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The Living Forests Process (1995-2006)

A Laboratory for New Modes of Governance in Forest Policies

New Modes of Governance for Sustainable Forestry in Europe
Main Assessment Study, Møreforsking Volda, Norway

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Preface

This is the report for the case study *The Living Forests Process (1995-2006) – A Laboratory for New Modes of Governance in Forest Policies.* The case study represents the Norwegian contribution to the research project New Modes of Governance for Sustainable Forestry in Europe (GoFOR).

The Norwegian GoFOR project has received funding mostly from the European Commission through the Sixth EU Framework Programme for Research and Technological Development: FP6-2003-SSP-3 (CORDIS 2007). In addition, the Norwegian case study is partly financed by The Research Council of Norway and by Møre Research Volda (MFV).

The analyses in the report are based on a substantial amount of qualitative in-depth interviews with key-personnel of Living Forests and other stakeholders in sustainable forest management. In addition, existing documentation on the Living Forests' process and effects, and governmental white papers and regulations within the forestry sector have been examined. Møre Research Volda and the Norwegian project team will seize the opportunity to express deep gratitude to all of our interviewees, and all who have contributed in different ways throughout the study. We also give thanks to the Living Forests Council, whose board took the time to read through parts of the report for comments.

Project management has throughout the project from December 2004 to November 2007 alternated between Johan Barstad, Else Ragni Yttredal and Finn Ove Båtevik. Also Lars Halvorsen and Susanne Moen Ouff have acted as project managers in some periods. Main authors of the case study report have been Susanne Moen Ouff and Else Ragni Yttredal. Lars Julius Halvorsen is the author of chapter 7 and made a major contribution to Part 1. Geir Tangen contributed to the data collection. Paul Mitchell-Banks was part of the project team at an earlier stage.

Volda, May 13th 2008

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Abbreviations and English Titles Used in the Report

ABBREVIATION	NORWEGIAN	ENGLISH
	Fellesforbundet	The Norwegian United Federation of Trade Unions
	Forbrukerrådet	The Norwegian Consumer Council
	Norsk Industri	The Federation of Norwegian Industries
AIP	Kontinuerlig planlegging	Adaptive and iterative planning
CORDIS	Informasjonsservice for samfunnsforskning og utvikling[1]	Community Research & Development Information Service
DnS	Det norske Skogselskap	
ENRI	Østlandsforskning	Eastern Norway Research Institute
FL	Friluftsrådenes Landsforbund	The Association of Intermunicipal Outdoor Recreation Boards
FRIFO	Friluftslivets Fellesorganisasjon	The Norway National Council for Outdoor Recreation
FSC	FSC	Forest Stewardship Council
GoFOR		New Modes of Governance for Sustainable Forestry in Europe
HINT	Høgskolen i Nord-Trøndelag	Nord-Trøndelag University College
IFF		Intergovernmental Forum for Forests
IPF		Intergovernmental Panel of Forests
ISC	Sektorovergripende samarbeid	Inter-sectorial coordination
ITTA		International Tropic Timber Agreement
LF	Levende Skog	Living Forests
LMD	Landbruks- og matdepartementet	The Norwegian Ministry of Agriculture and Food
MD	Miljøverndepartementet	The Norwegian Ministry of the Environment
MLC	Vertikal koordinering	Multi-level coordination
MLG	Vertikal "governance"	Multi-level governance
NGO	Frivillig organisasjon	Non-governmental
NIJOS	Norsk institutt for jord- og skogkartlegging[2]	Norwegian Institute of Land Inventory
NIKU	Norsk institutt for kulturminneforskning	Institute for cultural heritage research
NINA	Norsk Institutt for Naturforskning	Norwegian Institute for Nature Research
NISK	Norsk Institutt for skogforskning	
NNV	Norges Naturvernforbund	The Norwegian Society for the Conservation of Nature
NORSKOG	NORSKOG[3]	The Norwegian Forestry Association
NSF	Norges Skogeierforbund	The Norwegian Forest Owners' Federation
ØF	Østlandsforskning	Eastern Norway Research Institute
PEFC	PEFC	Pan-European Forest Council
R&D	Forskning og utvikling (FoU)	Research and Development
SABIMA	Samarbeidsrådet for biologisk mangfold	Norwegian Biodiversity Network
Skog og landskap	Norsk institutt for skog og landskap	The Norwegian Forest and Landscape Institute
Skogkurs	Skogbrukets Kursinstitutt	The Forestry Extension Institute
Skogforsk	Skogforsk	Norwegian Forest Research Institute
Statskog	Statskog SF	The State-owned Land and Forest Company
TFB	Treforedlingsindustriens Bransjeforening	The Norwegian Pulp and Paper Association (NPPA)
TL	Treindustriens Landsforening	The Norwegian Sawmill Industries' Association
TL	Treindustrien	The Norwegian Sawmill Industries Association
UiO	Universitetet i Oslo	The University of Oslo
UMB	Universitetet for miljø og biovitenskap	The Norwegian University of Life Sciences
WG 1-4	Delprosjekt 1-4	Working group 1-4
WWF		WWF Norway

[1] Based on our own translation from English.
[2] Part of the Norwegian Forest and Landscape Institute (Skog og Landskap) by July 1st 2006.
[3] Formerly called Norsk Skogbruksforening.

Introduction

Why the Living Forests Process?

This is the final report for the Main Assessment Study in the project New Modes of Governance for Sustainable Forestry in Europe. The case chosen by the Norwegian GoFOR project team is the Living Forests Process lasting from 1995-2006, with major fluctuations in intensity and content. The main purpose of the report is to present documentation suitable for drawing thematic comparisons between the other GoFOR-cases. Therefore, the information is connected quite closely to the Terms of Reference (ToR) and the five main elements of governance worked out by the GoFOR-teams. Thus, the case study is short of a framework to make this an independent case study, and must be read as such.

The Living Forests process as a whole is a tug of war about sustainable forestry. The stakeholders of forestry and environmental protection are the players. The means have been negotiations on standards for sustainable forestry on which the parties were able to agree first in 1998 and later in 2006. The Living Forests process was in an evaluation in 2004 called "a remarkable process". The timing of the process, the fact that different sectors and organisations cooperated in developing a new institutional arena, and that the results at the same time seem to make an operational difference, contributed to the success (Arnesen et al. 2004:81).

Unit of analysis in the GoFOR-study is the governance process itself. The Living Forests process gives a unique opportunity to follow such a process and to look at what has been a governmental experiment, for more than ten years. These the distinctive features of the Living Forests process made it especially interesting as a GoFOR-case:

- The process has included a broad mass of actors both in directly negotiations and advisory groups on sustainable forestry, but also indirectly in hearings and as members of negotiating organisations. The process has spread out to different sectors and also levels within the organisations. The ministries involved have played down their own substantial role at the moment the process came to life.
- The process shows a fluctuating nature, at the same time the cooperation seems to be increasingly institutionalised. This gives examples of how external demands force business actors to adapt to changing conditions. The status of LF today is an institutionalised self regulating regime.
- While this has not been an expert driven process, it has all the same been "flooded" with the use of expertise. This use has actually been one of the girders of the negotiations. The main conflicts between the actors prior to the process are now more levelled.
- Finally, the long lasting time frame of the process makes it possible also to see effects on institutional and behavioural level as well as the operational level in the forests. The level of institutionalisation has differed over time, so has the attitudes and cooperation between the parties.

We have divided the Living Forests[1995-2006] process into three distinct periods: The Living Forests project (1995-1998), the intermediate period (1998-2003) and the Living Forests revision (2003-2006). Still, this division is not used systematically as a structuring element throughout the presentation. We see the time periods as elements of the entire Living Forests

process, and this governance process as a whole is the focus of our study. References are found at the end of part 1, 2 and 3.

We distinguish between *project* and *process* throughout the report. The entire Living Forests 1995-2006 is characterised as a fluctuating process, developing even at times when the parties are not co-operating. The $LF^{1995-98}$ and $LF^{2003-06}$ negotiations are characterised as projects with more or less identified start and ending. Both times the projects resulted in signed agreements.

Methodology in the data collection

Methodological triangulation is used to examine a case by several reference points (Grønmo 2004). To investigate a complex social phenomenon such as the living Forest Process, different methodological angels or methods will increase the researcher's ability to get the full understanding of the object under study. Put differently, the choice of methodological approach is a matter of pragmatism, not dogmatism (Andersen 2003).

In the Living Forests case study we have combined two methodological approaches, namely document studies including previous evaluations of aspects of the Living Forest Process, and qualitative interviews with persons central to the process. The former serves as an introduction to the field of Norwegian governance of forestry in general and to the Living Forest Process in particular, while the latter is used to validate and to further investigate the initial findings as well as to follow up interesting patterns. Below we will provide a more detailed discussion of the methodological approach.

Document Studies

Three kinds of documents have been in use for this case study.

- Studies of documents connected to forest policies in general
- Studies of documents directly connected to the living forests process
- Reports and evaluations directly connected to the process

Documents, laws and regulations connected to forest policies

The Living Forests process is a part of what Norwegian Forest authorities see as the National Forest Programme (NFP) of which there are officially several parts:

- The Forest Act (2005)
- The White paper on forestry (1998-99)
- Regulations on sustainable forestry (2006)
- The Living Forest Process

Some parts of the NFP are not included in the study, like

- The economic means like the cost-share programmes and grants
- The forest trust fund
- The County forest strategies
- Local forestry management plans
- Project to identify and systematise all Norwegian International Obligations regarding forestry

All documents related to these elements have been part of the framework for the case study of Living Forests and was also vital for our choice of this specific governance process for the GoFor case studies.

Documents within the Living Forests process

Meetings, hearings and negotiations in the process have been heavily documented from the beginning all the way to 2006. More formal studies have also been part of the background documents. This has been a great advantage for the case study. Since the process started already more than a decade ago, studies taking place in closer in time to the actual events provides us with more detailed and reliable insight in those processes than would be possible if we were to rely on interviews conducted several years after alone (Grønmo 2004).

Previous evaluations of aspects of the Living Forest process

For the same reason, studies of the most central documents of the process have been an important part of the project. Documents in the form of minutes from meetings, signed agreements, white papers, and presentations held by key actors in the process at a given time, all provides insight in actual happenings as well as the actors' worldview and preferences at different points of the process (Scott 1990).

Both during the Living Forests project [1995-1998] and the Living Forests[2003-2006] revision several reports and evaluations were published. Most of these were of a technical nature. In 2004, a process evaluation of the LF[1995-98] and the period up to the revision in 2003 was conducted. All of these evaluations have been part of the foundation for this study, and especially the process evaluation has given useful insight and background information into the first and intermediate period.

Qualitative Interviews with key actors

The documents referred to under the previous paragraph gave a good introduction to the Living Forest Process. Still, there was both a need to both validate and supplement these findings. For this purpose we employed qualitative interviews with key actors from the process.

During the fall 2006 and winter 2007 a total of 27 qualitative interviews with persons central in the Living Forests process were conducted. The interviews divides themselves on nine forestry-related interviewees (representing both forest owners, industry and more), three representatives from the political sphere, four on environmental issues, five NGOs on social issues and three interviewees representing science. Some of the informants had been part of Living Forests throughout the process, while others were only central in certain periods. In addition to the process participants we have conducted a total of three interviews with representatives from organisations which chose not to participate in the process, or was not invited. In addition three more informal telephone calls were made to the forest administration at county level in three different counties.

Most of the respondents were representatives of different organisations which were stakeholders in the Living Forest process. The group includes environmental organisations like the WWF-Norway, SABIMA and the Norwegian Society for the Conservation of Nature (NNV), the forest owners' organisations and representatives from the forest industry, organisations on social interests like FRIFO and FL, as well as key representatives from the ministries of Agriculture and of the Environment. In addition we have interviewed more

“technical” personnel in the certification firms, members of the Living Forest secretariat and to a lesser extent people in research and administration.

Almost all of the respondents were connected to activities, ministries, NGOs, or industry representatives working on the national level. Only in one or two cases was the informant a representative working on the regional level. This has provided us with an opportunity to go quite in depth of the process at the national level, while it has limited our insight over the process on a regional and local level.

In creating the interview guide, the GoFor Terms of Reference was used as a guideline for research questions. Still the actual interview guide employed was quite different than the former. Our main concern has been to provide all information asked for in the GoFOR Terms of Reference. Building upon the documentary analysis, we have constructed the interview guide in order to supplement the information already available from other sources. To avoid language barriers causing problems during the interviews all were conducted in Norwegian.

The interviews are quoted and marked by letter and numbers I 1-24. All quotes are translated from Norwegian by the authors, and are not always to be seen as literally citation. As a rule they are to be regarded as an essence of opinions.

Part 1: Explanatory Context Factors and Actor-Related Aspects

1.1 Economic and Social Factors

The Norwegian Forest and Forest Industry[4]

About 37 percent of the surface area in Norway is covered by forest. The total forested area amounts to 12 million hectares, including 7 million hectares of productive forest. 15 percent of the productive forest has been estimated as non-economic operational areas due to difficult terrain and long distance transport, which means that economical forestry, is operated in 50 percent of the forested area. The most important species are Norway spruce (47%), Scots pine (33%) and birch (18%).

Historically forestry in addition to fishery has been the major export industry in Norway (Danielsen et al 1991). Over time, forestry has been able to maintain an important position in the Norwegian economy. Today it has remained the third largest export industry in the country.

In 2001, the gross production value for the forestry sector, including primary forestry and the forest industry, was valued at NOK 41,000 million (EURO 5,125 million). The export value was about NOK 17,000 million (EURO 2,125 million). Approx. 40,000 people receive their income from primary forestry and the forest industry.

The forest activities provide about 7 million cubic meters of wood annually for the forest industry. An increasing part of the felling and transport of timber is taken care of by contractors. However, 15 percent of the forest owners are still working in their own forest with felling and/or transport during the winter season. The total work contribution in primary forestry is estimated to 5,000 man-years.

The Ownership Structure gives many Forest Owners

There are a total of 125,000 forest holdings in Norway with more than 2, 5 hectares of forest land. The average size is about 50 hectares. About 120,000 of these holdings are family owned. Small forest properties, the steep and varying terrain conditions and the alternating production possibilities have created great variations within the forest landscape.

Approx. 80 percent of the forest is part of freehold farms, owned by farmers who perform forest management in combination with farming. State and community forests amount to 12 percent of the productive forest area, while 4 percent is owned by private companies.
The family forestry in Norway is being managed and operated through typical small-scale forestry operations. The average sized felling area is 1.4 hectares.

The Allodial Rights Act restricts trade on real estate over a certain size (Danielsen et al 1991). The main purpose of the law is to maintain the whole real estate intact. In addition, the

[4] This paragraph is for the most part based on the Nordic Family Forestry web-cite (2006): www.nordicforestry.org

Concession Act protects agricultural production areas by controlling acquisition of real property.

The Forest Trust Fund

In order to secure financing measures for sustainable forestry, forest owners must divert 4-40 percent of the gross sale value on "sale, expropriation or other transfer of felled or extracted timber or of standing trees, on the forest owner's use of timber for further sale or other transfer" (LMD 2005). These funds shall be used in the forest in the form of long-term investments in silviculture and forest roads. Payments from the Fund may also be invested in measures to enhance features of special environmental value in the forest. The forest owner makes the decision on the percentage to be allocated depending on the need for investments.

1.2 The Political Culture and Style

Being a young nation state receiving independence from Sweden as late as in 1905, Norway still has long democratic traditions. The Norwegian constitution written in 1814 was based upon the constitutions of France and the USA, was at its time on of the most liberal in the world (Danielsen et al 1991). The next 70 years the democratic rights was gradually developed, resulting in the parliament, not the King appointing the government in 1884 and further, in full voting rights for all adult citizens including female in 1913. During the last 90 years the constitutional system has been relatively stable.

Being quite stable on a political level, the political system underwent large changes from 1920 to the post war era. In addition the next twenty years was dominated by the social democratic Norwegian Labour Party (DNA). During this period new tradition of cooperation between major industrial actors, the labour unions and the state developed. Though gradually loosing ground during the 1980s and 1990s, this corporative tradition still plays a significant role in the development of the Norwegian economic policy.

In the forestry sector cooperation between the Ministry of Agriculture, the labour unions and the large economic actors as Norske Skog, other large process industry companies, and the Forest Owners' Association has played a major role.[5] This group forms a triangle-like arena of dominant actors of the forest sector. Non-economic, NGO stakeholders such as environmental organisations and outdoor recreation organisations etc, has traditionally been left out of the most important decision making processes.

Due to three important processes the Norwegian society this situation has changed after 1990. The first of these processes was a development towards larger political attention to environmental issues. The second process was a gradually development from a one-dimensional economic view on forestry towards a multidimensional view including aspects of environmental and recreational issues. The third trend was a development toward participation as a political objective. These trends can be seen as a part of international trends in their respective fields (Christensen et al 2002; Amdam 2005). As we shall see in part 2 this lead to a more inclusive approach to the Living Forest Process, although not without resistance.

[5] Norske Skog, founded in 1962 mainly by the Norwegian Forest Owners' Federation to "ensure a market for mid-Norway's forest resources and to give the raw material suppliers greater insight into the wood processing industry" (Norske Skog 2007). Now one of the world's leading producers of newsprint and magazine paper.

1.3 The Norwegian Political-Institutional Framework[6]

The Norwegian Governance System

The political-administrative governing system in Norway has traditionally been divided into three levels: State (Nation); County; and Municipality. With respect to the EEA-agreement, a 4th International level could be argued. Norway's government system is actively used and reasonably fluid as responsibilities and tasks keeps being redistributed.

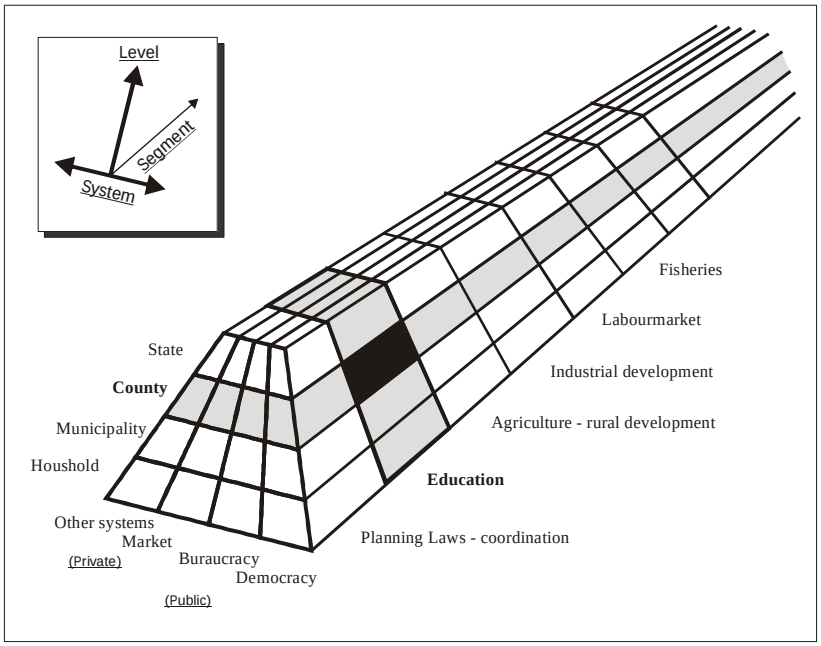


Figure 1: The Challenge of Coordination in the Segmented Society
(*Amdam and Veggeland 1998*)

The figure above gives a representation of the political-administrative governance in Norway. As can be seen it has been divided into a system of segments, often with tight boundaries (which can serve as an impediment) to other segments. This structure has been recognised as a challenge and efforts have been done to break down boundaries and have it function in a more coordinated way.

State Level

In Norway, political decision-making occurs in the Parliament (in Norway referred to as the 'Storting'). The government and the public authorities have direct power on most important functions of Norwegian society. This is mainly implemented through the Ministries but also through agencies and directorates. The production of services is usually delegated down to the County and Municipality level. All final decision-making in the form of laws and regulations is restricted to the national level

County Level

The County Governor is the chief representative of the Government in the county, and works for the implementation of the Parliament and central government decisions.

[6] The material in this section was compiled in a report on 'Rural Proofing' in Norway by Johan Barstad and Paul Mitchell-Banks (Møreforsking Volda) as a contribution to a UK funded project in 2005.

The County Council is responsible for county policies for instance on the following policy fields: secondary education, infrastructure, regional economic development and regional planning.

Municipal Level

The Norwegian welfare-model has identified a large part of service production as public (government) responsibilities and to a large degree this occurs at the local level where the people reside. Thus the task as producer/supplier of public services and production activities has been delegated to the local governments. Even if these local governments have limited decision-making power, they are important stakeholders in policy-forming processes and contribute through a structured system of consultancy. Their power is limited to issues concerning municipal territory and issues not in conflict with the responsibilities on the higher levels.

The Policy Process

The policy process may vary slightly depending on the issue(s) at hand, but in general the stages will be much the same. The institution or level that has the decision-making power will normally be to initiate and lead the process. The State being the major government level responsible, normally takes the initiative either through the political system (Parliament and Government), the Ministries or the various State Agencies. If decision-making power lies at lower levels, the State will often still be the instigator. The general tendency has been that the policy process has been made more inclusive for all concerned. This gives more room for participation at all stages, and from all involved and/or interested parties.

A general policy document is elaborated when new issues/areas arise or there is a need to revaluate the existing approach or situation. This happens at intervals within all the Ministries, resulting in White Papers, which then act as the foundation for policy development until they are outdated and replaced. When a White Paper is active or in force, specific policies are elaborated according to need. Such needs might originate from a number of sources (the ministry, state agencies, even at the county level), but will rely heavily upon the White Paper(s). There are many stages in these processes, involving participation to various degrees.

- Normally a White Paper will be preceded by a number of reports, hearings, consultations, etc. The aim will be to gather information for the oncoming process.
- Then a mandate will be elaborated and a committee will be appointed. Normally the time-frame for developing the Government White Paper will be decided at this stage.
- The consultation and preparation process will have to be consistent with what is set out in the Instructions for Official Studies and Reports. This aims at securing good preparation and control in public reforms, how to manage/change rules and other initiatives. This provides instructions for the scale and scope/content of the mandate, for outcome-analysis, public hearings and procedures for process from mandate to final discussion.

Below we will have a closer look at the Norwegian political-institutional framework regarding forestry.

1.4 Norwegian Forestry[7]

Norwegian Forest Management

Norwegian policies dealing with the conservation and sustainable utilisation of forest resources are based on fundamental principles of maintaining the long-term stability and resilience of the resource base. The goal of Norwegian forest management policies is to meet social, economic, ecological and cultural needs for present and future generations. Norway has ratified the Rio convention on biological diversity and the climate and signed resolutions on sustainable management of Europe's forests. The principles expressed in these documents are also incorporated into Norwegian forest policy.

Following the Norwegian Governance System, the public forest administration in Norway is divided into three levels. Nationally the Ministry of Agriculture and Food governs forestry in general. In addition the Ministry of the Environment governs certain aspects of forest management such as pollution, securing biodiversity, securing public access to recreational areas etc. To make the matter further complicated the Ministry of Industries governs issues concerning regulating competition in the forest industry.

At county level, authority on forest issues is delegated to the county governor and a county agricultural committee. As on the national level, the county governors have different departments with major and minor authority on forestry issues. Among main tasks on forestry is supervision for local authorities and coordination of county planning.

The local governments serve as the authority on forest issues. Some municipalities have established cooperation in the administration of forestry related issues.

The forestry authorities' tasks include
- Making sure that the Forest Act and other relevant acts are complied with
- Administering the public subsidy arrangements
- Guidance for the forest owners
- Participating in the planning process, particularly as regards land management
- Administering the forestry preservation duty arrangements

Below the Norwegian forest legislation will be outlined.

Forest Legislation

In the new Forestry Act from 2005, the environmental regulations are updated based on new knowledge, especially within the field of biodiversity. Furthermore, it has been important to improve the forest legislation with regard to application and enforcement, through simplification of the existing legislation. Results and guidelines from the international policy dialogue, in particular the United Nations forest process (IPF, IFF, UNFF) as well as the Ministerial Conference on the Protection of Forests in Europe (MCPFE) constitute an important basis for the new act.

The forest legislation originally dates back to 1965, but has been amended and modernized several times since, most recently in 2005. Its' main objectives have been to promote forest production, afforestation and the protection of forest land while promoting the functions of forests as environment for plants and animals and as a source for recreation, hunting and

[7] Some of this material is also presented in Norway GoFor Pre-Assessment Report (Barstad, J. and Mitchell-Banks, P. 2005). Some of it is compiled transcripts from www.nordicforestry.org. (December 3rd, 2006).

fishing. The Forest Act applies to all forest land, and is based on the fundamental principle of freedom with responsibility for the individual forest owner. The provisions include principles related to environmental and recreational considerations, forest road construction, and forest management in areas of particular ecological value, protective functions, and the Forest Trust Fund.

Public Access to the Forests

One basic premiss for the Norwegian forestry is the so called "public right of access" which grants the general public free, year-round access for to non-cultivated land in Norway. Free access is an ancient public right, and established by law in the 1957 Act relating to outdoor recreation (last time edited in 2004).

A lot of people use the forest for recreational activities, both traditional and modern. There is a widely distributed web of marked walking-paths as well as prepared tracks for cross-country skiing to be used free of charge. Hunting and fishing are important activities for a large number of people.

Restrictions and Protection

While the forests are open for public access, alternative commercial use of it is highly restricted. In principle, all Norwegian forestland is protected from non-forestry development through provisions of the Planning and Building Act and the local governments' land use plans. The Nature Conservation Act provides for various degrees of conservation of areas. Forest owners can also voluntarily set-aside forest areas excepted from commercial forestry.

There are several different categories of protected areas:

- Areas of special environmental or recreational value – areas in which forest operation is subject to severe restrictions. Applied to approx. 170,000 ha.
- Protection forest – forestland that must be treated with special care due to their location or characteristics. Approx. 15-20% of Norway's forestland is classified as protection forest.

Areas protected under The Nature Conservation Act include:

- National parks – extensive areas free of improvements of a technical nature. Forest operations and most types of commercial or industrial activity are banned.
- Landscape protection areas – areas with distinctive landscape features in which any measures or activities which may alter the character of the landscape are banned. Forest operations are normally subject to restrictions.
- Nature reserves – distinctive areas totally protected against commercial or industrial activity and interference of any kind.
- Nature monuments – sites or small areas protected for their special natural historic value.
- Other protection areas – protected species and conservation of biotopes.

Norwegian Forestry and the National Forest Programme

Norway has actively participated in the Pan-European and International processes regarding the development of the concept of National Forest Programmes (NFP) and the development of NFPs as a tool for sustainable forest management. Norway did not, however, engage in a process to develop one consistent NFP document as can be observed in other European countries.

Instead Norway had a development from the viewpoint that the White Paper on forestry to the Storting (1999) was to be regarded as our NFP, and when it was evident that this document did not fill the criteria for being recognised as a NFP, there was a change in government policy where the Norwegian NFP was to be the sum of the relevant documents and processes which now are referred to as the Norwegian National Forest Programme. I.e. the NFP consists of laws and regulations on forestry, the political strategies on forestry provided by the Parliament, the political means on forest policy, strategies regarding county administration and forest policy plans on local level. As such, Norway can be seen as having an informal NFP organised as a process (Trømborg 2005).

1.5 Governance Aspects of Norwegian Forest Administration

Before entering Part 2, we will have a brief look at the most explicit governance aspects in the forest administration; public participation, intersectoral coordination and multi-level coordination.

Public Participation

Participation is and has been an issue in Norway for a long time. The origin for participation can be traced back through Norwegian policy-making and politics at least into the 70's (Bukve 1990). When it comes to the issues of the National Forest Programmes, it can be stated that one of the reasons for increased focus on participation can be found in the engagement in international forest policy, such as the IPF/IFF, and MCPFE, etc. Norway has engaged seriously in these international processes, and increased participation was among the more visible slogans in these forum and corresponding processes. Further it must be noted that changes in Norwegian society have resulted in agriculture and forestry diminishing in importance, with a growing emphasis on recreation, land use planning, etc., issues that have been championing participation as a tool in Norwegian politics and policy.

Both the long term horizon in forestry as well as the ownership structure in the Norwegian forest sector present challenges to the forest policy objectives in balancing the public, private, market, and non-market benefits from forests. This has led to public involvement to ensure that the objectives of the forest policy are fulfilled. The Norwegian forest policy is in this regard practising a form of public-private partnership (Nordic Family Forestry 2006). The Forest Trust Fund is one example of this partnership, whereby private finances are allocated by a public agency. Investment from the fund is regulated by public law but include incentives that make it economically beneficial for the forest owner.

A prerequisite for the effectiveness of instruments such as the Norwegian Forest Trust Fund is an established extension and technical support service available for the forest owner. Norway has a system of county and municipal level forest authorities traditionally providing guidance and advice for the forest owner in addition to the primary task of monitoring that forest management is in accordance with the Forest and Forest Protection Act and subsequent regulations. In addition, a system of forest owner's organisations is in place around the country.

Intersectoral Coordination and Multi Level Coordination

Given the practise of Norwegian Legislation addressing a particular issue or sector often being found in a number of legislation or planning documents from various ministries, there is

an ongoing need to coordinate input and decision making not only from various ministries but also the industrial and public sectors most affected by those ministries.
Coordination occurs at local, regional and national levels of both government but also forestry and forestry related organisations.

From the outset Norway has had a multi-level structure within the segments, so that there were bonds (legal, formal, professional practical and of loyalty) between all three levels. In many ways such a system was characteristic of the traditional, Norwegian public administration system that dominated up into the 1970's and into the 1980's: A system with high degree of ties between levels within the various segments and rather few between the segments.

When we look at the two aspects together, inter-sector coordination and multi-level coordination are two aspects closely connected in the Norwegian setting. As said, there has been a long tradition for multi-level governance within the segment while the lack of inter-sector coordination often has been mentioned as a serious hindrance for further development.

Part 2: The Living Forests Projects and Process 1995-2006

Before getting into details on aspects of the process, we present a broad outline on the actors and issues at hand according to a timeline.

The Living Forests Process 1994-2006

1994	The forest owners and industry came together to form the *Trade project on forestry and environment*, strongly encouraged by the Ministry of Agriculture.[8]
1995-98	A wide range of organisations were invited into the process, now named Living Forests. Reality orientation and negotiations were carried out, on which the finale first set of Living Forests Standards were formed.
1998-2000	The forest owners and industry developed a group certification system based on the LF-standards, much to the ENGOs' discontent. Collaboration is practically non-existing in this period.
2000-01	Most of the actors from the $LF^{1995-98}$ project came together to redefine and specify some of the standards they did not agree upon. The agreement was signed in May 2001.
2002	No specific co-operation took place.
2003	The original actors from $LF^{1995-98}$ came together to revise the 98-standards. They agreed to carry out three different evaluations, which later form the foundation for the revision. One of the ENGOs steps out of the co-operation.
2004	The evaluations were presented. A couple of new actors were invited in, of which some turned it down and some accepted.
2005-06	Negotiations were completed, resulting in a new set of claims based on consensus. The final LF^{2006} Standard was signed in October 2006. Living Forests Council was then established.

Living $Forests^{1995-2006}$ was an inter-sectorial co-operation project between stakeholders from forestry, environmental and outdoor recreational organisations, trade unions, consumers' organisations and the government. The main objective was to achieve and document sustainable forestry in Norway. Even though the objectives of the Living Forests process gives way into the public sphere, the process is viewed upon by the government as a non-governmental process. It is said to be more of an "internal affair" within forestry itself, detached from the governmental forestry management. Even though certification was not an issue from the outset, the Ministry of Agriculture claimed the government should not be involved in these kinds of regulations on industry and commerce (Arnesen et al. 2004:39). The certification issue justified this view. The requirements in LF $Standards^{1998/2006}$ are imposed onto private forest management by themselves, more than by governmental regulation.

What triggered off initiation of the Living Forests project were the demands for documentation on biologically sustainable timber especially from the German paper industry (I 10, Sæther 2000). The public made "a green turn", the ENGOs gained force and the industry in turn responded to this. At this stage in 1994, this was a project within the wood industry, between forest owners and business interests. The trade project was also strongly desired and supported from the Ministry of Agriculture (I 15). In 1995 Living Forests was

[8] Translated from Norwegian: *Bransjeprosjektet for skog og miljø*. This project became a preliminary project to the Living Forests.

established as a three-year project, financed partially by governmental bodies. Objectives for the work were set and short after other stakeholders were invited to take part as well. This market imposed pressure was also put on the industry in other countries, like Germany itself. Still, the reaction towards this pressure, in for instance Germany, was almost the opposite of LF; the government and the forest industry tightened the bonds within themselves even more. At the present, we have no analyses as to why this reaction (founding of Living Forests) became the preferred action in Norway.

One of the four Working Groups was called "WG2 Sustainable Forestry -criteria and documentation" (Levende Skog 1998e). The work of this particular working group has special focus in this Norwegian case study. When not mentioned otherwise, the term *Living Forests* refers to the WG2. The discussion within WG2 of Living Forests$^{1995\text{-}98}$ was mostly concentrated on finding criteria, indicators and standards for sustainable Norwegian forestry (Arnesen et al. 2004). Based on scientific grounds, the parties wanted to reach a sound understanding on how to carry out sustainable forestry, and how to document this.

The work of WG2 continued for three years, research and negotiations being carried out, until consensus on 23 standards was reached during the summer 1998. A Certification Committee was also launched to look more thoroughly into the issue of certification systems. After signing the agreement, the co-operation between the stakeholders came to a halt. They came back together in 2001 to further specify some of the agreed 1998-standards, of which there had been some disagreement since the endorsement. Again the co-operation came to a halt, and the parties then came together in 2003 for a revision of the 1998-standards. Three evaluations were carried out, to form a basis for the greater revision of the standards. In 2005 the parties could again sit down at the negotiation table, first trying to reach a sound and common perception of reality, later on negotiating on the precise formulation of the revised standards (Levende Skog 2006a). The Living Forests Standards^{2006} was signed late autumn 2006, together with the establishment of the Living Forests Council. With the LF Council the project is now transformed into a permanent co-operation between the 12 signing parties.

2.1 Organisation and Participation 1995-2006

In the following, a detailed presentation of the LF organisation is made according to three distinct phases:
1: LF$^{1995\text{-}98}$
2: Intermediate period 1998-2003
3: LF$^{2003\text{-}06}$

From the outset Living Forests had two main objectives (Levende Skog 1998e):

- To help create Norwegian and international confidence in the raw materials from the Norwegian forest industry based on sustainable and environmentally friendly Norwegian forest management
- To demonstrate the will and ability of Norwegian forestry to conduct long-term, sustainable resource management through research and development, competence building and information, making the raw material an asset and thereby develop and secure employment and added value in Norwegian forests and forest industries.

These objectives were formed early in the process, and before the process was opened up to actors outside the industry. This means that the forest owners, actors from the industry and the government defined the framework, into which the other parties were invited to join. Formally

these objectives have not changed over time. How to obtain these objectives and how they were to be carried out in actual forest management was more of a question.

In the preliminary draft for the revised standards in 2005, the objectives are elaborated. This is shown later in paragraph 8.1 Output across a Ten Year Period.

As can be seen from the outline above, the process has fluctuated strongly from its initiation in 1994 until the establishment of the Living Forests Council in 2006. The level of formalisation has varied and different actors have entered and left the process at different stages. In the following presentation, the process is presented according to the three periods; $LF^{1995\text{-}1998}$ and $LF^{2003\text{-}2006}$ with formalised contact between the parties, and the intermediate period (1998-2003) where the conflict level was higher and formalised contact scarce.

The Living Forests$^{1995\text{-}1998}$ Project

Initiation

The preparation for the Living Forests Project was started in 1994. The project was then called *Trade Project for Forest and Environment*, and came about as a response to foreign costumers' demand for documentation on the sustainability of Norwegian Forestry (Levende Skog 1998e). Several discussions between the actors in forestry and governmental bodies were carried out on how the parties could address these issues together. The pressure to achieve a reputation among wood customers as an environmentally sound business, laid heavy on the forest industry. Also the government invested time and energy in pushing the process and the co-operation forward in what we could call resource and policy framing (Sørensen and Løfgren 2007).

The actual work on the Living Forests project started in 1995, as cooperation between several parties. The budget for the project was NOK 30 mill, and the cost was divided between the owners and the industry (25% each), and governmental organisations (50%).[9]

The forest owners were represented by The Norwegian Forest Owners' Federation, The Norwegian Forestry Association and The State-owned Land and Forest Company.

The industry was represented by The Norwegian Sawmill Industries' Association and The Norwegian Pulp and Paper Association, and The Norwegian united Federation of Trade Unions represented workers interests.

The **Ministry of Agriculture** and the **Ministry of the Environment** both had active observing roles during the project, but no right to vote in negotiations.

[9] The Norwegian Ministry of Agriculture and The Norwegian Ministry of Environment, The State-owned Bank of Agriculture, Statens Nærings-og Distriktsutviklingsfond and The Research Council of Norway

The organisation was structured like this (Levende Skog 1998e):

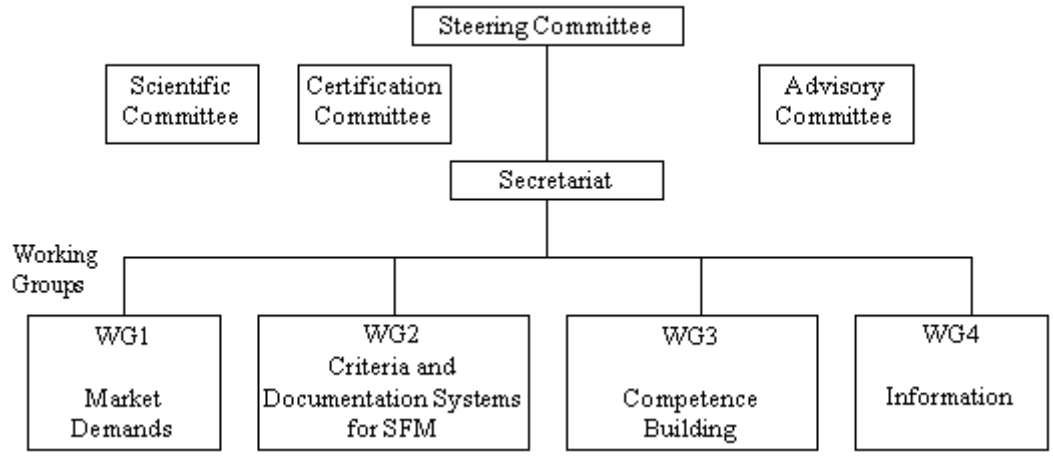


Figure 2: Organisational structure of Living Forests 1995

The Steering Committee

The Steering committee was formed in 1995 and was chaired by a representative from the Norwegian Pulp and Paper Association. The responsibility of the steering committee was to focus on the structure of the project and to ensure that it ran as smoothly as possible.

The NGOs on social and environmental issues were not represented in the committee and were not invited in later either. This means that the industry kept the overall formal control of the progress in the project. The organisations in the Steering Committee were represented by their managing directors respectively. The Steering Committed included the following members, all of whom supported the project financially (Arnesen et al. 2004):

- The Norwegian Forest Owners' Federation
- The Norwegian Forestry Association
- The Norwegian Sawmill Industries Association
- The Norwegian Pulp and Paper Association
- The State-owned Land and Forest Company
- The Norwegian United Federation of Trade Unions
- The Ministry of Agriculture
- The Ministry of the Environment

The Secretariat

Project management was placed within the Forest Owners' Federation. During the LF[1995-98] the secretariat consisted of up to 12 people, some of which worked at the central office and some out on test areas (Levende Skog 1998e). There were discussions whether this was a fair way to organise the project, as the secretariat this way became strongly connected to one of the parties. The criticism was not levelled at particular persons, but more a review on the system as such (Arnesen et al. 2004).

The Working Groups 1-4

There were four working groups in Living Forests[1995-1998] project period (WG 1-4), and they were all appointed by the Steering Committee. Our case is connected to WG 2 only, but to

make a comprehensive picture of the entire project, we nevertheless outline the work also in the remaining three working groups.

WG1 Market demands on the forest industry and forestry
WG1 had for a large part an international focus. In addition to financial support from the LF project, some research performed by WG1 was financed by the Research Council of Norway.

The work of this group resulted in, among others, the research project "Consumers' attitudes towards forestry and the forest industry." Data for this project was collected in Norway, as well as in Great Britain, the Netherlands and Germany. Some of the data collection was managed by Nordic co-workers (Levende Skog 1998e).

Another working group called the Subgroup Substitution Project was formed in cooperation with the Joint FAO/ECE Team.[10] Their main task was to look into the market situation for forest industries' products and the competing materials. The report "The Competitive Climate for Wood Products and Paper Packaging; the Factors Causing Substitution with Emphasis on Environmental Promotion" was completed in the autumn 1998 (Burrows 1998). This group was later replaced by a Market Forum.

WG2 Sustainable forestry – criteria and documentation
The Norwegian case study is concentrated around the work carried out by WG2. This group carried out several research projects, including for instance registration on key biotopes in test areas. Living Forests' reports 4, 5, 7 and 10 are all results from the preparatory work on how to conduct sustainable forestry in WG2. Reports 8a –d contains the preliminary comprehensive standards, on which hearings were held in the Advisory Committee (Levende Skog 1998e).

The signing representatives of WG2 are listed in Chapter 3.1 Participation.

WG3 Competence building
The Norwegian Forestry Association chaired this working group. The overall focus was the building of competence in the industry and among the forest owners. Among other thing, the group was dealing with:

- Courses of increasing knowledge in biodiversity among both forest owners and workers
- Development and accomplishment of courses for sales- and marketing personnel in the industry
- Research into attitudes among forest owners
- Prior to the completion of Living Forests in 1998, WG3 developed study material for making the result of the project known, first of all among the forest owners.

The Ministry of the Environment, Norwegian Forest Owners Association, The Norwegian United Federation of Trade Unions, Norwegian Pulp and Paper Association and The Forestry Extension Institute were also represented in WG3.

WG4 Information
The overall objective of WG4 was to develop strategies for communication, both in terms of information about Living Forests as a project, but also on forestry in general.

The group worked out different information material and reports, such as newsletters, material for use on conferences and exhibitions, and brochures. The contact to the media, co-operation

[10] The Joint FAO/ECE Team of Specialists of Public Relations in the Forests and the Forest Industries Sector.

with the Nordic partners and the completion of the Living Forests website was also made of this working group.

The Norwegian Pulp and Paper Association had the chair-man for this group. In addition the Ministry of Agriculture, The Norwegian Society for the Conservation of Nature, Det norske Skogselskap and the organisation Jenter i Skogbruket took part.[11]

The Certification Committee

During summer 1997, a Certification Committee was appointed by the Steering Committee, in agreement with the actors from the social and environmental sector (Levende Skog 1998e). The committee was founded to assist WG2, and was to propose practical systems for certification of sustainable forestry in Norway. The economical, social and ecological interests had equal representation in the committee. The chairman of the committee did not represent any of the partners, but was appointed by the county chief administration.[12] Two observers from the ministries of Agriculture and of Environment were also taking part. The work in the committee was supposed to be consensus building in its form, and the actors were about the same as in WG2.

In February 1998, the Certification Committee approached the member organisations of Norwegian Forestry Association Glommen, Inn-Trøndelag and Drammensregionen forestry associations, to communicate directly with forest owners on the certification matter (Levende Skog 1998c:63). Thus, both the national, regional and local levels were addressed in this committee, as well as economical, social and ecological interests.

The objective of the work in the Certification Committee was also to find ways of combining the already existing ISO- and FSC-certification systems. The final report from the committee was delivered on June 31st 1998, containing a general view of the certification systems available, solutions on group certification, and also a description on how to make use of the Living Forests Standards independently of certification system. In the report, there were no priorities between the different certification systems, as the committee noted that only the forest owners could make this choice for them selves (Levende Skog 1998c). The committee advised on a 5-yearly revision of the LF-standards.

Living Forests was partner of the Nordic Wood Certification Project, established in 1995, but the Certification Committee was not represented directly in this project (Levende Skog 1998c).

The Scientific Committee

The Scientific Committee chaired by the Norwegian Institute for Nature Research (NINA), was appointed spring 1996. This committee was to give quality assurance to the documentation work of WG2. The committee included 10 leading researchers, with biology and ecology as specialities (Arnesen et al. 2004). These were all scientists at a national level. Later it is said that the committee for a large part was left unemployed, or at least too much so (I 4).

[11] Translated ”Women in Forestry”
[12] First from Vest-Agder County, later Telemark County.

The Advisory Committee

An Advisory Committee was launched for the LF[1995-1998] project with more than 200 organisations invited to attend open hearings. The appointment of the advisory committee was suggested from the Ministry of Agriculture, as an arena open to all actors (I 15). The invited parties represented local, regional, and national levels and different kinds of organisations; the industry, forest owners, workers' unions, environmental and outdoor recreational organisations, governmental organisations, ministries, research institutions, consumers' organisation, farmers' unions. Throughout the process, approximately 160 organisations attended these open meetings (Levende Skog 1998d).The meetings were conducted as open hearings with plenary discussions, with working groups on different matters. The results from these meetings were handed over to WG2 in writing and then taken into consideration in the work following.

The Intermediate Period 1998-2003

During the period, strategic behaviour is recognised from several parties. The first Living Forests project was brought to a conclusion in 1998 with the signing of the Standard document, with no intention of holding up the co-operation on a continuous basis. The forest owners continued the work towards a certification system, aiming at group certifications on the basis of the LF-standards[1998]. In the ENGOs' opinion, this was impossible because the standards were not developed specifically enough for certification. They felt strongly that the forest owners and the industry misused and misinterpreted the Living Forests agreement on insufficient grounds (Arnesen et al. 2004:52). Still, the owners carried out group certification in several regions. One of these group-certificates was withdrawn in spring 2000, bringing grist to the ENGOs' mill on this matter (Sanness 2002).

The method used for registration on important biological areas and key biotopes in Living Forests (MiS), is highly conflicting with biological expertise on some crucial elements. It is claimed that the way these areas are registered (by foresters) is not sufficient to secure biodiversity.

The parties came together again in June 2000 on the initiative of the Forest Owners' Federation, the government and the certification service holders to define more precisely some of the LF-standards (Sanness 2002).

> *"The Specification Committee came about as a result of Viken loosing its' certificate. Then, it became important to appoint a committee, also under pressure from Det Norske Veritas (DNV). It can also be understood as a way to prevent negative publicity" (I 17).*

Roads for timber transportation are seen as a conflicting issue from the NGOs on outdoor recreation, but during this period the issue is not addressed in the specifications (Dåsnes 2002). FL seems to mean that laws are the only way to fully deal with some of the conflicts. This is brought up specifically on the issue of forest for outdoor recreation close to the cities. One can view this as mistrust in the potential of Living Forests as a mechanism to change and control the behaviour of forestry and the forest industry. A representative was appointed from Sámediggi - The Sami Parliament, but withdrew later from the working group. Instead the parliament wanted to comment on the draft documents prior to negotiations.

The ministries of Agriculture and Environment and the Norwegian Consumer Council did not take part in this group. The group was called The Specification Committee, and delivered in

2001 specifications on six of the standards.[13] Later these specifications were made part of the signed agreement of 1998. FL saw this as a "satisfactory progress" closing up to the demands on biologically important areas from the outdoor recreational organisations' point of view (Dåsnes 2002). The Norwegian Society for the Conservation of Nature left this work en route because they could not make anything of it (Arnesen et al. 2004:54).

The Living Forests$^{2003\text{-}06}$ Revision

Initiation

In the LF Standards signed in 1998, the parties had agreed to revise the standards on a regular basis (Levende Skog 1998b), but made no binding resolution on this. The Certification Committee recommended this to be carried out every fifth year (Levende Skog 1998c). From 1998 it seems like there is an expectation for further cooperation, but except for the specifications in 2001, none of the parties take action towards any of the other parties in this issue until 2003.

During spring 2003, preparation was made for a revision. All parties from the LF^{98}-agreement met, agreed upon a mandate for the revision in June and constituted themselves as a working group for the revision in August the same year. It soon became evident that due to lack of knowledge on how the LF Standards$^{1998\ (spec\ 2001)}$ were implemented and effected forest management and biodiversity in practice, evaluations were needed. It was decided that all parties could take part in evaluations, and later decide whether to take part in the actual negotiations or not. The Norwegian Society for the Conservation of Nature then agreed to take part in the evaluation, before finally concluding on their further participation (Levende Skog 2006a).

Evaluations

A Steering Committee was formed to prepare and bring about the evaluations. The committee had six members, covering economic, social and environmental interests.[14] The main objectives for the evaluations were outlined and formed into three different studies.

The evaluations were handed over to the steering committee during 2004 on (Levende Skog 2006a):

- the process of the LF$^{1995\text{-}98}$-negotiations (Eastern Norway Research Institute)
- the implementation of Living Forests-standards and certification schemes onto Norwegian forestry (NINA)
- the development of the Norwegian forests according to LF-standards, criteria and indicators (NIJOS)

In addition other evaluations had been carried out on some of the standards, onto which adjustments were made for this particular evaluation. These former evaluations were made by NINA/NORSKOG (Levende Skog 2006a:15).

Revision

After evaluations were completed, the revision continued. At this stage, SABIMA and Nature and Youth were invited into the process, of which only SABIMA accepted. The NNV left the

[13] In Norwegian called the Presiseringsutvalget.
[14] Organisations taking part: WWF Norway, The Norwegian Society for the Conservation of Nature, Pulp and Paper, Statskog SF, NORSKOG, The Association of Intermunicipal Outdoor Recreation Boards.

co-operation at this point. For a year the actors worked on three main issues (Levende Skog 2006a:7):

1. Go through and undertake needed adjustments and changes on Living Forests Standards.
2. Discuss the use of LF standards as regards to certification.
3. Look into the need for and function of a permanent LF Council or other ways to follow up on the LF co-operation.

A two-month consultative round was held on the preliminary standard-document in April and May 2006, for all organisations to go through. This was crucial not only to inform members and open up the process to the entire organisation, but most of all to ensure that the representatives came back to the final negotiations with necessary authorisation.

Public hearings were also this time held on the draft document. In the LF co-operation's own view, all stakeholders with an interest in forests and forestry were invited to the open hearing in May 2006. For the most part, this were the same organisations as was invited in the $LF^{1997-98}$ -hearings. On the invitation-list were 57 specified organisations, of which many of them had county and local groups or administrations. This makes the total of representatives potentially a lot larger than the 57. Among the invited organisations were the county forestry administrations, cultural heritage management and scientists. In addition, the public was encouraged to present written submissions directly to the secretariat. Seven such submissions were handed in.

The actual negotiations on the revised standards were carried out between the time of the hearings and the signing, which took place on Oct. 20th 2006. Some standards are revised and another two were new. This gives a set of 25 standards, now called claims. The changes are further outlined in the chapter on Effects.

The agreement also includes additional 5 points, lining out the preparation for adaptation to the FSC-standards and the establishing of Living Forests Council (Levende Skog 2006b).

In the press release regarding the agreement following statement was made (Levende Skog 2006d):

> *"The most difficult issues in the negotiations were connected to management of the biologically important areas, and how to preserve 5% of the total forest for this purpose. An agreement is reached, on which environmental NGOs' wish for trustworthiness and forest owners organisations' wish for adjustments to structures in Norwegian ownership, are both taken care of."*

Living Forests Council

On Dec. 11th the council was constituted, and general secretary of The Norway National Council for Outdoor Recreation was elected chairman. A working committee was also elected, consisting of the chairman in addition to two other members. The council's main function is to safeguard and administer the LF^{2006} agreement, and to take care of documentation from the work of $LF^{2003-06}$. LF Council will be the arena on which co-operation between the parties take place from now on. The Ministries of Agriculture and Food, and Environment have observing roles in the council. All acknowledged stakeholders

of the LF Standard[2006] have a seat in the council. Thus, in January 2007, the council was represented by:

- The Norwegian Pulp and Paper Association
- The Norwegian Forestry Association
- The Norwegian Forest Owners' Federation
- The Association of Inter municipal Outdoor Recreation Boards
- The State-owned Land and Forest Company
- WWF-Norway
- Norwegian Biodiversity Network
- The Norwegian United Federation of Trade Unions
- The Norway National Council for Outdoor Recreation
- The Norwegian Sawmill Industries' Association

2.2 Conflicting Issues

Although LF has been successful in both negotiations, there have been conflicting issues along the way, both on the organisational level, on the contents of the project and on scientific issues. The conflicts were to a great extent solved during the negotiations, but some were "solved" simply by defining them out of the project. This applies for example on the issue of primeval and natural forests.[15] We will have a brief look into these three categories of conflict: conflict on organisation, conflict on content, and conflict on expertise.

Conflict on Organisation

The conflicts on how the project was organised and run, arose to a great extent from the environmental and outdoor recreation NGOs. As mentioned before, these organisations were invited into the project after the framework for the entire co-operation was set. The setting therefore became questionable to the NGOs. These quotes reflect upon this issue:

> *"Traditionally, the conflicts between forestry and environment were so profound, that the NGOs were not allowed into the Steering Committee. They were let into WG2, and at the end of the day, that's were decisions were made" (I 15).*

> *"We did not have any secretarial functions or the like. And these kinds of functions are very important in processes like the LF. The "heavy" actors controlled this" (I 17).*

> *"The social and environmental interests were not represented in the upper Steering Committee, and in that sense disqualified from debate and decision making at the highest level" (Arnesen et al. 2004:13).*

The question on where to place the secretariat was also an issue in the LF[2003-06]-revision. The issue reflects a more profound imbalance between the parties: The forest organisations had more resources available, both money and personnel, than the environmental and outdoor recreational organisations. This had also other practical implications. Some of the organisations representing social and environmental interests later withdrew from the negotiations for this reason (Levende Skog 2006a), those who remained had at times problems getting through great piles of papers and reports within the deadlines (Arnesen et al.

[15] That is the forest areas not cultivated by forest management.

2004). Some actors, weak on resources, did not have the opportunity to take part because the project had no funding to their disposal.
To a large extent, these issues reflect on the meta-governance of the project.

Conflict on Content

Also connected to meta-governance, the framework of Living Forests project was set before a lot of the actors were invited into it. Thus, there was no real possibility to influence on this later on. In addition there were disputes as to whether actors in forestry actually wanted to change behaviour towards more sustainable forestry. Or if they were merely looking for a way to show that Norwegian forestry already was sustainable (Arnesen et al. 2004).

The issue of whether to include forest protection and issues regarding primeval forests was also brought up for discussion. Forestry actors and environmental NGOs insisted both on their own view, and the NGOs finally had to give in. It was made clear in the first round, that from the government's point of view, the issue of forest protection could not be solved by any of the parties in the co-operation, as they no authority to negotiate on behalf of governmental finances.

The conflict lines between environmentalists and forestry has made a shift, balancing perhaps more over to the environmental side. The shift towards making certification a significant part of the project, made the governmental representatives less confident in their role in the project, as certification is considered a one-sided issue for business interests only (Arnesen et al. 2004:14, 39, 64).

> *"At the same time, The Norwegian Society for the Conservation of Nature made it absolutely clear they wanted both forest utilisation and protection to be part of the main objective – but they did not get support for it." (Arnesen et al. 2004:45).*

> *"(…) the forestry business meant that this was an issue between the government who had competence regarding the legislation, and the forest owners who are entitled to (financial) compensation regarding forest protection" (ibid.:71).*

> *"Environmental and outdoor recreational NGO's thought of LF standards[1998] to provide a good starting point for certification, but not as an actual basis on which to draw certificates" (ibid.:52).*

> *"The conflicts on forest policy between the Ministry of Agriculture and Food, and the Ministry of the Environment became evident with Living Forests" (I 10).*

Conflict in the View of and the Use of Expertise

Research and development has been an important part of the LF[1995-2006] process, although scientists have not been part of the actual negotiations at the table. The Scientific Committee formed spring 1996, was supposed to give scientific grounds for the formulation of indicators and standards, but is also said to be made less use of than most actors wished for (Arnesen et al. 2004). One obvious conflict is the uncompromising nature of science on the one hand, and the demand for compromises and consensus building in projects like Living Forests on the other.

All the same, there are differences in opinion even on scientific measures. What exactly is the content of what is regarded sustainable forestry? What scientists have the most credibility? Is science ever unbiased? Some of these questions have been addressed by the NGOs, pointing to the fact that few biologists have been deeply involved (Arnesen et al. 2004:46). Regional differences in forest biology (and more) make it more difficult to set accurate national criteria, even though this would be the most desirable. This was a conflict on which everybody agreed upon, as shown in the first quote below. There were other conflicting areas on expertise, on which the parties did not agree:

> *"The group was therefore ready to develop regional criteria, and was aware that this left room for discretion (…)" (Arnesen et al. 2004:53).*

> *"It was alleged that there was a poor range of scientists chosen to perform some of the research employed (ibid.:46).*

> *"There were problems with "lopsidedness" on what side the knowledge came from. To a certain extent, what came up were the truths of traditional forestry, so whenever expertise is used, it is crucial to see to it that the information is balanced" (I 17, I 18).*

> *"Also, different scientists seem "married" to one side or another. This confirms that there exists not only one truth" (I 8).*

As we can draw from this outline of the process, it is beyond doubt that LF has been "a **complex, remarkable and ambitious project** including several stakeholders in unusual constellations" (Arnesen et al. 2004:7). Although fluctuating strongly since 1998, **cooperation has continued** throughout the years. The final proof of success and mutual trust is the institutionalisation of the cooperation in the Living Forests Council in December 2006. The council forms a stable basis for future cooperation and the parties have now agreed on a 5 year schedule for revising the LF Standard.

It is also beyond doubt that the process is kept alive **despite a large number of hindrances.**

We will in the following Part 3 look into the process more thoroughly with regard to the five governance-elements chosen for the GoFOR-study. We also look into effects and lessons learned from the process.

Part 3: Aspects of Governance in Living Forests

This part relies heavily on information from our own interviews, and is presented according to the elements of the GoFOR Terms of Reference. This results in some overlap in the presentation of the material. For example the chapter on participation, which is one of the fundamental characteristics of all different aspects of governance pointed out in the GoFOR, inevitably have overlapping information with the other chapters, especially those on intersectoral coordination, multi-level governance and expertise. We deal with this in two ways:

1. We have chosen to overlook this overlapping, so that some of the material presented in this chapter is repeated in the succeeding chapters.
2. We refer to the other chapters instead of repeating too much.

3. Participation

The actors on the "forest field" have traditionally been limited to a tightly knit group: The Ministry of Agriculture and the forest sector through their often concurrent education from the former University College of Agriculture now the University of Life Sciences. Some of our informants express it in this way:

> *"It is very obvious in the agricultural and forestry sector of Norway that we have a corporative state. All actors participate within a small arena in the "triangle" The University college of Agriculture / forestry / Ministry of Agriculture where no one else can enter, and where everyone see it as inappropriate when someone interferes in the way public administration is handled. These actors know each other well and have a beer together on occasions" (I 5).*

This however changed gradually from the 1970ies. In the 1980ies, the debate on the regulation of forestry in Oslo and surrounding areas (Markaforskriften) opened the sector to new focus areas and new actors. In the 80ies, the ENGOs' only way to influence forestry in any way, was by agitating from the sidelines. Conflict lines were maintained, and through lobbying and stigmatising forest owners, ENGOs' tried to make forestry change towards sustainability (I 8).

The result of this development is indicated when looking at the history of Norwegian forest policies. In laws and regulations there have been development from focus merely on long term forestry to secure raw material supply, to a gradual incorporation of environmental and recreational issues (Sverdrup-Thygeson et al.:2005).[16] Some of our informants claim that the Living Forests process has added to such a development:

> *"Earlier (1980-1990), the public authorities were the forest industry's most important partner. After Living Forests the environmental organisations have become a much more important partner, and the authorities are less important, other than through the laws. Public administration within forestry has been worked off both on local and regional level. There have been substantial changes since then" (I 6).*

[16] This is also illustrated in a table in the chapter 8. Effects.

The traditional "triangle" is however also present on the economic side in the Living Forest process. Conflict over this has come to the surface especially in the forester/biologist controversy (for more on this, see chapter 6 Expertise).

The Living Forests process involved at its' most more than 90 people in various boards and groups, and more than 150 people in the advisory committee and hearings ($LF^{1995-98}$). In addition to this, negotiating organisations have consulted members on different levels in their internal democratic procedures and expertise has been drawn into the process at different times. In this chapter, we look into how and when in the course of the process, different actors are taking part. Actors being for the most part organisations, but also some single stakeholders, like

3.1 A Process with Broad Participation on Different Levels

The Living Forests process had broad participation both from different sectors and levels. However there is still a distinct line drawn between those "inside" the process, and those "outside". Environmental and social interests were invited to the negotiation table in Living Forests, and has influenced directly on the process.

Participation in the $LF^{1995-1998}$ project, in the intermediate period (1998-2003) and in the Living Forests $^{2003-2006}$ revision is listed in part 2 presenting the case. In the following we will first look at certain features according to participation in LF, and also have a closer look at each individual organisation's participation in the process.

Initiation and Agenda Setting

International market forces and consumer demands for sustainable forestry has been given much of the credit for the Living Forests' process. At least this, connected with national economic development, is forestry's version of the background of the Living $Forests^{1995-1998}$ project and also for the continuation of it. International trends created a need in forestry first to document sustainable forestry, later to an understanding on the fact that forestry also had to change to become sustainable (for more on this see also chapter 8 Effects). In the process both towards sustainability and documentation, forestry has been dependent on other interest groups.

In his doctoral thesis, Bjørnar Sæther also points out the international context in which the central actors of forest industry act (Sæther 2002).

When asked, the Ministry of Agriculture and Food claims that public authorities influenced heavily on the process coming about. They feel *"the story live on by itself"*, when the forest industry and forest owners are given and also fully claim credit for the process. On the other hand, the Ministry claims to have had a large role in initiating first the *Trade project for forestry and environment* I 1994, and later the Living $Forests^{1995-98}$ project. They also pointed out that information was not the solution here. But they are also clear on the fact that the Ministry did not push forward specific solutions, but only supported the co-operation and the process as such (I 15).

Different ENGOs see also other forerunners to the $LF^{1995-98}$ project. The NNV sees a clear link to their campaign "Skotjernfjell-aksjonen" where alleged primeval timber was marked with paint to scare off potential buyers. The organisation also contacted Axel Springer Verlag

in Germany in order to influence them not to buy products of Norwegian origin. This affected Norske Skog's reputation in the international market (Arnesen et al. 2004:42). WWF-Norway on the other hand sees an obvious connection to their work on FSC-certification from 1995 even though certification was not an issue in LF to begin with. WWF International all the time worked to create a system of certification (Arnesen et al. 2004:43). It is said that the ENGOs gained little by working by the conflict lines. This made dialog through Living Forests a more promising approach to reach sustainable forestry (I 8).

The outline of the project was set already in 1995, before the NGOs were invited in. The environmental organisations were not satisfied with this, and there were discussions on whether to involve preservation of forests and primeval forests in the negotiations. The NNV worked hard to include this in the negotiations, but had to give in.

By the end of 1996, a group was initiated to work on the certification issue. All stakeholders represented in Working Group 2 were also participating in the Certification Committee which delivered its' report in 1998. The forest owners and the industry followed up on the 98-agreement towards a certification regime on its' own. They saw this as an internal matter and this view led the ENGOs to engage the mass media in the conflict. The environmental organisations were supporting an FSC certification, while the forest owners worked towards a PEFC group certification. The PEFC was reckoned to be less environmental friendly by the ENGOs (see chapter 8 Effects).

This disagreement on certification systems, and the implementation of these systems in actual forestry, led to the initiation for the parties to get together to specify some of the standards. Both the LMD and the DNV pushed this work forward.

When it comes to initiation of the revision in 2003, it was quite clear in the 98-agreement, that the standards were to be revised regularly, and a 5-year schedule was suggested. The Forest Owners' Federation invited in 2003 all organisations from $LF^{1995\text{-}98}$ into negotiations, also this time strongly wanted by the LMD. The process came to a halt when the NNV threatened to leave the cooperation. In order to prevent the cooperation to fall apart, they ordered three different evaluations which could form a common basis of knowledge for the partners. NNV agreed to put off the final decision on participation until the evaluations were conducted.

All in all, the Forest Owners' Federation has been the driving force behind the initiations in the Living Forests process. Together with the industry, they had far more financial recourses than the interests groups. Mostly they were also setting the agenda. This becomes obvious in the initiation of the $LF^{1995\text{-}1998}$ project and in the implementation of the certification regime. On the other hand the other interests are not without power to alter the direction of the process. The NGOs could choose to leave the process, and in that way weaken the legitimacy of the process. The goals set in 1995 were not the same as the result seen in 1998 and the attitudes of the forest owners and industry had also changed.

When forestry tried to operate on their own after the 1998-agreement, this created a lot of racket, and led first to a specification on the standards, then to a revision. Because of the pressure from the market forces the environmental and social organisations gained power to pressure the industry for more environmental friendly practices and into new negotiations. The fuss in between the two formal negotiations also made a common understanding that a formal agreement had to be managed by a permanent board, thus the Living Forests council came into light in 2006.

It seems obvious that the role of the Ministry of Agriculture is much underrated. Their pulling strings backstage have been translated into "had no decision-making role". In our opinions, this does not mean they didn't get their way.

Actors with Decision Making Power

The table below shows who participated and participates on the highest participatory, holding decision making power in different ways. Other stakeholders, as well as external expertise, had an advisory role and were only part of the quite extensive hearings, this even though some stakeholders tried to make their way into decision making arenas.

As the table below shows, The NNV withdrew from the process after evaluations in 2004. The environmental interests were still represented in the 2003-2006 process, by the WWF-Norway and one umbrella ENGO; SABIMA.

The Ministry of Agriculture and the Ministry of the Environment had no formal role in Working Group 2 during the LF[1995-1998] project, when it comes to the right to vote. This custom is continued in the succeeding negotiations. They were however full members of the Steering Committee of the project.

Table 1: Actors with decision making power in the Living Forests process 1995-2006. (Spots mean participation without the right to vote.)

Actors WG2/LF[1995-2006]	Initiation 1994	Initiation 1995	WG2/ Negotiations 1995-1998	Certification Committee 1997-1998	Draft hearings	Signing LF 1998	Specif. on LF 2001	Initiation Revision 2003	Evaluati 2003-04
Forest Owners' Federation									
NORSKOG									
Pulp and Paper									
Sawmill Industries' Association									
Statskog SF									
The United Federation of Trade Unions									
Ministry of Agriculture									
Ministry of the Environment									
NNV									
WWF Norway									
FRIFO									
Intermunicipal Outdoor Recr. Boards									
The Consumer Council[17]									
SABIMA									

[17] Represented by Environmental Labelling in Norway.

Advisory Roles and Public Hearings

The Advisory Committee during the LF[1995-1998] involved a broad range of organisations in open hearings:

> *"… by the end of January this year, altogether 25 reports were therefore presented to an assembly of 160 persons meeting in the Living Forests Advisory Committee. The meeting was the fifth in a row. The assembly consisted of representatives from the 19 Forest Owners' associations, NORSKOG (The Norwegian Forestry Association), Statskog SF (The State-owned Land and Forest Company), the forest industry, labour organisations, consumer interests, environment- and outdoor recreation movement, public administration (the country governors agricultural and environmental departments), Ministry of Agriculture, Ministry of the Environment, research institutions and other connected to Living Forests" (Levende Skog 1997).*

There was also one Advisory Committee meeting in the LF[2003-06]. (For more information on the advisory committee see 2.2 The Advisory Committee.)

The Scientific Committee also became a kind of an advisory group without any real influence (for more, see chapter 6 Expertise).

Documents were also sent out on public hearings to quite a broad list of stakeholders at different points in the process. The invitations were sent to the same group of organisations as for the Advisory Committee and included also the organisations participating directly in the negotiations. Some of them had quite extensive internal processes before returning to the negotiation table. The hearings were open to all interested parties, also the ones who did not receive specific invitation. For the LF[2003-06], seven consultative statements were given from organisations and private forest owners.

For more on organisational participation see also chapter 5 on Multi level coordination.

Actors not taking Part

Most interviewees feel to a great extent that all demands are met regarding incorporation of stakeholders:

> *"[At the outset of the Living Forests[2003-2006] revision] … we went through again who should participate. We concluded that the most important groups were represented or had been invited into the process" (I 2).*
>
> *"This is sufficient. The LF-process has been carried out with participation to a large extent" (I 20)*
>
> *"(…) feel the process was wide open, including representatives from outdoor recreation, industry, forestry and environmental organisations. All interests were covered" (I 8, I 20)*

There are, however, several stakeholders who themselves feels left out of the process, of some reason or another. Others have of different reasons chosen not to take part even though they were invited. Below are listed stakeholders recognised by the LF-participants, and other stakeholders not recognised by them, all of which are not taking part.

The **NNV** chose to leave the co-operation both in the 2001 specification and finally in the 2005-2006 negotiations. When they left the co-operation, it was because natural forest areas never became included, and the parties did not have the will to set aside 5% of the forests as biologically important areas. Some was said to see conflict and uncovering violations on the standards as a more rewarding way of work than co-operation. Still, *"nothing has become of this, so by choosing to stand outside, [the NNV] has chosen a passive approach anyway"* (I 11). The organisation was replaced by Norwegian Biodiversity Network, SABIMA, an umbrella ENGO.

Due to the importance of native people in international certification, **The Sámediggi** (the Sami Parliament) was invited into the LF[2003-3005]. From the parties inside the LF, it is seen as a result of inadequate financial management, when The Sámediggi in April 2005 had to turn the invitation down due to lack of finances. The Sámediggi-representative himself say they did not find participation worth the cost of travelling from Kárášjohka to Oslo, costing at least NOK 8000-9000 per meeting. The decision not to take part was taken even though the Parliament saw that their interests were at stake. Instead they had to be confident in the LF-negotiations to attend to their interests (I 14). The Sámediggi presented in 2006 a written statement especially concerning cultural landscapes for the public hearing.

The Norwegian Consumer Council was part of the establishing the LF[1995-98], but turned the invitation for the 2003-2006 revision down because of capacity limitations (Arnesen et al. 2004, I 1).

The villagers who in fact live closest to the forest areas are another group not taking part. These could easily be recognised as independent stakeholders of social interests, because outdoor recreational organisations traditionally represent predominantly "*urban interests*" (I 7, I 15). There were no obvious spokesmen for this group, however, so this issue was not taken any further.

The organisation **Nature and Youth** (NU) is the only ENGO for youths in Norway, and part of the Friends of the Earth International. They were not invited into LF from the start, and are not themselves sure on when they became aware of the process. They themselves believe they were not invited from the start because they have no professional knowledge on forestry, and that both WWF-Norway and their mother organisation NNV were thought to contribute more on technical details.

When invited to the LF[2003-06], NU made a strategic choice not to participate, and wanted to maintain independent from any co-operation: *"The role of NU in forest issue was supposed to be more independent from forest industry and forestry in general, whenever something was not right"* (I 13). That way, they thought themselves able to speak out on behalf of also the ENGOs inside the process, who for at great part was held from agitating in the media over indifferences, as they were silenced by the negotiations and agreements. They are not satisfied with the results of Living Forests, and do not think they ever will be.

Bellona has also been wanted into the process, but it is assumed that forest management is not of their interest.[18] We have not been able to pursue this issue.

[18] The Bellona Foundation; a multi-disciplinary international ENGO based in Oslo.

NIKU, the Norwegian institute for research on cultural heritage, consider themselves as stakeholders in sustainable forestry. Even so, they would not want to give priority to the LF-process, had it not been for the fact that cultural heritage management in general, and the Directorate for Cultural Heritage in particular, did not at all participate. *"To my great surprise, I became also aware that the county administrations [which are responsible for the culture heritage management on behalf of the government] were not invited at all*, an interviewee says (I 16). It is emphasised that interests like outdoor recreation and bio-diversity are fully covered, but no stakeholders on cultural heritage are present. The Ministry of the Environment, being the responsible body also for cultural remains in forests, appointed their representative from the Directorate for Nature Management. Thus, they did not make use of their own archaeologists, who would be more competent on these issues. To excuse NIKU on not taking action on the issue for the first LF[1995-98], the interviewee says that the organisation at that time had no employees working especially on cultural remains in forests. More on NIKU's view on the result of cultural heritage management not being represented is found in chapter 8 Effects.

Other potential stakeholders which some actors feel is missing are **entrepreneurs** of processing machinery and large **furniture dealers** like IKEA especially with regard to certification (I 21, I 23). The first due to the fact that contractors are actually carrying out a large portion of forest management today, the latter because of their direct contact to the consumers. It is also claimed that owners' interests are well looked after in the project but *"there is an overall lack of knowledge on workforce policies"* (I 24).

Another stakeholder, not mentioned by any of our informants, is the **tourism sector**. As far as we know this sector has never been considered a relevant part in the negotiations or for public hearings, even though the forests are a large part of tourism products sold especially to foreign tourists.

Except for the project manager and the representative for the Consumers' Council of LF[1995-98], **women** are no part of this process. The same goes for **children and youth**, who to an increasing extent are involved in planning processes which concerns their interests, especially after the Ministry of the Environment established National Policy Guidelines on children and planning in 1995 (MD 1995). None of the informants finds these groups relevant as stakeholders.

In addition a distinctive feature of the Living Forests process is the vague and not outspoken role of the Ministries**.** In the **Ministry of Agriculture**, they see themselves as "*process catalyst"* and contributed substantially on what turn the project was to make from the start. The Ministry of Agriculture and the **Ministry of the Environment** granted money for the LF[1995-1998] project, but they were mostly bystanders later in the process and did not have the right to vote in Working Group 2 or later. In the present Living Forests Council they hold the right to meet, but not to vote. Still, this rather peripheral role is not at all mentioned as a problem by our informants. It seems to be accepted and also preferred by many of them (for example I 5, I 6, I 21).

Throughout the history of Living Forests the forest sector who have had the right to include or exclude other participants in the negotiations. Now the organisation seems quite set. The organisations who signed the 2006 agreement have the right to representation in the Council. This does not mean that the Living Forests process is now all closed. There is an opening to new members. In the statutes for the new Living Forests Council it is said that:

"The annual meeting can, if consensus is reached, include new members in the Council. These have to sign the current agreement about Living Forests, be nationwide and represent important interests to Living Forests" (Levende Skog 2006c)

3.2 Organisations Participate to achieve specific Goals, but the Goals Differ

Both the former evaluations and our interviews show that there are several reasons why the actors have participated in the LF process. In Arnesen et al. expectations of the participants towards the Living Forests[1995-1998] process were described (Arnesen et al. 2004). From our interviews it seems like the objectives for the organisations and the reasons to enter the process have not changed a lot from the LF[1995-98] process until today. In the following we will have a closer look at each of the organisations in the former Working Group 2 in LF[1995-1998] and those who participated in the 2003-2006 revision.

- The Norwegian Society for the Conservation of Nature (NNV)
For a long time the organisation had been working to improve the quality of Norwegian forestry, and expected the initiative from the industry and forest owners to be an honest attempt to satisfy international standards and costumers. Their special interests have been connected to the primeval forest and biodiversity. The organisation joined the project to make a difference in the quality on sustainable forestry and expected that they in LF[1995-1998] would achieve more from the inside than from the outside.

From their own point of view, they learned that this was not the case. The organisation chose to step out of the 2001 specification process and most of the LF[2003-06]. The reason, even though there were different views within the organisation, was that they felt it more useful to keep out of it and make visible how unsatisfactory Norwegian forestry was (I 11).

- WWF Norway
A negotiation processes like LF is in line with WWF-Norway's general strategy to overcome a traditionally high level of conflicts between the environmental organisations, the government and the industry. The organisation also accepted to a higher degree than the NNV, the terms for the Living Forests negotiations. WWF is quite familiar with certification process internationally and express belief in the way the market can be a push for a better environment.

- SABIMA
SABIMA was not a part of Working Group 2 in the 1995-1998 project. The organisation was invited in when the NNV left the negotiations to secure sufficient participation from the environmental side. The preservation of biodiversity and an interest in influencing processes connected to standards, seem to have been the most important reason for SABIMA to join the process.

- The Association of Intermunicipal Outdoor Recreation Boards (FL)
The FL seems to have had no distinct expectations towards the process. They joined due to the fact that the forests are important arenas for outdoor recreation and for taking care of the social dimension in forest management.

- The Norway National Council for Outdoor Recreation (FRIFO)
FRIFO joined the negotiations to see to the interests of the organisations engaged in outdoor activities and the social dimension in forest management.

- The industry and forest owners
They wanted to achieve trust in the national and international market. Later they reached the conclusion that they first would need to change praxis in order to achieve sustainable forestry.[19]

In interviews also other reasons are mentioned: 1. An interest in environmental friendly forestry. 2. A need to follow up new knowledge already brought to light. The push factors seem however to be more important than the pull factors.

- The Norwegian United Federation of Trade Unions (FF)
FF's arguments for participation in the LF-project are based on a broad field of interest regarding employees' interests. In addition, the union had interests concerning both ecological and social issues. That the union recruits members both from the wood processing industry, forestry and from the timber industry probably adds to this.

- The Norwegian Ministry of the Environment (MD)
The Ministry of the Environment had during the 1990ies been working on a process to improve forestry, but seemed to get little out of it. They therefore joined the Living Forests process to influence the improvement of foresty (Arnesen et al. 2004:64). Also, the fact that the Ministry partly financed the process, gave them seat in the Steering Committee, and by that, also the opportunity to influence on the entire process (I 10).

- The Norwegian Ministry of Agriculture and Food (LMD)
The Ministry of Agriculture's representative felt that the impression that Living Forests was an information project was wrong. According to the ministry's representative a change in forest industry was a prerequisite for the project all along (Arnesen et.al. 2004:67). LD wanted an increased focus on forestry and environment, in order to secure that Norway

> *"appear legitimate with regard to environment. Until late 1990ies, the ministry and the government had the sole responsibility of working out forest policies, it was only fair that both forest owners and the industry did this themselves now. Norwegian forestry is not proven especially problematic. LF was more an expression for an increased invironmental interest" (I 15).*

3.3 A Change in Participatory Culture?

As described at the beginning of this chapter and in part 1, the culture of participation in forestry in Norway has been far from inclusive. Since the 1970ies and with the Living Forests process this seems to be gradually changing.

Among our informants there is broad agreement on the strong and weak points of participation in the Living Forests process. The pros are connected to broad participation and

[19] This change of attitude is documented broadly both in the 2004 evaluation and in our interviews.

inclusion. Informants point out that different interests have come into dialogue and democratic principles and consensus have become rules of the game.

Arnesen et al. (2004) underlines these effects with regard to democratisation: The LF process has increased the parties' ability to negotiate and to build consensus on complex matters. This means that also the NGOs, whose opinion has not always been counted for, have become more able to participate in these kinds of processes. This is what sin some governance theories are called *institutional capacity* (Healey 1997).

One of the informants sum up the strengths and weaknesses in this way:

> *"Strong points: On the paper, all important parties take part on the same basis with consensus. All decisions are made after open debate. Weak points: The industry has much more resources to push the process ahead, and to get and hold information. They have the capacity to influence from the outside as well as from the inside for example politically and economically" (I 5).*

It seems as if the Living Forests process has had direct effects on the power structure in forestry. When our informants are asked about this they point out a two step process: They see a move of power from the state to forestry and further from forestry to the public. One informant puts it this way: *"The market's power has become more visible. To put it simple: Until 1995 it was the Ministry of Agriculture which defined forest politics. After this, the parties in Living Forests have been defining it" (I 10).*

Living Forests seems thereby to be an important factor promoting a shift in participatory culture in Norwegian forestry and in the work for sustainable forestry. With the establishment of the Living Forests council in 2006, cooperation between different interests has even been institutionalised.

Generally this chapter has gone through the basics of who, why, what and how of participation in the Living Forests process. The presentation has shown that Living Forests[1995-2006] has been a broad participatory process, novel in its form because it has included new stakeholders into forest policies in powerful positions. In this way the process has also been part of a democratisation of forestry, even though there would be many objections to the term forest democracy.

Except for the formal hindrances to participation, lack of resources has been a recurring issue and problem both for organisations participating and those who choose to be on the outside. Both the Sami parliament and The Norwegian Consumer council gave up this reason for not participating in the 2003-2006 revision. Such a broad process will drain resources in poor voluntary organisations.

Participation or not will be a question of priorities and an estimate of costs against gains. This is a recurring problem. The statutes of the Living Forests Council states that the secretariat and the work group is financed by the interest group "Economy", but all members must cover their costs of participation themselves.

The **forest industry** entered the negotiations mostly out of necessity because of the pressure from the market and the public opinion.

The **ENGOs** entered to reach increased quality on forestry. Living Forests became an opportunity to achieve this through cooperation and dialogue with the government the forest owners and industry, in other words those who affect forests. The main objective for participation is related to the protection of biodiversity. Informants in our case study argue that a large part of the productive forest in Norway will never be protected, and that Living Forests is an approach to secure management of these unprotected areas. However, because priorities and strategies differed, the environmental organisations also ended up with different roles in the process.

The aims of the actors speaking on behalf of the **social interests** were more vague, and thereby a more ambiguous role in the process. They were also new to this kind of negotiations.

The **ministries** saw this as a way to achieve goals they otherwise would not reach. By letting the industry take on the responsibility, they most likely eased potential challenges in the implementation. Still, by financing a large part of the process, the ministries gained seats in steering bodies, and practised a "hands-on management" anyway. By resource- and policy framing, the ministries to a large degree influenced on who was "in" and "out" of the decision making arenas.

4. Intersectoral Coordination

Living Forests[1995-2006] is all about intersectoral coordination. The actors presented in the previous chapter can divided on several areas:

- Forestry
- Industry
- Environment
- Cultural heritage
- Outdoor recreation
- Public administration
- Education
- Research and Development
- Consumers' and workers' interests

Living Forests is an example of a policy process *outside* the traditional policy making area. The organisations on forest management, environmental issues and social interests carried out negotiations and signed LF agreements on three occasions. As pointed out earlier, governmental representatives were said to be present as observers, although actively taking part in discussions.

Research and development, as well as education are included on the list too, on the grounds of their vital role as suppliers of knowledge and expertise all along the project. The intersectoral negotiations were carried out on the basis of newly developed research, most of which was ordered solely for this purpose, and mostly paid for by LF project-funding. Some research was in addition partly funded by The Research Council of Norway (Levende Skog 1998e).[20]

In the Terms of Reference for the main assessment, intersectoral coordination is recognised as one of five constituting elements of the conception of governance (GoFOR 2006a:28).
In this chapter, we will concentrate on whether intersectoral coordination can be found as an indicator for governance in the LF case or not. We look into how intersectoral coordination has been of significance in the Living Forests project. First, the term *sector* is defined. For a broader view on Norwegian sectors, look into Part 1 Explanatory Context Factors. Then the empirical data is presented. This is followed by a brief analysis of the findings.

4.1 Which Sectors Take Part?

There are several approaches as to how "sector" is understood. We speak of private and public sector, productive sector and sectors exposed to competition, sector policies and sectoral planning. For the most part, we define sectors as a division between certain subject areas, such as agriculture, cultural affairs, fisheries, industry and so on. This division is done along policy dimensions, classifying the sectors according to function.

Another point of view is division by function and the economic chain. In this respect the forest sector includes all actors, networks and decisions made regarding forest issues. This in mind, one could argue that all actors involved in Living Forests belong to the forest sector, but this approach makes no sense for studying the LF process.

[20] This is for later shortened to The Research Council.

It seems more suitable to go by "interests", rather than dividing by sector. As a rough approach, one could say that the stakeholders of Living Forests can be divided into three main groups:

1. Economic interests (NGOs on forestry; forest owners, industry)
2. Environmental interests (NGOs on environmental issues)
3. Social interests (NGOs on outdoor recreational issues, trade unions, native population)

This is the same classification as the actors in LF themselves use in the now constituted Living Forests Council. The inconvenience of this grouping is that it excludes the Ministry of Food and Agriculture and the Ministry of the Environment. On the other hand, one could argue that they belong to either of the three or all three at the same time, so where they belong is ambiguous.

This classification also says nothing on whether the actor is public, private or civic. It also might understate the possible significance of the R&D-sector, which has played a major part during the process, but which is not a member of the co-operation.

From leaving the NGOs trying to exercise power from the outside, agitating and displaying their point of views ad-hoc, the LF is seen as a paradigm shift, concerning participation in forest management.[21] Seen in the light of the definitions of sectors above, the actors of Living Forests 1994 through 2006 can be presented as follows:

Table 2: The actors in Living Forests by sector.

ECONOMIC	ENVIRONMENTAL	SOCIAL	GOVERNMENTAL
Norwegian Forestry Association	WWF-Norway	The Norwegian United Federation of Trade Unions	The Norwegian Ministry of the Environment
The Norwegian Pulp and Paper Association	The Norwegian Society for the Conservation of Nature	The Association of Inter Municipal Outdoor Recreation Board	The Norwegian Ministry of Agriculture
The State-owned Land and Forest Company	SABIMA	The Norway National Council for Outdoor Recreation	
The Norwegian Forest Owners' Federation		The Norwegian Consumer Council	
The Norwegian Sawmill Industries' Association		The Sami parliament	

Intersectoral Coordination Mostly on National Level

The Living Forests process is first and foremost coordinated on the national level. The now established Living Forests Council is a centralised organisation where each party attends by one representative only. Most representatives taking part work on the national level within their own organisations. This was also the case for LF 1995-2006. One exception is The Norwegian Sawmill Industries' Association, from which the representative is elected among one of their regional members.[22]

[21] Interviews I 5, I 2, I 17, I 21, I 11, I 4.
[22] That is Begna Bruk, member of the Norwegian Sawmilling Industry.

Within a governance process, one could expect "*intersectoral coordination processes to be situated increasingly at the sub-national or the international level"* (GoFOR 2006a). This is not the case in Living Forests. Most intersectoral coordination is conducted at a national level. The exception from this overall impression is the SABIMA and WWF-Norway, where the organisations to a certain extent are coordinated on the regional level (I 17, I 5).

The Living Forests process has also promoted informal contacts between the organisations. This development is most significant within the sectors (indicated in several interviews). To a lesser extent this is also true between the environmental and social interests. It is however interesting to see that it is also indicated that this is increasingly true between economic and environmental stakeholder (I 6, I 9).

The most striking absence of will or ability for inter-sectorial coordination comes visible with regard to the governmental participation. Both the Ministry of Agriculture and the Ministry of the Environment were taking part, each with one representative. They were put under pressure in the process, as they were expected both to appear as one agreed part and to be supportive within their own sector at the same time (Arnesen et al. 2004:65, I 10).[23] This was hard as "(…) *in fact there were distinctions in ideas and values among them [the ministries]"* (I 10).

Between the actors on social interests and environmental interests and among the environmental NGOs there were similar differences. The NNV had more of a conflicting approach, whereas WWF Norway produced information on biological perspectives (Arnesen et al. 2004:65).

4.2 Actors' Reasons for Intersectoral Coordination

In the following we will present actors' reasons for intersectoral coordination in the Living Forests process. The presentation is based on the interviews conducted. The statements are divided into the categories "naturally and positive" and "a necessity".

"Naturally…only positive"

As being in a position between public and private, between forest owner and supplier of different forest management services, Statskog SF feels that they have a special responsibility towards the general public. Already prior to the Living Forests project, Statskog SF had been in touch with NGOs on environmental and outdoor recreational issues. They have found this co-operation, although not strictly necessary "a good thing" (I 9). Evidently, the number of people actively involved in forestry, is decreasing. This is also seen as a valid reason for this kind of cooperation, crossing traditional boundaries between sectors and interests: *"…as less and less people are connected to forestry, we need to spread knowledge and understanding about the business to others"* (I 19). This is quoted from one of the forest owner associations.

The representative for the trade unions is taking part to make sure employees' interests are taken into account.[24] They say that they for a long time have urged sustainable forestry both by ecological and social measures (I 21). As a result, Living Forests and its' inter-sectorial coordination is seen as a positive mean to meet this objective.

[23] That is, The Ministry of Agriculture on forestry issues and the Ministry of Environment on environmental issues.
[24] The Norwegian United Federation of Trade Unions

The forests represents the public sphere in which several groups have different interests, so obviously these interests must be represented and involved in Living Forests, claims several interviewees from the forest economic side.

"A Necessity"

Some of the actors find the issues of intersectoral coordination an obvious consequence of the complexity of forest matters, also reflecting the international aspect of forestry. *"Forestry being an export industry needs to be in touch with market demands abroad"* says one of the forest owners' representatives (I 7).[25] When customers demand a change, it is necessary to adjust to this. To secure democratic legitimacy to the process, you need to bring all stakeholders together.

This means the economic interests holds the key to initiate this kind of processes. At the same time the same organisations understand that they cannot do this work alone. There is a need to become more considerate in terms of both business and environmental aspects in forest management (I 18). The economic organisations therefore present several reasons for intersectoral coordination, for example that all sectors were needed for bringing depth and thereby legitimacy into the process (I 22). Coordination is necessary seen from one of the forest owners' organisation's point of view as well, but without any explanation as to "why" (I 6).

Several interviewees underline the fact that it was actually external factors that triggered off the entire process. The market demands for well documented sustainable forestry made it impossible not to arrange for this process to be of intersectoral manner (I 10).

As became more obvious that certification was of great importance to guarantee sustainable forestry, is seems like the parties of Living Forests find ISC increasingly necessary. Two of the interviewees on the economic side put it like this (I 6, I7):

> *"The business holds the key to certification, because you cannot hand out certificates without the forest owners and the ones who carry out the actual forestry. Other interested organisations cannot initiate this. The certification-issue made the need for intersectoral coordination evident to all."*

Secretary-general of WWF-Norway sees intersectoral coordination, illustrated by Living Forests, as the only way of achieving results for the benefit of the environment. He says

> *"If we cannot enter into dialog and cooperation with the government, the forest owners, the business; all of those who affect actual use of forests; we have no influence at all.*

The interviewee from NIKU finds the missing expertise on cultural remains somewhat peculiar. In principle, considerations on cultural remains are supposed to balance considerations on environmental conservation and social issues, but this is not the case. He feels the cultural sector in practice is left out of the co-operation.

[25] The Norwegian Forestry Association

4.3 Intersectoral Coordination in Formal Documents

Based on the fact that obvious reasons for intersectoral coordination are expressed in the interviews, one would expect that this would leave traces in the organisations' formal documents. Below, we look into the documents which form the basis of Living Forests, the organisations' own formal documents and governmental policy papers. At least from governmental bodies, one would expect that heavy involvement both financially and by human resources required clean-cut reflections and mandates. This seems to be proven wrong in the case of Living Forests.

Some Traces of Intersectoral Coordination in Formal Documents of Living Forests [1995-2006]

The need to balance economic, social and ecological interest is recognised in the **final report from WG2 1998** (Levende Skog 1998b). It is said in this document that forest management plans *"can be a useful tool to manage the forest in an economically-sound manner, while taking environmental and social aspects into consideration at the same time"* (Levende Skog 1998g: 4). The forest owners' responsibility towards all forest resources is emphasised; biodiversity, outdoor recreation, aesthetics, heritage remains and working conditions for the work force are taken into consideration along with economic interests. The importance of research and development, communication and competence building is also taken into account. It is also declared that potential regional or local adjustments are to be approved by a group in which economic, ecologic and social interests are represented (Living Forests 1998b:6).

The forest sector is the only sector specifically addressed in this document. The fact that several organisations and actors are taking part is nonetheless obvious and pointed at. Along with the examples above, one can say that intersectoral coordination is viewed upon as crucial. ISC also appears in some of the criteria, for example criterion nr 6: *The protection of other economic and social functions and assets in the forest*.

In the **mandate for the LF[2003-06] -revision** one finds no intersectoral coordination in specific terms (Levende Skog 2005). Nevertheless, the manner in which the parties are expected to cooperate is obvious. There are terms as of how meetings are to proceed, of working conditions and routines related to this, for external communication and as for how the parties are supposed to behave when addressing specific standards. All together this is a sign of a growing understanding of the importance of structuring the cooperation and having working routines which are agreed upon. This can be seen as a result of the experience the parties have drawn from the first rounds.

The most important experiences brought up by the Eastern Norway Research Institute in the process evaluation report, are referred to in the document that forms **the basis for the negotiations** (Levende Skog 2006a). It is said that although the consensus built during the LF[1995-98] was remarkable in many ways, dialog and cooperation has been suffering since. Intersectoral coordination is not addressed specifically, but the phrase "Living Forests type of configuration" (Levende Skog 2006a:17), can be read as such. According to the evaluation, measures must be taken to ensure a fruitful collaboration climate between the parties.

The **Final Protocol** from the LF$^{2003-06}$ is a short statement only, but in this context, article nr. 3 in the agreement is of specific interest (Levende Skog 2006b:1). This article establishes the forming of the Living Forests Council, which means that the parties of Living Forests have agreed upon an established framework for future inter-sectorial coordination. One could say that the constitution of the council is an immediate consequence of the intersectoral manner of Living Forests.

The final protocol of the revision includes the revised Living Forests Standards^{2006} and statutes for the Living Forests Council.

The **Living Forests Council's** statutes conclude that all representatives in Living Forests hold an equal right to vote and all votes count equally. The members of the council are identical to the ones who took part in negotiations on the LF^{2006} Standards. The ten organisations are divided into three groups covering economy (5 organisations), environment (2 organisations) and social interests (3 organisations). This means economic versus environmental/social interests balance in terms of number of votes, but implies at the same time that the balance can easily be disturbed by new member organisations on either "side".

Any member organisation can leave the council at any time, but is still required to comply with the signed agreement until the next revision is carried out. This is probably a way to deal with the complex nature of intersectoral coordination, where several different actors take part. The need for stability is obvious. If any of the actors are to prioritise the time consuming and difficult work of consensus building between diverse organisations like this, one needs to be sure of the continued existence of the agreement. Other organisations must meet certain requirements in order to enter the council (Levende Skog 2006c).

The **LF 2006 Standard document** is more of a technical kind and does not specifically refer to intersectoral coordination (Levende Skog 2006c). In the document one can still find traces of intersectoral coordination in the way the standards are presented and their concern with issues far beyond the technical side of forestry. "Linguistic traces" tell us that other actors in addition to the mere "forest-technicians" have had influence on the document:

"Biologically important areas (…) key biotopes are to be left untouched (…) precautionary principle (…) registration on environmental qualities (…) biodiversity (…) nature based experiences…(…) heritage sites (…) concern for the landscape (…) outdoor recreation (…) Sami rights…"

Inter-Sectorial Coordination not Addressed in Governmental Documents

In the **1998 White Paper on Forestry**, The government states that great values are connected to forestry and that these values are an important base for both value adding, settlement patterns and social welfare for the population (LMD 1998).

One of the primary objectives for the forest sector is "to contribute to solving important environmental issues" (ibid.:box 6.1). A great responsibility for the preservation and development of environmental values are being imposed upon the forest sector, as "the [forest] sector manages major public assets" (6.1.2). This alone suggests that the government find intersectoral coordination important to deal with.

The political means used in forest management are said to balance the economic, environmental, cultural and social interests (2.3).

Further the government in the White Paper on Forestry (1998-99) acknowledges that forest management needs to deal with a variety of issues listing issues as the environment, policy on trade and industry, public goods, governmental interests in forestry, challenges in agricultural management in general, sustainable production and consumption, female representation in forestry, bio-energy and aid to developing countries. In addition, it is explicitly stated that contributions to develop forest policy "both from the forest sector and others", are of great importance.

Under the headline *Main objectives and perspectives according to political means* in Chap. 6, one finds intersectoral coordination specifically addressed. The importance of intersectoral coordination is stressed in all social planning taking place at local and county level. The Building Act is to be the means to approach this coordination (6.2). When addressing the forests' role in maintaining sustainable production- and consumption patterns, the White Paper emphasizes an effort across sectoral boundaries. This is also said to be a process-oriented kind of planning, of which one of the most important values is linked to cooperation among government and other stakeholders (8.5.4.1). Implicitly read, this means the authorities see forest management as an issue which requires intersectoral coordination.

The Living Forests Project is mentioned under chapter 5.2.7 *Development in environmental politics*. As their financing of the project is also mentioned, one can assume that they find the intersectoral coordination of Living Forests also valuable, even though the significance of intersectoral coordination is not mentioned by name. Further it is said that "it is essential that cooperation between the government, the forest industry and environmental organisations is maintained and further improved" (8.5.1).

In the **Regulation on Sustainable Forestry** the government refers to Living Forests on two occasions First in Chapter 2 regarding environmental interests, and later in Chapter 4 regarding action on forest damage (LMD 2006 § 5 and 14).:

> *"When taking forest management measures, the forest owner is obliged to make sure important environmental values and key biotopes are preserved in agreement with guidelines in Living Forests."*
>
> *"Considerations are to be shown with regard to biodiversity, landscape and outdoor recreation before action is imposed, and by taking action on forest damage."*

This shows that intersectoral issues are addressed by the Ministry of Agriculture, but says nothing explicitly concerning the coordination of these possibly differing interests. The reference to Living Forests can be interpreted as such a concern, though.

Intersectoral Coordination in the Organisations' Own Formal Documents

Few organizations have been willing to give up their internal notes and memorandums, so we have no information on this except from the interviews. None of the interviewees seem to have addressed intersectoral coordination as an objective in their formal documents. It looks as if this is more of an ad-hoc approach, as the opportunity (Living Forests) showed up and the purpose (sustainable forestry) seemed worth while.

4.4 Results and Costs of Intersectoral Coordination

Intersectoral Coordination Gives Results in Several Ways

The effort of the Living Forests process is seen to have positive effects on different levels, not only concerning the work on the LF standards, but also between the partners as such. Coordination and balancing relationships are considered crucial to the actors (I 6). The process is regarded an opportunity for the parties to get to know each other in other ways than before, which is said to "create commitment and acceptance" (I 20) and "strengthen the collaboration" (I 10). Living Forests has become a meeting point and a forum for discussion (I 9), where power is equally shared among the actors (I 7). Two of the informants express it this strong:

> *"(…) we have become an entire family during the process"* (I 21).

> *" [LF] makes one-sided actions from the different sectors unnecessary, which would have been more time consuming anyway, in addition to having given an overall unsatisfactory result"* (I 18)

By intersectoral coordination, it is said that results are achieved without specific losers; everybody end up as winners. By joining this kind of process, one *"creates solutions in a democracy where the parties one way or the other has to compromise on matters"* (I 8). Still the actors also see the downsides of intersectoral coordination.

Intersectoral Coordination has its' Costs

One of the catches of Living Forests is the fact that resources are the **imbalance of resources** among the actors, regarding both finances and competence or personnel (Arnesen et al. 2004). There is obvious scarcity on economic resources on the environmental side (I 17). This creates a bias in the relation among the actors. This aggregation on resources inevitably makes an imbalance also with regard to power:

> *"The power is situated especially on one side of the table, were resources are accumulated and the cooperation with government is strong, this makes cooperation between sectors more of a problem"* (I 10).

Still, the interviews indicate that this imbalance of resources has been less of a problem in the $LF^{2003\text{-}06}$.

On the other hand, when consensus forms the basis of the cooperation, and every party holds one vote each, this creates another form of imbalance between the parties at the cost of the economic interests:

> *"Everybody possesses the same power, at the same time as the social and environmental interests do not have to pay for the decisions made by consensus. This can create unevenness in debates and in power relations/balance"* (I 7).

This gives all actors compatible control, at least theoretically speaking, which in turn gives none of them the opportunity to get their own way only (I 8).

The lack of resources is on the other hand a valid excuse for all parties. All actors look at the project as **time consuming and resource demanding** in a several ways (I 19, I 21 and I 20). Consensus building is very challenging; one informant feels the process *"'consumes" a lot of people and all of them need to agree upon decisions*" (I 20). The fact that these are all very different organisations is also made clear: *"The meeting between sectors with very different starting points has made the process a little heavy and unstructured"* (I 9). This might also be part of the explanation to why the process came to a halt in 1998; the actors were all "worn out". One can say that some of the actors have gained stronger faith in the benefit of intersectoral coordination. Their insight is related to what results are possible to achieve, using this kind of process but has also increased knowledge about the other organisations' and representatives' professional work. At the same time they have learnt that this kind of work consumes time, energy and financial resources that some of the organisations might not have.

4.5 Changes in Intersectoral Coordination over Time

Our data indicates strongly that changes in intersectorial coordination have occurred in forestry and forest management with the Living Forests process. Experiences drawn from the first round of negotiation and the conflict leading to the 2001-specification, have also displayed the need for some rules of conduct to facilitate this co-ordination.

When asked what they see as the most important strength of the process, many of the informants emphasises coordination and cooperation. This is a strong indication on the importance of intersectoral coordination.

Some see changes in the attitudes towards coordination as a sign of maturation, in which the organisations *"have won mutual trust and more openness"* (I 8). This is a consequence of the fact that the group has spent a considerable amount of time learning to know each other, trying to reach a common perception of reality (I 9).

One single informant claims that there were less will for consensus building in the $LF^{2003\text{-}06}$, due to the fact that the parties in 2006 were less afraid of failure than in the first round. This brought more concerns on the organisations' behalf respectively, and less will to compromise (I 22).

Overall there seems to be no profound changes over time in this issue.

Rules of Conduct changes over time

Rules of conduct are made more pronounced in the $LF^{2003\text{-}06}$ documents than in the $LF^{1995\text{-}98}$ documents. This is not surprising, and shows that the project gradually became more institutionalised in time. The following presentation of rules of conduct is for a large part derived from Living Forests' own documents (Levende Skog 1998b/2006a), and presented point-by-point. The presentation is not exhaustive.

Rules of Conduct in the 1998 Negotiations (Levende Skog 1998c)

- Include all stakeholders
- Rely on scientific grounds for sustainable forestry
- Hold Advisory Committee meetings for the general public on draft documents

- Consensus building by negotiation[26]
- Assessments are to be made on standard alternatives when at least one of the stakeholders asks for it

Rules of Conduct in the 2006 Negotiations

- Sound and clear mandates from each organisation are required to enter negotiation[27]
- Issues regarding present or new standards are to be assessed, whoever asks for it
- Consensus on the perception of reality is essential prior to negotiation
- All suggestions must be taken into the draft documents on which negotiations are to be carried out
- All social aspects must be considered
- Consensus on results until revision is carried out and signed
- Evaluation must be conducted on a regular basis

Rules of Conduct in the Living Forests Council (statutes)

- Stakeholders are divided into three categories by interest: economic, social and environmental interests
- Member organisations representing economic interests finance the Council's work
- Taking in new member organisations requires consensus from all LF organisations
- Annual meetings, or when AU or two member organisations ask for it
- Issues on which consensus is not reached, is approached by specific means in an arbitration board
- Each member holds one vote
- Conflicts are to be solved at the lowest levels first, i.e. forest owners' level.
- Revision is to be carried out every 5th year, or on request of at least 2/3 of the Council members

[26] This required all representatives to ensure sound mandates from within their own organisations.
[27] To ensure this, all organisations must work through the draft documents on Living Forests Standards in advance.

The data show that the economic and environmental organisations both recognise **intersectoral coordination as crucial to "get the work done"** even though they may have different point of views on what work needs to be carried out. It seems like the outdoor recreational organisations find intersectoral coordination less fundamental than the environmental and economic interests. It seems like the cultural sector is weighed in the balance and found wanting, with regard to equal participation.

Through **the Living Forests Council** the intersectoral coordination has become **an "ever-lasting project"**. As we have seen intersectoral coordination is not directly an issue in formal documents. Living Forests has, all the same, contributed to formally institutionalise this kind of coordination in forest management.

The governmental bodies were not well coordinated in Living Forests; their representatives received little support and few clear guidelines for their representation during preliminary work and negotiations.

- In Living Forests action is taken to accommodate to the obvious **need for intersectoral coordination in forest management**.
- **Both governmental and non-governmental** actors are taking part.
- The **complexity of forestry** is acknowledged. This is also valid for the wish for open and flexible processes. Intersectoral coordination co-exists with some of the other constituting elements of governance, i.e. participation, accountable expertise and iterativeness.
- There do not seem to be a great extent of intersectoral coordination on local and regional level. The intersectoral coordination seems to a considerable extent to have taken place at the **national level**. Some activity has been initiated towards international partners, but this is more of **"intra sectorial"** manner, within the forestry sector.
- Even though governmental actors are taking part, they hold the weaker position as they do not hold a right to vote.
- ISC seems to be **dependent on multi-level coordination** to succeed.

5. Multi-level Governance - or Simply Coordination across Levels?

Looking at multi-level coordination in the Living Forests project, we want to find out whether decision-making has changed into a more governance-like manner, divided between the different levels, or if it still takes place within a traditional hierarchy. I.e. are decisions made at national level following traditional organisational procedure, or are these hierarchies dissolved, leaving decision making open to all levels to perform? Potentially the actors are interacting within and between a wide range of levels; from local to international.

In this chapter we look into the vertical organisation of Living Forests, if and how the levels are interacting across traditional boundaries and whether this influences decision-making. Almost all delegates for the LF negotiations were elected from the national level within their organisations. In order to find out whether the organisations' members on other levels also took part in decision making, we have been looking more in depth into organisational democracy. NGOs with large numbers of members were an important part of the legitimating of the LF project. It therefore seems crucial that a large part of these members were drawn into the process, or else this legitimising procedure would be a failure and a fake.

The overall question remains: where does the decision-making actually take place? The term multi-level coordination is used until any possible governance features are recognised within the project. We regret that we within the framework of GoFOR did not have the opportunity to approach all organisations at the local level. In order to verify the information given from central level on involvement on all levels, we would have liked to perform a study on forest owner and members' level.

5.1 Actors at all Levels are Involved in Living Forests[1995-2006]

According to the interviews, debate on LF is carried out at all levels within the organisations; international, national, regional and local. Yet, there is large variation as to how much the different levels have been involved by the national level, and also how eagerly the different levels themselves have participated in the process. First we look into how each organisation has involved their members along the project. Then we sum up the coordination according to levels.

A Large Degree of Coordination Within most Organisations

Most of the organisations in Living Forests are committed to traditional organisational democracy. This means that they have a central organisation made up of one or several boards and an employed administration. Annual or biannual national conferences are held, for which the local and district branches elect their delegates. Local or district branches arrange activities for their own members and elect their own local boards. Issues concerning the organisation follow regular rules of participation at all levels, before decisions are made at national level. The table below shows what organisations commit them selves to this kind of democratic rules of the game, and which levels are involved in the process. In addition, each organisation is more thoroughly looked into to find out to what extent the organisational channels have been involved.

The Norway National Council for Outdoor Recreation (FRIFO), Norwegian Biodiversity Network (SABIMA) and The Association of Intermunicipal Outdoor Recreation Boards (FL) are all umbrella organisations. Giving an account of all of their member organisations is not possible within the frame of this study. This account is therefore based on the overall impression of these organisations regarding organisational democracy and the involvement of local and regional offices.

Table 3 Actors and organisational levels involved in Living Forests

Organisations	Central Adm.	Regional offices[28]	Local offices
Ministry of Agriculture	**X**		
Ministry of the Environment	**X**		
Norwegian United Federation of Trade Unions	**X**	**X**	**X**
Sawmill Industries' Association	**X**		
Pulp and Paper	**X**		
Statskog SF	**X**	**X**[29]	
NORSKOG	**X**		
Norwegian Forest Owners' Federation	**X**	**X**	**X**
Norwegian Society for the Conservation of Nature (NNV)	**X**	**X**	**X**
WWF-Norway	**X**	**X**	
SABIMA	**X**	**X**	**X**
FRIFO	**X**	**X**	**X**
Association of Inter Municipal Outdoor Recreation Boards (FL)	**X**	**X**	**X**

WWF-Norway

WWF-Norway is organised as a foundation where supporting members approaches the central administration independently. For the biennial national congress, one supporter per 1000 members is elected from the regions. Members propose regional delegates for the biennial national congress, the secretariat presents them on the internet, and all members are free to vote for whoever they find suitable. In addition 7 delegates are elected on an individual basis on the prior national congress. These 7 delegates qualify by working for WWF-Norway purposes outside the organisation in different ways.

During Living Forest, WWF-Norway focused their effort at the national level, without greater mobilisation at member level. Still, contributions have been given from members on individual initiative, by direct communication mostly over the phone. Organisations like WWF-Norway though, have extensive connections internationally. WWF International sets objectives for the entire organisation. These are not subject to discussion at the national level at all (I 5). In turn this gives the national branches less of a free hand to negotiate at their own will. In terms of forestry, WWF International seeks to "improve forest management by balancing commercial and non-commercial interests" (WWF International 2006). To achieve this, they want to make use of the FSC certification system, which they consider to be the only credible system available.

The Norwegian Society for the Conservation of Nature (NNV)

The National Board is formed by delegates from all the counties, Nature & Youth, Rainforest Foundation Norway, Eco-detectives (children's association) and an employees delegate, all

[28] District branches or boards

[29] From Jan. 1st 2007 Statskog SF is no longer organised by districts.

elected on the biannual general meeting.[30] Seven delegates elected from the biannual general meeting constitute the Central Board.

NNV believes in public participation and picture themselves as a democratic organization, as "*all members can participate in the decision-making process through their local and county branches and the biannual general meeting*" (Naturvernforbundet 2006). The organisation experienced little demand for participation on the LF issue from district or local branches. Due to this, Living Forests was for a great part an issue between the central section of the organisation and the other parties. Some active members have been in touch with staff members on an individual basis. This general lack of interest is explained by the fact that a lot of county and local branches are located in areas with little, if any, commercial forestry at all. The fact that Living Forests is a complex issue, contributes to this lack of interest. Some local or regional branches have simply given higher priority to other issues (I 11).

Norwegian Biodiversity Network (SABIMA)
SABIMA is an umbrella organisation for 11 member organisations within the biology field, ranging from Norwegian Ornithological Society and The Norwegian Zoological Society to The Norwegian Society of Pharmacology and Toxicology. SABIMA is supposed to be a spokesman for the member organisations towards government and political circles. The organisation does not have the authority to impose on the member organisations how to behave or what to express, but make a point of cooperation as a way to gain influence.

SABIMA's representative to LF (from 2005-) feels the mandate from all organisations have been clear and has given the ability to act within the LF-negotiations. The representative argues that the clear mandate shows that LF is well founded in the member organisations (I 17). We have no further information to challenge this statement.

The Norwegian National Association for Outdoor Recreation (FRIFO)
FRIFO is also an umbrella organisation, in which 13 member organisations are taking part. FRIFO demands that partaking organisations are based on individual membership and is open to the public. FRIFO sets out to be a spokesman for these organisations and for outdoor recreation in general. There seems to have been little formal approach to the issue of founding the LF-negotiations in FRIFO's member organisations. The representative has had no written or in any other way committing mandate (I 23).

The Association of Inter Municipal Outdoor Recreation Boards (FL)
Like SABIMA and FRIFO, FL is an umbrella NGO. FL unite all inter municipal outdoor recreation boards in Norway. One of the main objectives of these boards is to coordinate state, county and municipal founding for outdoor activity.

FL has been in touch with all 18 regional boards on this matter and it has been an issue on FL-board meetings. This way contributions and mandate has been given for negotiations in $LF^{1995\text{-}2006}$. All local governments were asked for contributions when LF^{1995} was launched, and LF was subject for discussion on some of the inter-municipal board meetings. FL means that the contributions from member boards have been substantial, but the pressure on the issue has been low in general (I 2). For the most part, this has been an issue at the national level in FL.

[30] Regnskogfondet

The Norwegian Forest Owners' Federation
The Norwegian Forest Owners' Federation includes a total of approx. 43,000 forest owners. Among the main objectives for the Norwegian Forest Owners' Federation, is to work for their members' right to perform a sustainable forestry, and to improve the general conditions in forestry.

When voting at the board of representatives, each districts' representative counts relatively to the volume of lumber sold last year. Forest Owners' Federation held several meetings on Living Forests for their members. In LF[1995-98] a two-day meeting was held on the issue for the board of representatives. The forest owners were approached by the Federation on draft standards and regular member meetings were also carried out in order to ensure involvement (I 5,I 19). Forest entrepreneurs and Federation employees have also contributed more informally, giving their opinions in various ways (I 20).

The Norwegian Forestry Association (NORSKOG)
The Norwegian Forestry Association, unite 220 forest owners. NORSKOG's main objective is to secure proprietary rights and forest owners' economic base in forestry. According to NORSKOG's representative in LF[1995-2006], the work within the organisation clearly bears traces of multi-level coordination. The union officials have been approached from the very beginning; this is seen as crucial to the outcome of the process. The organisation have been in touch directly with forest owners, on the phone, by e-mail and by thematic meetings with selected members and union officials. A lot of effort has been made to ensure that the process is well grounded among the members, simply because the outcome of the process would possibly make an immense difference in the members' every day life. The members' opinion and considerations on consequences of the work in LF has been taken into account (I 7).

The Norwegian United Federation of Trade Unions
The Norwegian United Federation of Trade Unions with approximately 146 000 members is the largest trade union in the private sector in Norway. The union organises mainly members from the industry, including the paper industry and forestry.

The Sectional Council represents all unions, and gave together with the federation management the mandate for negotiations in WG2.[31] Information and input has been exchanged only between this council and the delegate (I 21). We have no further information regarding multi-level coordination within the unions respectively.

The Norwegian Sawmill Industries' Association (TL)
TL consists of about 200 sawmills and more than 94 member businesses spread all over Norway. Most of them are located in rural areas. The total number of employees is approximately 5.000. The association appointed one of its' regional managers as representative in WG2. The representative feels that with the appointment follows confidence and a clear mandate from TL (I 18). The representative had ongoing and close contact with the TL manager, but no extensive contact to the members in general.

The Norwegian Pulp and Paper Association (NPPA/TFB)
NPPA include 22 Norwegian manufacturers of paper, cellulose, wood chemical products, wood pulp and fibres board. All members are organised as limited companies, with the standard procedures that goes with this according to regular business practice. The association

[31] Translation of "Seksjonsrådet"

works to ensure a broad contact base for co-operating organisations both in Norway and abroad (TFB 2006).

The State-owned Land and Forest Company (Statskog SF)[32]
Statskog is the principal landowner in Norway, holding about one third of the country's total land area. Being state-owned, Statskog SF is officially run by the Ministry of Agriculture. Statskog is aiming at cooperation to manage land owned by the company. The management is to balance economic, nature conservation and outdoor recreational considerations (Statskog 2006). For the Statskog SF representative, the mandate was felt sound and clear. The discussions in Statskog SF were handled by the formal routines within the company, and this made it easy for the delegate to go into negotiations. He was also in touch with the sector manager and informed the board on a regular basis. Employees in general were not approached (I 9).

The Ministry of the Environment (MD)
MD left the appointment of their delegate with the Directorate for Nature Management (DN), who appointed one of their councillors. There was little, if any, communication between this delegate and the political management. Multi-level coordination and support from within DN was also missing. The delegate represented MD with no explicit mandate, except from the general mandate given DN as a "national body that has the scientific responsibility for managing the Norwegian countryside" (DN 2007). The representative knows of no policy decisions in terms of founding LF in political levels (I 10).

The Ministry of Agriculture (LMD)
The ministry itself is content on how the coordination between levels have been carried out:

> *"(…) we had complete vertical integration within the ministry [of Agriculture], all co-workers and all the way to the Minister himself. We informed the county administrations along the way, but it was out of the question to involve all these parties. This was supposed to be a trade co-operation, not politics. There were no reasons to involve the local administrations, either. We were not supposed to please all stakeholders; this was a process for forestry and trade actors. But of course, I am sure for instance the forest employees would have liked to be involved more (I 15).*

Forest authorities on county level was aware the explicit message not to involve or interfere with the process, but some had to a certain degree informal contact to local forest owner associations (I 13).

Summing Up Involvement According to Levels

The table below shows the actors of Living Forests according to levels and their degree of influence on the process. Direct influence means negotiating actors, legislative bodies and mandate from lower levels. Actors not being brought into the process to a great extent, or taking part in a more informal way are seen as influencing more indirectly. Some organisations participate directly or indirectly on more than one level.

[32] SF: Statsforetak (State owned company) is governed by Statsforetaksloven.

Table 4: Actors according to level and degree of influence on forest policies

Levels	Direct influence	Indirect influence
International		
	United Nations[33]	WWF International
	ILO[34]	International markets
National		
	Ministry of Agriculture	
	Ministry of the Environment	
	Norwegian Sawmill Industries Association	
	Statskog SF	
	NORSKOG	
	Norwegian Society for the Conservation of Nature (NNV)	
	WWF-Norway	
	SABIMA, and each of its member organisations	
	FRIFO	
	Association of Inter Municipal Outdoor Recreation Boards (FL)	
Regional		
	FL inter municipal Board Meetings	County forest managers
	District Co-operatives of the Forest Owners` Federation	
	NPPA regional members	
	Statskog SF District offices	
Local		
	Some local FL members (esp. Oslo and surroundings)	Forest supervisors
	Selected NORSKOG members (forest owners)	NORSKOG members
	Forest Owners` Federations members	Begna Bruk by its representative to WG2
	Statskog SF Local offices	WWF-Norway members
		NNV members

Most of the decision-making seems to be carried out on the **national level**, either within the organisations respectively or at the negotiation table. Within WG2 there was no direct contact abroad, even though in LF[1995-98] as a whole, extensive contact and cooperation took place with both Nordic and European partners.

Overall, **international organisations and institutions** have influenced both indirectly and directly on the process; indirectly, through governmental agreements. Directly by the international industry and markets which triggered off the process in the first place, and influenced heavily by demanding certain measures to be taken. Still, this influence had an indirect manner and not formal.

[33] For example through UN Commission Report "Our common future" (1987), The Bio-diversity Convention and the Climate Convention (1992), The Helsinki Conference and Intergovernmental Forum on Forests.
[34] Through ILO's conventions on worker protection, worker protection employment and more.

Of the three levels, **county level** seems least involved in the Living Forests process. The Norwegian Forest Owners' Federation held a single two-day meeting for the eight district coordinators. The district coordinators seem to have had internal discussions on this issue as well (I 19, I 6, and I 20). In political circles, there has been no "official" or formal participation, except in advisory committee hearings. In some counties the head of forest management in the county chief administration has had informal conversations with forest owners and representatives from the Forest Owners' Federation (I 13). One regional delegate was appointed, representing the Sawmill Industries' Association at the negotiation table.[35] Originating from the regional level, he would know the implications on regional level well; still he was appointed as a national delegate, representing the national level.

There seem to be little contact from **local level** directly to the Living Forests negotiation table. There are a couple of exceptions though: For the LF^{2006} hearing, two written statements were made from local level. One short statement came from a forest management leader in a small municipality with large forest interests. Another statement was made from a forest and outfield manager on a larger private property in the middle of Norway.

In addition to this, there has been some involvement on this level within the partaking organisations, most of which accounts to ordinary organisational democracy. Regional and local divisions hold regular meetings for their members. In $LF^{1995\text{-}98}$, three meetings were held for the Advisory Committee gathering around 160 participants, of which some were from local and county level. In LF^{2006}, one advisory committee meeting was held giving participants from local and county level the opportunity to influence on decision making. However, the formal invitation was for the most part addressed to organisations at the national level.

5.2 Actors have Different Reasons for Multi-level Coordination

When looking into actors' reasons for multi-level coordination, we have searched for inconsistencies between expressions made in formal documents and expressions and actions recognised through interviews.

Multi-level Coordination Addressed in Formal LF Documents

There are no formal rules of multi-level coordination within Living Forests. Still, informal rules can be identified: Multi-level coordination anchoring the work within the organisations is seen as crucial to ensure that the mandate given to negotiating delegates are well founded.

In the **final report from WG2** in 1998, multi level coordination between LF in the international level is addressed. Five UN related conventions or documents are seen as relevant for the Living Forests project, as well as one European follow-up on the Rio-conference from 1992. In addition to national acts and policy, the international commitments are seen as "an important foundation for the work on the LF Standards" (Levende Skog 1998b:2).

[35] Begna Bruk is an independent sawmill, largely owned by the Forest Owners' Federation (by Viken Skog). In Living Forests, Begna Bruk's purchase manager/office manager represented Norwegian Sawmill Industries Association.

The Certification Committee was to look into how certification systems could apply in Norwegian forestry, how regional differences should be met and how to meet with international demands on credibility of the preferred certification system. In the **final report from the Certification Committee** they recognise the necessity of coordination between forest owners, government and the forest industry (Levende Skog 1998c:8). It is underlined that certification as such is voluntary. With regard to group certification, it is also emphasised that the individual forest owner has a democratic right to influence whether her forest association is to implement a certification scheme or not.

In order to achieve successful implementation of the Living Forests Standards, the competence building, which has already been emphasised among the forest owners organisations over the last 10 years, must be given further support.

In the **mandate for the 2003-revision** it is emphasised that the Advisory Committee is to be invited throughout the revision, to ensure a wide range of participants, but seemingly more regarding inter sectoral coordination than multi-level coordination. It is left to each organisation to decide on the amount of information needed within the organisation, on technical studies and binding resolutions.

The **draft standard-document 2006** emphasises the coordination between levels within the organisations in order to pave the way for consensus building at the negotiation table. All interested parties outside the LF agreement are welcomed into the hearing process, either as part of the Advisory Committee or by providing consultative statements directly to the revision working group.

In the **final LF^{2006} Standard** the need for multi-level coordination is not specifically addressed, but some of the LF objectives themselves call for this kind of coordination:

- Comply with the national legal requirements.
- Give way for an active utilization of the forest resources, maintain profitability and increase in value on a satisfactory level, as well as secure the marketing possibilities on the international market.
- Provide for future generations' resource foundation, on minimum the same level as today, and give way for development according to both volume and quality.
- Provide for a safe environment for the forest workers.
- Attend to consumers' interests.

Little Multi-level Coordination in the Legal Framework

In the **White Paper on Forestry** several levels are addressed with regard to forestry and related responsibilities. International cooperation is directed through UN bodies like IPF and later IFF.[36] In addition the government will follow up on the Kyoto-protocol according to forest issues. Norwegian authorities have also ratified the ITTA.[37] From the governments' point of view, UN organisations on forest issues are the most suitable to attend to international coordination, in order to carry out an effective and offensive effort in this matter.

[36]IPF: Intergovernmental Panel of Forests; IFF: Intergovernmental Forum for Forests.
[37] ITTA: The International Tropic Timber Agreement

Of European cooperation, the Pan-European Ministerial Conferences for the protection of European forests is probably the most important. The reason for Norwegian participation in the cooperation is obvious according to the authorities: Norwegian export on pulp and paper and timber amounts to respectively 85-90% and 35% of annual production. Exports to European countries make a total of 70-90% (LMD1998:4.3).

In the **Regulation on Sustainable Forestry**, the responsibility for taking requisite measures on sustainability is brought upon the forest owner. The forest owner is obliged to take into consideration both environmental, outdoor recreational, landscape- and cultural heritage values, along with the mere economic considerations. Some responsibility is also brought upon the local authority, for example on the issue of whether to bring foreign species into a forest or not. This is to be brought to the local authority for approval. It is also the local authorities' responsibility to see to it that all regulations and acts are followed with regard to forestry. The need for multi-level coordination is not addressed as such.

In the **Forestry Act** the Government establishes the responsibility on forest management at forest owner level. Departmental responsibilities are restricted to passing on regulation as to how forest owners are to take environmental measures in forest management. Authority is also transferred to lower levels; the County Governor, county council Agricultural Board and local authorities. These are on different issues supposed to act on behalf of governmental authorities. On issues of regional or national interest, transferred authority can be withdrawn to departmental level. Multi-level coordination as such is not addressed.

Multi Level Coordination is Crucial to the Overall Success of the Process

Multi-level Coordination is Necessary, but Challenging

The actors agreed that the draft standards had to be discussed thoroughly within each organisation to ensure in-depth foundation for the negotiations, because this would give the delegates the necessary authorisations. With regard to the 2003-2006 revision, the process management "checked out" this with the delegates once in a while. The project manager says the entire effort of LF relied on the fact that all parties founded the agreement thoroughly within their own organisation (I 8). LF delegates were supposed to act as facilitators also within their own organisations. In the opposite case, they might act as "plugs" hindering information and knowledge coming into circulation. This could obstruct the actual decision-making.

Most delegates in LF claim that multi-level coordination has been of low or non-existing interest during the process. To the extent that multi-level coordination has been debated, this has taken place within some of the organisations, and not as part of the overall project administration. Yet, multi-level coordination is being addressed in positive expressions. It seems that multi-level coordination is not part of a discussion due to the fact that most organisations' formal routines see to this in general. Their reasons for multi-level coordination are pointed out to be 1) extract information you could not get from national level, 2) reduce fear and resistance, and thereby ease implementation at local level and 3) strong international bindings make it necessary to coordinate also internationally. These views are shared among all stakeholders, except by from the social side, where the actors have specific views on this.

Not surprisingly, the actors find it time consuming and challenging to involve all levels (I 19):

> *"Some times one needs to step carefully and weigh one's words [within your own organisation], not to expose the other parties in the negotiations to criticism and to further escalate the conflict. One needs to remain loyal to the process to keep it from coming to a halt, and so that "misery description" is not spread" (I 7).*

There have been contributions made from regional levels, but little pressure was put on national level to become a part of the process (I 2). It seems therefore that greater challenges are faced on how to motivate all levels in the process, rather than opening up the process. The complexity of the Living Forests project, contributes to this challenge (I 11). WWF Norway claims to have found a way to deal with this challenge. By structuring the organisation without local branches, members commit themselves by cause rather than organisational work. Individual members approach the secretariat or the general secretary and this also gives an effective and smooth organisation (I 5).

5.3 Where does Decision Making take Place?

The LF process is combining traditional hierarchical steering within organisations with power-sharing negotiation and consensus building within the project. Mutual adaptation between the parties is seen as necessary to carry this kind of project through. This adaptation is institutionalised in the Living Forests Council. Actors hindering multi-level coordination endanger the implementation of the project. This has not been an actual threat in this case.

The precise dispersion of decision making in the process is hard to get hold of as the intra organisational procedures are not all that transparent. One informant is confident that the range of levels involved in decision making has increased, but he suggests that this makes the decision making more complex and difficult (I 24). The partaking organisations of LF are for a large part still ordered hierarchically. This applies also to the process itself, where formal decisions are taken at the central or national level, but internal processes within the organisations can in theory give members on every level the opportunity to influence on the decisions being made on national level.

The government, represented by the Ministries of Agriculture and Food, and Environment, left themselves out of actual decision making by neither signing the LF^{1998} agreement nor the LF^{2006} agreement, and by abstaining from holding the right to vote in the LF Council. Both county and local authorities seem totally kept out of decision making.

In conclusion then, even with the reservation that we can not within all organisations determine exactly where the final decisions are made, multi-level coordination has been important to reach and implement the decisions in Living Forests$^{1995\text{-}2006}$.

There is **extensive collaboration** taking place **between levels** in Living Forests. The actual negotiations between the parties are carried out on a national level, but large efforts are made to found this work within the organisations. Most organisations, except the ministries, have had thorough debates on the formulation of standards on several levels. **Differences** occur **on how these debates are carried out**. Economic interests claim multi-level coordination is a way to get hold of more quality information, to the benefit of the process, i.e. the competencies on all levels are valued. The **range of actors** has also changed according to the involvement of new levels. Probably the most important is the involvement at forest owner level, this includes also forest entrepreneurs.

There are **few specific references** to need for multi-level coordination **in formal documents** from the authorities. Interdependencies between levels are addressed, shows that this is an important issue anyway. The regional and local political bodies on forest issues are asked not to interfere in the process.

For the economic sector within LF, **multi-level coordination** is seen as **crucial** because the standards are to be implemented at forest owner level, although negotiations are carried out at national level.

With respect to the social and environmental interests, the **pressure from lower levels** to become part of the process has been **low**.

There seems also to be an **inter dependency between inter-sectorial coordination and multi-level coordination**. Without in depth anchoring within the organisations, none of them would find the effort of ISC worth-while.

With the exception of WWF-Norway local level is not more involved in decision making in LF than in traditional policy making in the forest sector. Consequently, we claim that **Living Forests seems to be a project ensuring more of multi-level coordination than multi-level governance.**

6. Expertise

The Living Forests process is a story in the use of expertise. Expertise of different backgrounds has been used at different levels throughout the process. At the same time, it is not an expert-driven process. It is clearly a political process with a tug-of-war especially between environmental and economic interests, but also where other interests have been taken into account. In this context experts have come to use.

In the following we will look into different aspects of the use of expertise in the Living Forests process. The main questions are:

- At what stages of the process is expertise used?
- What kind of expertise has been vital to the process?
- What role do the experts play, what impact have they had on the process?

In accordance with the GoFor Terms of Reference (GoFOR 2006), we have used a broad definition of experts in our interviews, trying not to limit the criteria for the expert denomination to academic standards. This seemed however to be difficult. The following presentation is still coloured by the fact that most people have an intuitive understanding of experts related to academic standards combined with experience.

6.1 Expertise Important at all Stages of the Process

The use of expertise has been extensive at all stages of the process, from 1995 throughout 2006. This accounts for the formal use of experts within the process, but also their importance within a more informal setting in the different organisations. We will in the following go through different use of experts throughout the process. The presentation is made chronologically.

The Formal Role of Expertise over Time

Working Group 2 of the LF[1995-1998] project started out with the goal of providing knowledge as a basis for the further work. Then the discussion started on how to use the knowledge and several alternatives were discussed: First guidelines, then standards, then certification in the end (Arnesen et al. 2004:68). On this ground WG2 started out right from the beginning publishing reports on different issues within forestry. Experts later became a part of the formal organisation through the Scientific Committee from 1996 throughout the LF[1995-1998] project.

Such a committee has not again been appointed after 1998. Experts, expert advice and competence building has however been a formal part of the process in different ways also later on in the process, though partially with different formal status and different roles. To illustrate changes over time, we will have a closer look at expertise used in the different LF documents.

The LF[1995-1998] Studies

A comprehensive documentation work was carried out in the period 1995-1998. Already early in the process report 1 was published. After this, several reports were submitted (Levende Skog 1998a, 1998b, 1998c):

- Report 1: Criteria for documentation of sustainable forestry
- Report 2: Status for the criteria- and documentation work (1996)
- Report 3: Market demands and competence building (1996)
- Report 4: Scientific information seminar on key biotopes (1997)
- Report 5: Final report from the Living Forests test areas (Bærum, Brøttum and Grane) (1997)
- Report 6: Market demands and governmental processes (1997).
- Report 7: Evaluation of Living Forests test project at Brøttum (1998).
- Report 8: Preliminary standards (4 reports) (1998).
- Report 9 a-d: Final Standard Documents from Living Forests (1998)
- Report 10: Economic consequences of efforts for sustainable forestry (1998).
- Report 11: Final Report from Working Group 2 (1998).
- Report 12: Final report from the certification committee.

Several of the reports were based on field work and research. For example, after registering key biotopes in the areas, the WG 2 guidelines for forestry were tested in the test areas Bærum, Brøttum, Lindås and Grane in 1996 and later evaluated in report 5 and 7 on the list above. Three other research projects were also connected to the LF[1995-1998] project: "Key biotopes in Norway," "The connection between endangered species and key biotopes" and "Economic consequences of efforts for sustainable forestry".[38] They were partially financed by Living Forests and were used in the further work on the standards. Report nr 4 from Living Forests sum up an Advisory Committee meeting on the key biotopes projects while the last report was summarised in LF[1995-1998] report 10 (Arnesen et al. 2004:13).

In addition to this, the Living Forests secretariat was manned by skilled personnel and gave account of different subject matters related to the standards. As outlined earlier, there were to a certain extent debate on the expertise put to use in the secretariat, as most of them were foresters. All the same, every single member of WG2 through the period had the opportunity to ask for studies and reports on different issues whenever they found it necessary.

The Scientific Committee

As a result mainly of demands from the environmental organisations, a scientific committee was appointed spring 1996 and was connected to the work with the standards in WG2 (I 4). The task of the committee was to comment and advice on the research performed by LF. The committee consisted of researchers from the following institutes:

- Norwegian Institute for Nature Research
- Norwegian Forest Research Institute[39]
- The University College of Agriculture[40]
- NIJOS[41]
- Norwegian Institute for Nature Research
- The University of Oslo

[38] Project leaders were respectively: Jørund Rolstad NISK for the two first projects and Hans Fredrik Hoen at UMB for the last project.
[39] From July 2006 The Norwegian Forest and Landscape Institute.
[40] From 2005: The Norwegian University of Life Sciences.
[41] From July 2006 The Norwegian Forest and Landscape Institute.

- Norwegian Forest Research Institute
- NINA
- Nord-Trøndelag University College

The scientific committee mainly covered the subject area of biology and forest ecology (Arnesen et al. 2004:13). Except Håkon Holien from Nord-Trøndelag University College and Rune Halvorsen Økland from The University of Oslo, they all represent the institutes who have dominated "supplies of expertise" throughout the Living Forests process.

Even though the committee formally was part of the $LF^{1995\text{-}1998}$ organisation, their mandate was vague and the resources submitted to the committee was limited to compensation for transport and working hours (I 4, I 12, I 23). Both these factors hindered the committee in playing an independent and significant role. The committee was not a main supplier of terms for the process and had a limited impact on the actual negotiations within Living Forests:

> *"To a very large degree the scientific committee was a Mickey Mouse organisation. It could react to suggestions and documents, but we had no influence on what then happened to it. The term scientific committee was an alibi…" (I 4).*

Another informant confirms this:

> *"During the first period (1995-1998) there was a group of researchers giving advice. It worked poorly…. The secretariat used people to give an account of the different themes… Data was especially ordered from …. And relatively much was done to find existing knowledge, especially on the forestry side" (I 2).*

The explanation for this peripheral role probably lies in the vague mandate of the committee, but also in the fact the expressed feeling that *"The research around the Living Forests standards was politics…All that really mattered took place anywhere, except in the scientific committee" (I 4).*

The LF 1998 Standard Document

The LF 1998 standards were published in reports 9a-d. In the final standard documents existing knowledge is extensively documented. Each of the 23 standards is presented in this form (Levende Skog 1998a):

1. Introduction: A short explanation of the main problem that has been examined.
2. A description of the current situation: A presentation of what is perceived as the actual conditions and challenges especially related to forest conditions and activities and clarification of the environmental and economical aspects.
3. Standard alternatives: An evaluation of the need for standards in this area and a presentation of standard alternatives.
4. Impact assessment: An evaluation of the impact of the alternative standards according to value added, biological diversity, environmental impact and tolerance, the protective functions of the forest, social and cultural conditions, management and participation.
5. Standard approved 27 March 1998: A presentation of the final standards.

The final report turned out to be an extensive document, consisting of about 550 pages based on already existing knowledge and knowledge obtained during the Living Forests process.

According to Arnesen et al. (2004:46) WWF-Norway questioned the quality and legitimacy of the accounts regarding the final standards. Their view was that the presentations were too

general and they questioned what they saw as the one-sided use of foresters' expertise at the expense of biologists'. According to WWF-Norway there were biologists in the Norwegian Forest Owners' Federation that should have been put to work, but the forest-side had no interest in this. The Association of Intermunicipal Outdoor Recreation Boards, who generally supported the environmental side, did not agree to this scepticism (ibid.:47). This indicates that this is not a general view upon the work executed in the committee. This is only one sign of a more far-reaching conflict between the forest-side and the environmental organisations on legitimacy of professionals in the process. We will return to this issue later.

The Final Report from the Certification Committee

The certification committee was established in July 1997. The mandate of the certification committee was to "suggest practical solutions for certification of environmentally friendly forestry in Norway, so that they could be used both related to ISO's system and for FSC-certification, and if possible show combinations of these" (Levende Skog 1998c:4). The work was to build on the WG2's work on the standards. The Certification Committee consisted of representatives for all parties in the WG2.

To broaden the knowledge base, studies were ordered from certification firms, on environmental labelling and on forestry. This resulted in a report where different alternatives for certification were quite thoroughly documented.

The Evaluations

Prior to negotiations in 2005-2006, three evaluations were conducted: One evaluating the certification system (Sverdrup-Thygeson et al. 2004), one looking at what considerations were taken on the felling patches before and after the standards (Sverdrup-Thygeson et al. 2005) and one evaluation looking for strengths and weaknesses in the process itself (Arnesen et al. 2004).[42]

The main aim of the evaluations was to:

- Describe and evaluate with the use of recognised scientific methods how Living Forests is incorporated into Norwegian Forestry.

This goal was divided into three intermediate aims:

- Map out the development of Norwegian forestry evaluated against standards, criteria and indicators in Living Forests.
- Look into how each of the LF partners assesses the result of the incorporation of the standards in Norwegian forestry compared to their own expectations.
- Look at how Living Forests is incorporated in Norwegian forestry, how forest certification as a tool functions and how forest certification in Norway is implemented compared to Sweden and Finland (Sverdrup-Thygeson et al. 2004).

A steering committee with representatives from the forest owners, the forest industry, the outdoor recreation organisations and the environmental organisations was appointed. The work resulted in three reports. All of which were conducted by well known and institutions on forestry research: Norwegian Institute for Nature Research (NINA), Norwegian Forest and Landscape Institute (NIJOS), and Eastern Norway Research Institute. In one of the projects NORSKOG, The Norwegian Forestry Association was a partner with NINA.

[42] For more on the evaluations, see the chapter on 8 Effects.

The evaluations seem to have been accepted by the actors in the Living Forests process as a snapshot of the situation, and thus as a basis for further negotiations. There is however modifications to this view, that might be seen as an underrating of social sciences compared to the natural sciences:

> *"Generally it was mostly useful; they were partially good and characterised by real documentation of the effects of Living Forests. But they were too general and there was a lack of documentation which gave space to the forest sector, not biodiversity. The analyses are not sharp enough. The process analysis was not useful, claptrap" (I 5).*

Still the evaluations seem to have made some kind of common understanding that the forests and forestry was moving in the right direction:

> *"The evaluations told, me anyway, in an unambiguous way, that Living Forests has changed forestry in the direction intended. What is more uncertain is to what degree and how fast. They had better qualitative answers than quantitative" (I 11).*

What seems clear is that these evaluations were part of the platform for the negotiations, and also had impact on them both because they made visible results in the forests and also because they lay premises for the organisation and continuation of the Living Forests process.

> *"They were useful concerning process, but most of all on how the standard is actually lived up to. They were used in the process actively on the way" (I 7).*

> *"The process evaluation of the Eastern Norway Research Institute has among other things resulted in the establishment of the Living Forests Council (2006). The evaluation of how the standards were actually used in praxis has for instance led to changes to the claim on old large trees" (I 7).*

Some of the informants also point to the fact that the evaluations have shown that none of the parties actually has the sole key to solve the problem, and that the actors therefore have been forced to adjust their views.

The Ad-hoc Role of Expertise in the LF$^{2003\text{-}06}$

The LF$^{2003\text{-}06}$ revision process was by far not as extensive as the LF$^{1995\text{-}98}$ project. Still expertise and the use of knowledge was an important part of the process. Any of the actors had the opportunity to ask for further studies on a given subject. One of the informants expressed:

> *"We could claim needs for new knowledge and get an assessment, but we never did, we never concretised such needs. Just to do that would demand a substantial effort… We tried to stay informed in our subject area and take this with us into the process" (I 2).*

There was no formalised body, like the scientific committee, to provide input into the revision process. Instead experts were invited on a more ad-hoc basis to inform the Living Forests revision committee about pressing issues. Still documentation work had an important part also in the revision process, and this is illustrated in "The basis for negotiations".

In March 2006 a draft document was sent out for public hearing to all parties with interests in the Living Forests revision (Levende Skog 2006a). The documents were built up along some

of the same lines as the Standard documents from 1998, though with one substantial difference: The ground documents for the negotiations were presented before the final decisions were made. According to one of our informants this lead to a polarisation of positions prior to hearings, and the document thereby did not present the actual rapprochement between the parties in the foregoing negotiations. The presentation of the standards in the basis for negotiations was structured like this:

1. Alternatives: A presentation of the original standard and alternatives promoted by different actors on the subject area.
2. A summary of background and consequences including:
    - Contributions from the certification companies.
    - Laws and regulations.
    - The parties' suggestions for changes.
    - New knowledge.
    - Consequences.

In addition to this the evaluations conducted ahead of the actual negotiations were summarised in a separate chapter.

The basis for negotiations - document in the revision process is by far not as extensive as the former standard documents, altogether about 90 pages. This reflects the fact that the first process was more extensive when it comes to use of resources, but we also have to bear in mind that the evaluations conducted ahead of the negotiations also functioned as a basis of knowledge on Norwegian forestry and the standardisation and certification work.

Informal Use of Expertise

While the above review shows the formal roles of expertise, the following will be a brief look into expertise and knowledge important to the process, but not a formal part of it.

Studies outside LF

The Living Forests process has to a large degree triggered new studies not directly linked to the process. This accounts for the extensive work within the Complementary Hotspot Inventory (CHI), for mapping important areas for biodiversity in the forests. This work started in 1997, not as a part of the Living Forests project, but it still is strongly connected to it because it has created a tool that can be used for certification and as part of the implementation of the standards.[43] This project alone had by October 2005 generated 41 Norwegian and 35 English publications of different types from different research institutes.[44] The work on the CHI was initiated by the forestry sector and the agricultural authorities, and was according to our informants not well received by the environmental side in the beginning (I 11). The reason was among other things that the CHI recommended to register fungus, lichen and higher plants instead of animals and plants, that is more of a registration of substratum than species. An agreement on the use of this however developed.

This is just an example. Several other studies can be mentioned connected to the Living Forests process some way or another. One of the informants points to this fact, and underlines

[43] For a more detailed description of this, see chapter 8 Effects.
[44] Skogforsk, NIJOS, Norsk institutt for Skogforskning, The Ministry of Agriculture, are mentioned as writers and publishers.

that projects which could illuminate questions connected to the Living Forests process were given priority in the application processes in the Norwegian Research council (I 4).

Expertise within the Organisations

The representatives of the organisations in the working group 1995-1998 and during the revision in 2003-2006 were highly skilled and knowledgeable in their field. The quote below illustrates the point.

> *"The people in the committee were not stupid. They had their personal expertise with them into the process. In what way they managed to separate this from their special interests, I don't know" (I 4).*

In addition to this, they were representing the knowledge of their entire organisations and could draw on their members' expertise. From our data, it seems like this has been done to different degrees in the organisations due to differences in the organisations' structure and resources. For example, the Norwegian Forest Owners' Federation used their organisations extensively on different levels to build legitimacy for the process. This was a difficult and time consuming procedure in many respects, but it also made input possible from "lay" members of the organisation to reach the negotiation table.

Other organisations like the WWF have a totally different organisational structure only including individual membership. They were not dependent on such a thorough process with their members to legitimise their views and actions in the process. However, WWF-Norway was considered as the prime supplier of knowledge on biological issues in the LF[1995-98], and probably also during the revision (Arnesen et al. 2004:51/65). Other organisations also confirm during the interviews that they during the process have tried to be updated on their own field, and bring this knowledge into the negotiations. The Ministry of the Environment and the Ministry of Agriculture brought their knowledge about public policies, laws and regulations into the process.

All organisations also seem to have used their networks, as indicated in this informant's answer to the question if their organisation used alternative expertise:

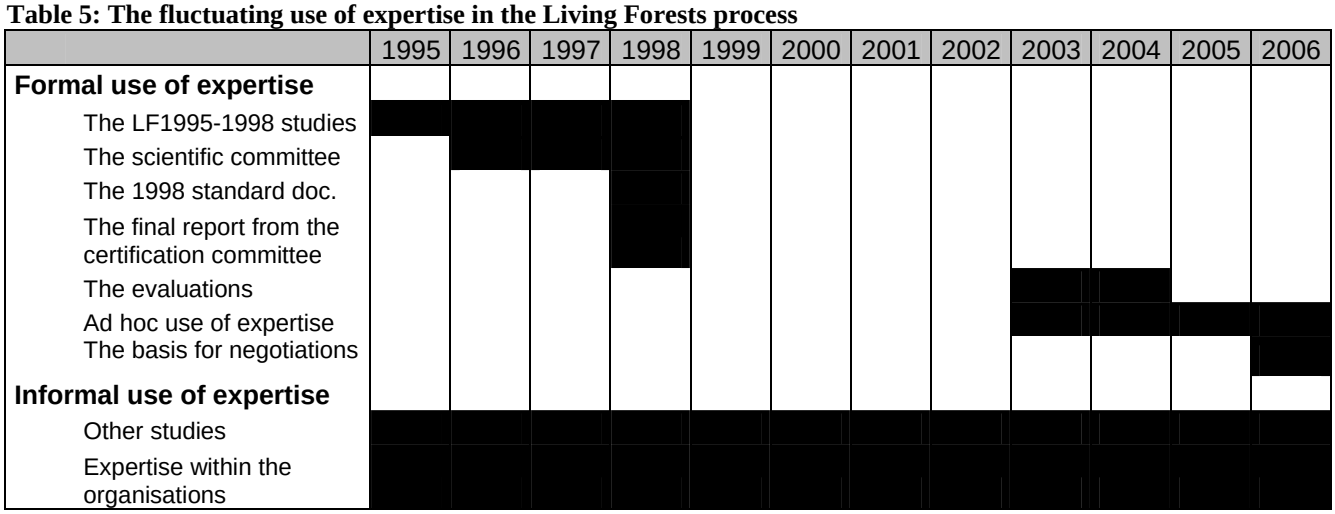
> *"Yes, we have consulted the other environmental organisations, biological expertise, our international network, competence in certification and corresponding processes in other countries" (I 5).*

However there are limitations. Several of the organisations point to the fact that they have limited resources to mobilise a counter expertise or even to dig deep enough into the subject matter.

> *"We used the expertise we had in the organisation, but the expression "in the organisation", also includes a great deal of professional experts we are in contact with, who we could ask for advice and knowledge. We have a large network of people with knowledge and insight, which we use on different occasions. We have not used other external experts. We do not have resources to order a study at the cost of NOK 500.000" (I 11).*

Summary Table

Table 5: The fluctuating use of expertise in the Living Forests process



From the summary table above we see that expertise has been used extensively throughout the entire period, but in different ways. The scientific committee which was a formal part of the $LF^{1995\text{-}98}$ organisation was not reintroduced in the $LF^{2003\text{-}06}$ revision, and was not seen as an important player to achieve the results in first project either.

However, research and studies have been broadly used in both periods to bring forward knowledge to form a common basis for negotiations. This is reflected in the $LF^{1995\text{-}1998}$ studies and in the evaluations prior to the revision negotiations, but also in the fact that thorough competence building is an integral part of the 1998 standard document and the final report from the certification committee, and also in the preliminary standard-document in 2006.

After 1998 there was no formal organisation responsible for the administration of the agreement, and the project as such came to an end. If we look closer at the informal expertise mobilised in the intermediate period 1999 to 2002, this was the organisations' and researchers' period. After LF^{1998} agreement the environmentalists and the forest owners came into conflict over the implementation of forestry certification, and there was no formal contact or negotiation between the parties until 2003. In the mean time new studies related to Living Forests was carried out and became part of a new store of knowledge for the 2003-06 period.

6.2 What Kind of Expertise?

Our informants almost unanimously say that expert advice is used more and more within forestry. While expertise historically has been part of the forest sector, it seems like the use of expertise has broadened and new knowledge has entered the scene. The general impression is that the Living Forests process has added to and maybe accelerated this trend even though one of the informants say that this development now has slowed down.

The informants are also of the opinion that expertise, and by this they especially mean expertise on biology and ecology has influenced the result. On the other hand, they give different reasons. Some point to the fact that knowledge has changed views of reality. Others say that experts do also not agree, and independent expertise has shown that no one has the only answer.

”Each and every one of the representatives for the organisations, possesses a great deal of expertise within their own field” (I 11).

In the following we will look deeper into what kind of experts is used in the process. There seem to be several different kinds:

- Experts on forestry
- Industrial expertise
- Economic experts
- Legal experts
- Biologist
- Environmental expertise
- Information/communication
- Market
- Certification competence
- Outdoor recreation knowledge
- System/process expertise
- Ecological expertise

As we can see from the list of experts this is expertise in very different areas, but this is not meant as an exhaustive list. We do not have a detailed overview of how different kind of competence has been used along the process and for different purposes. We will in the following concentrate on what we see as the overarching division between different kinds of expertise in this process, a division which goes to the heart of the matter: The use of foresters, as opposed to the use of biologists as experts into the process.

The Forester – Biologist Division

“Forestry is a self conscious industry. Researchers and the public administration are foresters with education from Ås (The Norwegian University of Life Sciences), with the same background, and same set of values. They see themselves as… the ones who know how the forests should be managed, have a long term production perspective. The culture and set of values was established before the war and in the 1950ies… [i.e.] the basis of knowledge for the forest administration…. The environmental side was seen as hair in the soup… debate on this from the 1920ies onward with a peak in the 1970ies: Biological diversity and nature’s interests - forest protection was a consequence, managed by the Ministry of the Environment. With the help of experts to identify valuable areas, then forest protection. This created antagonism and conflicts. Living Forests has managed to get things on another track...” (I 4).

This description of culture and history is reflected in public laws and regulations on forestry where the focus has moved from a one-sided focus on forests for raw material supply towards sustainable forestry (for more, see chapter on 8 Effects.) Even though the informant quoted above say that the Living Forests process has softened the level of conflict, it is still present and is also recently manifested in open conflicts.[45] We will have a closer look at this conflict between expertise and the use of expertise in the Living Forests process.

[45] For example in the conflict around forest protection in Trillemarka (NRK P2) and in the National Broadcasting Corporations’ documentary on the use of commercial forestry in alleged primeval forests (NRK Brennpunkt).

Foresters are traditionally for a great part educated at the Norwegian University of Life Sciences (UMB) at Ås south of Oslo. The university has eight departments:

- Department of Animal and Aqua cultural Sciences
- Department of Chemistry, Biotechnology and Food Science.
- Department of Ecology and Natural Resource Management.
- Department of Economics and Resource Management.
- Department of Landscape Architecture and Spatial Planning.
- Department of Mathematical Sciences and Technology.
- Department of Plant and Environmental Sciences.
- Department of International Environment and Development studies.

The UMB is traditionally closely connected to the agricultural sector: farming and forestry. Biologists on the other hand have their education mostly from the larger universities in the cities and are not as such connected to the agricultural sector. The point of departure for the two professional groups is therefore quite different and the two have been seen partially as counter expertise in the Living Forests process.

A Secretariat Dominated by Foresters

The secretariat was both in the $LF^{1995\text{-}1998}$ project and in the $LF^{2003\text{-}2006}$ revision placed in the Norwegian Forest Owner's Federation. The secretariat was manned mostly by foresters, who in their turn were strongly involved in laying terms for the negotiations. As mentioned before, the differences in view of expertise was manifested in the fact that WWF, seen as the prime supplier of biological competence in the $LF^{1995\text{-}98}$, was dissatisfied with the analysis made regarding the final standard documents. As the WWF saw it, the Forest Owner's Federation had biologists in their staff, but did not wish to use them in the studies and analysis prior to $LF^{1995\text{-}98}$-negotiations (Arnesen et al. 2004:46).

The Forest Owners on the other hand argued that biology competence was represented in the process by the representatives in WG2 and that in addition to this; insights on biology came to use in the scientific committee and in the public hearings in the Advisory committee (Arnesen et al. 2004:73).

Research Institutes Used are Mostly Connected to Forestry

A brief look at the different research institutes used for studies and research during the Living Forest process confirms that the work is dominated by the "Ås circle" based in agriculture. Below is an overview of the most frequently used institutes:

Norwegian Forest Research Institute (Skogforsk) and NIJOS merged July 1st 2006 into "The Norwegian Forest and Landscape Institute". Since they in the Living Forests process have been operating as separate entities, we will have a look at all three of them.

Norwegian Forest Research Institute was an autonomous institute under the Ministry of Food and Agriculture. On its' former web page, the institute calls itself "the leading research institute in Norway in areas related to forest." "The main tasks of the institute are to strengthen the scientific basis for the management of forest resources, the creation of wealth from forests and countermeasures against environmental problems in forests."

NIJOS (Norwegian Institute of Land Inventory) was, according to their former web page an independent public institute under the Norwegian Ministry of Agriculture (NIJOS 2007). The

institute provided national statistics on forest and cultural landscape resources, land-use and landscape information and consulting services. It is located on Ås and on the web page; their close cooperation with the UMB is mentioned in particular.

As mentioned The Norwegian Forest and Landscape Institute was established through a merger between Norwegian Forest Research Institute and the Norwegian Institute of Land Inventory (NIJOS). The new institute is associated with the Ministry of Agriculture and Food. It will collect data and carry out research on forest, soils, mountains and landscapes. The main office of the institute is at Ås, but there are also regional offices in Northern, Mid and Western Norway. The institute has 230 employees in total (Skog og Landskap 2007).

NINA, Norwegian Institute for Nature Research has slightly different profile. The institute is, according to their own web pages, Norway's leading institution for applied ecological research. Its' vision is: "Cooperation and expertise for a sustainable future." Their vision is, still according to the web page, "to be a leading national and international research institution in the production of applied scientific knowledge that can serve as a basis for sound management and utilization of natural resources". Biodiversity, Climate Impact Studies, Environmental Impact Assessment (EIA) and Wildlife Ecology are among their areas of research. The main office is located in Trondheim, but NINA is also situated in Tromsø, Lillehammer and Oslo (NINA 2007).

Eastern Norway Research Institute (ØF) is one of several regional research institutes spread all around Norway. The main office is at Storhove near Lillehammer, and an office is established in Hamar. The institute is co-located with NINA and the Lillehammer University College. The staff has main emphasis within the social sciences for instance: social anthropology, societal planning, political science, sociology and philosophy as well as subject areas like agriculture and engineering. Their research areas are broad and include areas like studies of public (local authority) organisation and production of services. Cultural studies, evaluations of public policy and measures but also industrial studies within inter alia tourism and industries based on agriculture and forestry and studies of the use of natural resources (ØF 2007).

NORSKOG organises forest owners in Norway.[46] The organisation has 220 members representing more than six million decare productive forest and 12 million decare outfields. The goal of the organisation is to "be the leading specialist environment in Norway on applied forestry." The organisation has its' own department for consultancy. The main office is located in Oslo (NORSKOG 2007).

Expertise Not Put to Use

When asked about what type of expertise should have been involved in the process, but which is not, no specific needs seem to be especially pressing. Many of the informants have no special view on this, but some mention different aspects:

- *Documentation of actual status in the forests (G1).*
- *Socioeconomic evaluations (I 18).*
- *Researchers have not been systematically involved in the process (I 19).*
- *More expertise and documentation on the historical perspective related to use of the forest (I 20).*

[46] NORSKOG: directly translated Norforests, they do not seem to have an official English name.

- *Forest botany at the University of Bergen (I 22).*
- *Forest entrepreneur perspective (I 24).*
- *There has been scepticism in forestry on using the most enthusiastic biologists (I 4).*
- *The Sami interests should have been covered better by expertise (I 14).*
- *The Ministry of the Environment should have had a broader representation according to their various responsibilities (I 16).*

A general impression is that no specific expertise is strongly missed. This is probably also based in the fact that the general view of the use of expertise is positive and that there have been no specific downsides. However when the interviewees express what kind of expertise they feel is missing some of them point exactly to the lack of biologists. One of the informants comment on this in this way:

> *"The most important reason [why biologists are not sufficiently involved] is that there is a limited interest to provide a rock hard basis of knowledge. The result is not what it is now because there is a lack of knowledge. It is a question of values. Knowledge is a good thing, the more quality knowledge, the better; then we have to see the limitations of what it will lead to" (I 4).*

This brings us back to the differences in science and politics. The differences of resource allocation between the forest-side and the environmental side of the negotiations have been a recurring issue both in the $LF^{1995-98}$, in the intermediate period and in the $LF^{2003-06}$. For the entire process, interviewees bring up the lack of resources and also a lack of more thorough knowledge up as a problem (Arnesen et al. 2004:46, I 2, I 4). In the interviews several of the informants also give up "resource-demanding" as a negative side of the use of experts in the Living Forests process. The fact that lack of resources was also given up as a reason for the Sami Parliament and the Norwegian Consumer Council for not taking part in the $LF^{2003-06}$ revision support this view. It also strengthens the impression that the societal and environmental interests had fewer resources to put into the process than the forest-side.

6.3 What Role do the Experts Play?

The foregoing presentation has shown that expertise has played a major role in the Living Forests process even though the role has differed in different phases. This seems also to be part of a general trend in forestry:

> *"What can be said is that expertise has become broader than before, but forestry has always leaned on expertise. Before this [i.e. LF] expertise was collected in forestry itself, now we use more external and broader competence" (I 9).*

> *I would say [that expertise has been used] increasingly, based on the fact that ecological knowledge and expertise has received a much broader space in the management of forestry than it had ten years ago. [Forestry management education] has been an education for production more than a forest biology education" (I 11).*

Still there seem to be a common view that the attitudes towards the use of experts have not changed a great deal from the $LF^{1995-98}$ project to the $LF^{2003-06}$ revision.

What was the main role of expertise in the process? We will in the following have a look at arguments for and counter arguments against two different roles: Expertise as a builder of consensus and expertise as a builder of arguments and counter arguments.

Expertise as Builder of Consensus

The broad consensus for so many years on the use of expertise in the Living Forests process indicates that the main purpose of the use of expertise has been to create a common and legitimate point of departure for consensus. This is especially evident in the revision process, where the evaluations precede the actual negotiations. The evaluations seemed to create a view on all sides that the Living Forests process had contributed to improvement in the forests, even though the views differed on how successful the outcome had been. There are also, however, aspects of the process that seem to oppose this.

Arguments for the role of expertise to improve forestry can be that research and studies are used to a significant degree in all formal parts of the process. This way, a knowledge base was built up as a basis for negotiations, and also around all the standards both in the $LF^{1995\text{-}98}$ project and in the $LF^{2003\text{-}06}$ revision. Generally the central actors in the process are satisfied with the use of experts and have seen it as a prerequisite for agreement. Experts of different types were used at different times as required in the process.

Opinions against expertise as consensus builder are among others that the formally appointed Scientific Committee did not play a significant role in the early stages of the process. The committee's formal role was not well defined, and resources did not follow the assignment of the scientists. Such an arrangement was also exchanged for a more ad-hoc use of experts in the revision. Also, experts are not part of the formal decision making bodies. Informal organisational expertise and research was also put to use all through the period 1995-2006. in addition to the formally appointed expertise.

WWF-Norway did not totally accept the expertise of the foresters in the Norwegian Forest Owners' Federation doing the groundwork for the negotiations. Resources are not evenly distributed, which gives the environmental and social organisations a handicap, as this also supports the evidently tug of war between different interests and kinds of expertise.

Expertise and Counter-expertise

On the other hand, expertise can be seen as part of politics. Not as a prerequisite for consensus, but as a tool for different interests to argue their case. There are elements in the Living Forests process which support such an interpretation of the use of expertise. Arguments supporting this interpretation of expertise's role in the process would be many of the same arguments against the above interpretation.

Arguments for such an interpretation:

- Due to their initiative and their resources, the forestry sector had the upper hand in the negotiations. Foresters' expertise has generally been preferred by the sector even though a wide range of expertise was at hand.
- Generally, knowledge connected to the Ås circle and the Ministry of Agriculture has been preferred all through the process.
- The lack of biologists is strongly underlined by the environmentalists.

- The NGOs on environmental and social issues used their internal, national and international networks, but due to the lack of resources this was brought about only to a limited degree.
- The intermediate period shows that even after building a consensus based on expertise, there is plenty of room for interpretation and politics.

Against such an interpretation:

- There seem to be a broad consensus on the use of expertise and that this has been necessary to create progress in the negotiations.
- In sum our informants do not have a homogenous view on what kind of expertise has not been present in the process.
- The informants generally have the impression that it has been possible to get information required on the table. The formal rules of the game was both in the 1995-1998 project and in the 2003-2006 revision that everyone could ask for additional information, even if being the only actor asking for this.

Good and Poor Qualities on the Use of Expertise

In this section we have looked closer into what the informants see as strong and weak qualities of the use of expertise.

The general view is that input of knowledge has been positive for the process. There also seem to be a general feeling that the most important facts have been on the table, and that everyone's concerns have had the opportunity to be taken into consideration.

Our informants see it as necessary to put experts to use in the process. Regarding expertise, the informants mention:

> *"Intersectoral knowledge and competence is gathered through the involvement from different actors" (I 17).*

Aspects like receiving external competence, is also mentioned. There are however also down sides. Some areas are easier to document than others, as one of the informants point out:

> *"Where it has been possible to achieve substantial changes related to forestry, facts have been important (…) To measure how people experience the great outdoors are however more difficult to document than endangered species" (I 2).*

What lies behind this statement is that it is more difficult to get support when the arguments are not based on facts, and that this will affect the results of the process. One informant questions the whole expertise system:

> *"Much has been based on the researchers' terms [environmental versus industry]. I question that the environmental considerations are really the forest owner's interest" (I 24).*

As elaborated before, another important down side to the use of experts in the Living Forests process is what interviewees see as an imbalance between different interests, and that forestry has the upper hand in this. This is connected to the differences in resources between the forestry side on one hand and the environmental and social interests on the other. We would

also like to point out that there has been no use of specific expertise on process management or negotiations, to help out on these challenging parts of the process. Still, none of the interviewees have called attention to this fact.

Expertise has played **a major role** all through the process; still the Living Forests process has not been an expert-driven process. It has been first and foremost **a tug of war** between different interests and considerations.

The presentation above shows that the Living Forests process has elements of both **consensus building and political tool models** in the use of expertise.

On one hand there is a broad consensus among the participants that the **use of expertise is important** for progress in the negotiations and understanding between the parties. From our interviews there seem also to be confidence among most of the informants that the knowledge base created in different phases of the process has been legitimate and necessary for the negotiations and the building of consensus. In addition there is agreement, also among environmentalists, that there has been some movement towards greater understanding of the environmental aspects of forestry.

On the other hand: **Counter expertise has been mobilised** through the organisations and seen as an important prerequisite to build up arguments. The forester-biologist conflict shows as well that it is important what type of expertise is used in the most incendiary questions.

7. Living Forests as an Adaptive and Iterative Process

The term iterative refers to using repetitive or recurring small steps, rather than one large step, to achieve outcomes, goals or solutions to a problem. As the term indicates, an adaptive process is characterised by the ability to adapt to challenges along the way. A prerequisite for adaptive processes is an ability to incorporate and utilise new lessons, experiences, different viewpoints, as well as new information in the process. An iterative and adaptive process will typically be regularly evaluated and adjusted according to new challenges.

The purpose of this chapter is to discuss to what degree the Living Forests Process 1995-2006 can be characterised as an adaptive and iterative process. This period contains a project phase (1995-1998), an intermediate phase (1998-2003) and a revision phase (2003-2006).

The chapter will be divided into three paragraphs. Below, important characteristics of an iterative process will be discussed. Then different levels of adaptations will be presented. The background on which The Living Forests process' iterative and adaptive characteristics are discussed earlier in chapter 2 *The Living Forests Project and Process.* The iterative and adaptive characteristics will be examined on different levels of the process and in general.

7.1 Important Characteristics of an Iterative Process

Planning is an undertaking which is characterized by significant uncertainty. One strategy to handle such uncertainty in planning processes is to regularly evaluate and review the means and objectives along the course of the process. Such processes are often referred to as iterative. The phrase "*iterative*" suggests a stepwise movement towards a goal where, at intervals, the situation is evaluated and necessary measures are taken to ensure the process being "on track" towards the objective. Such steps will normally be like loops, where you go backwards in the step-line and kind of "run it through another cycle". The figure below illustrates an iterative process (Barstad and Lengyel 2005).

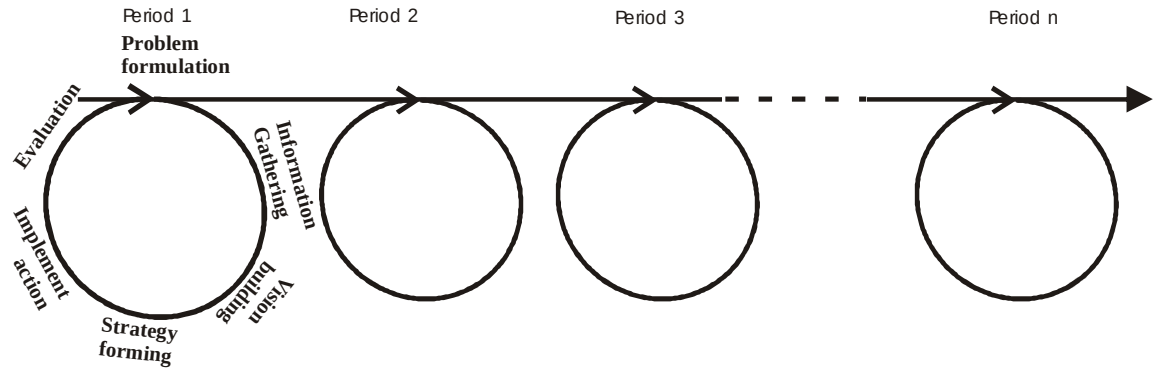


Figure 3: Illustration of an iterative process.

As the figure shows, the process involves data gathering; problem definition; definitions of constraints and finally potential solutions. This is the starting point for iterative planning. If analysis indicates that a solution is, or may be, practical, the team continues with detail planning to the next iterative loop. At each loop (technical, operational and risk) the team analyses the solution and either continues with the planning process or loops back to analyse a new or modified solution.

7.2 Different Levels of Adaptation

In planning theory one often divides between strategic, tactic, and operative planning (Amdam 2005). These forms of planning correspond to different levels of the planning process. On the strategic level the overarching visions and priorities are defined. On the tactic level these visions and priorities are specified into realistic objectives. On the operative level the objectives are addressed through specific work plans.

Adaptation as a response to new challenges or information can take place on each of these levels. Strategic adaptation refers to adjustments of goals and priorities as a response to changes in the situation or new knowledge about what's feasible or important. Tactic adaptation is adjustments of the objectives into more realistic or desired ones. Operational adaptation refers to redefinitions of working plans. This division will be utilized in the discussion of whether the Norwegian Living Forests Process 1995-2006 can be characterized as an adaptive and iterative process.

Another distinction that can be useful in this discussion is between external and internal targets of adaptation. One obvious reason for adaptation is changes in the contextual challenges. For any organization or institution, adaptation to such challenges is a primary, but not sufficient prerequisite for success (Pfeffer and Salancik 2003). In multi partner planning there is also necessary to deal with internal challenges in the form of differences in viewpoints and interests between different participating interest groups (Healey 1997). In a project like Living Forests, the adaptation of the planning process can be brought about by either.

Based upon these distinctions, the following six categories of adaptation can be deduced.

Table 6: Source of challenge and level of adaptation

Source of challenge	**Level of adaptation**		
	Strategic	***Tactic***	***Operative***
External	Adjustment of goals and priorities as a response to new external challenges	Adjustment of objectives as a response to new external challenges	Adjustments of working plans as a response to external challenges
Internal	Adjustment of goals and priorities as a compromise between the participants	Adjustments of objectives as a compromise between the participants	Adjustments of working plans as a compromise between the participants

This period contains three distinct phases: 1) The $LF^{1995\text{-}98}$ project phase (1995-1998), 2) an intermediate phase 1998-2003 and 3) the $LF^{2003\text{-}06}$ revision phase.

The next subchapter will discuss the iterative and adaptive aspects of the Living Forests process, and thus discuss whether the process can be considered as iterative and adaptive in the face of external challenges. The discussion will take place on three different levels.

7.3 Is the Living Forests Project an adaptive and Iterative Process?

The strategic Level

For a process to be adaptive and iterative on a strategic level it must regularly evaluate priorities and overarching goals throughout the project period. Further, in light of those evaluations, revisions should be made if necessary. Applying these criteria, **Living Forests at large cannot be characterized as an adaptive and iterative process on a strategic level.**

The establishment of the Living Forests Project itself represents an adaptation to new external challenges in the Forests industry. In Western Europe the focus upon environmental issues has grown steadily since the seventies. At the outset of the 1990s the pace of this development increased. For the Forests industry this resulted in a growing political awareness of environmental issues in Norway and even more important, among the customers. In the early 1990s important buyers of timber challenged the sustainability of Norwegian Forestry. Some even refused to buy products based on Norwegian timber due to lack of documentation about how environmental aspects were handled in the harvesting process. The Living Forests Process was established to improve this situation, which is reflected in the two major objectives of the project. The latter, defined as early as 1995 have laid the frames of the project, without undergoing any changes during the project period (et al. 2004; Levende Skog 1998e).

Still, some attempts to implement a system of regular evaluations and revision of the project were made during the project phase (1995-1998), but the result from these was only vaguely expressed intentions (Arnesen et al. 1998; Levende Skog 1998c, 1998b). As a result no system for regular evaluations was implemented during the project period. However, as a part of the agreement on the Living Forests standards and the establishment of a Living Forests Council in 2006, the partners enacted that Living Forests is to be evaluated and revised every fifth year. Thus, even if the Living Forests process (1995-2006) itself cannot be characterized as iterative and adaptive on a strategic level, it laid the foundation for these properties in the future governance of Norwegian Forestry.

The Tactical Level

The tactical level of a process is where decisions about resource allocations (the pursuit of different sub goals, priorities between and direction of possible subprojects etc) take place. Arguably, **the overall picture is that the Living Forests process could be characterized as adaptive and to some degree iterative on a tactical level.** However, important exceptions from this general picture are to be found in parts of the process.

For a process to be iterative on a tactical level, regular evaluations and coherent adjustment should be conducted during the process. In the project phase and the mediate phase, no such undertaking took place on a tactical level. Therefore **most part of the Living Forests process cannot be characterized as iterative**. During the revision phase on the other hand, a total of three evaluations were conducted, followed by revisions. As such the late part of the Living Forests process fulfils the criteria of being iterative on a tactical level.
An adaptive process on this level would be characterized by adaptation of sub goals and priorities to internal or external challenges. **The Living Forests process is clearly characterized by both kinds of tactical adaptation**. As we have described earlier, the main objectives of the project were defined early and were not subject to revisions during the

process. However, since the main objectives of the project were formulated in general terms, they had to be specified during the process. Some of these specification involved actual adaptation to external and internal challenges.

In the first phase of the project two important adaptive changes took place. The first of these was related to external developments. As a response to more environmental oriented and demanding customers, the project was expanded to involve the development of a certification system in 1998. In addition, another important adaptation took place. At the beginning of the project, the actors within the Forests industry were convinced that the development of a system that documented "all the good work" would be a sufficient response to the new market demands. This point of view was gradually replaced by an understanding of a need to improve the environmental profile of the Norwegian Forests industry. This change can be understood as an adaptation to both internal and external pressure.

Between the project phase and the revision phase two other tactical adaptations were made. Firstly, the project leader function was transferred from the Forests Owners' Association to the Federation of Norwegian Industries, whose candidate was seen as unbiased from all parties. This was a direct internal adaptation to criticism from the NGOs, who meant that project leadership in principle should not without discussion be placed with one of the strongest actors in the field. The second tactical adaptation between the project and revision phase was a change in priorities from technical investigations towards a focus upon establishing agreement and trust between the partners.

The Operative Level

The operative level of a process is where the actual work is conducted. For a process to be adaptive and iterative on this level, the actual work should be evaluated and revised, while the decisions should be a result of real participative negotiation processes. **Applying these standards, the Living Forests process was clearly iterative and adaptive on an operative level.**

The operative level in the Living Forests project mostly took place within the project period (1995-1998). The major objective in this phase was to discuss new standard for sustainable Forestry. This was approached through the broadly constituted WG2. The latter functioned as an arena for discussions and negotiations between the different interest groups. One major finding from our investigation is that the partners in many respects succeeded in reaching agreement on several important issues. To investigate important aspects of sustainable forestry several R&D projects were conducted. The most important undertakings in this respect were mappings and investigations of key biotopes as well as economical consequences of different precautions. A scientific committee commented on the scientific work, while a broad advisory panel was used in hearings on different aspects of the standardisation. The latter group came together several times (Arnesen et al. 2004).

These adaptive and iterative characteristics of Living Forests are gathered according to process levels.

Table 7: Adaptive and iterative characteristics of Living Forests

	Process level		
	Strategic	***Tactic***	***Operative***
Iterative	Not during the period under study, but it will be in the future.	Only in the revision phase (2003-2006).	Regularly, especially during the project phase
Adaptations to external needs	Living Forests represents an adaptation to new market demands, but the process itself has not been adaptive on a strategic level.	Regularly during the whole process.	During the whole process.
Adaptations to internal needs	No adaptations of the original main objectives. The participants from the Forests industry have opened their eyes for the need for some changes in how to conduct the Forestry.	Regularly during the whole process, especially in the revision phase.	Regularly during the whole process.

The overall picture is that the Living Forests process is both iterative and adaptive. There are however, significant variations in this respect, if one looks closer on the different levels of the process. These are summarised in the table above.

As this table shows, the Living Forests process (1995-2006) has **neither been an iterative nor an adaptive process on a strategic level**. However, through the process the partners have reached an understanding of a need for this in the future as well as an agreement upon routines for how this is going to be conducted.

Thus, we can expect the future development of the Living Forests to be both iterative and adaptive. **On the strategic level, the Living Forests Process can be characterised as both adaptive and iterative.** Both the iterative and internal adaptive aspects are largely a result of the Living Forests process itself. While the adaptations to external needs are taking place during the whole process, the former are mostly present in the revision phase.

Living Forests is clearly iterative and adaptive on an operative level in all parts of the process.

8.0 Effects

The Living Forests process has gone through different phases for more than ten years. In principle it should be possible to see effects on different aspects of the process; from administrative procedures to actual changes in forest conditions. When reviewing the effects we have divided different types of effects according to the GoFor Terms of Reference. "Output" refers to changes like new strategies, programmes or plans, laws, new policy instruments, changes in competencies and institutionalisation of actor forums. "Impacts" address changes in actors' behaviour as a result of the governance process. "Outcome" is a kind of ultimate effect, when you see actual changes in the forests.

In reality the division between the different types of effects is not as distinct as according to the definitions above. Still, in the Living Forests project it seems to be possible to look into all three kinds of effects, partially because the process has lasted for many years, partially because the process is well documented.

In our presentation, sources of information differ. While the overview of output relies heavily on LF documents, the paragraph on impacts partially has the same source, but is also based on the interviews. Whit regard to outcomes on forestry as such, independent research is not within the framework of the GoFor project, but evaluations of this sort have been conducted during the 1995-2006 period by other researchers. The presentation relies mainly on these sources. In addition, we have used information from the interviews.

8.1 Outputs across a Ten Year Period

We have all along this study divided the Living Forests process into two distinguishable project periods (1995-98) and (2003-06) and an intermediate period. We will have a closer look at the outputs from both project periods. What we see as the main outputs are in the form of keywords presented below. This presentation is followed by a closer look at the main outputs.

Main outputs from the $LF^{1995\text{-}98}$ process

- New environmental standards (LF^{1998} Standards)
- Certification of firms is conducted (1998-)
- Complementary Hotspot Inventory (CHI) (1997- 2000)
- A specifications on some of the standards (2000-01)
- Living Forests becomes part of public policies

Main outputs from the $LF^{2003\text{-}06}$

- Living $Forests^{2006}$ Standards
- The new Living Forests Council

$LF^{1995\text{-}1998}$: The Dawn of Environmental Standards

Forestry has been succumbed to restriction since the Forest Act of 1932. The laws have had as a main purpose to secure the forests as a renewable resource. Focus on other areas like outdoor recreation and biological diversity came much later and was reflected in the new Forest Act in 1965 and especially with amendments to this law in 1976. During the 1970ies there has been a gradual development of forestry connected to other issues than pure forestry (Sverdrup-Thygeson et. al 2005:7).

As mentioned earlier, the LF[1995-1998] project was initially called *The Trade Project for Forestry and Environment*. The goals of the programme were twofold and were focused on the industry (Levende Skog 1998b):

- *"To help create Norwegian and international confidence in the raw materials from the Norwegian forest industry being based on sustainable and environmentally friendly Norwegian forest management*
- *To demonstrate the will and ability of Norwegian forestry to conduct long-term, sustainable resource management through R&D, competence building and information"*

As we have shown earlier, the LF[1995-98] was a comprehensive project with many participants in the three years period. Part of the process developed into a standardisation process with focus on many dimensions of forestry. When The Living Forests environmental standards were introduced in 1998, they consisted of 23 standards raising both new subjects, and re-raising already old issues. The standards differ radically from the older regimes in one way: It is a kind of self disciplining system enforced mainly by the forest industry and with market access as the driving force. The two tables below show the development of focus in Norwegian forest policies and administration along the 20th century and the 1990ies. Both next tables are derived from Sverdrup-Thygeson et al. 2005 (2005:7, 8), and are in our translations.

Table 8: Development of forestry's focus on environment and outdoor recreation

Year	***Main focus* – new features**	**References**
-	*Long term forestry* Secure raw material supply	- New forest act 1965
1970-	*Hunted game* Forests close to the city, the wooded surroundings of Oslo	- Proposition for a special law for the forests around Oslo 1973. - Revision of the Norwegian forest act 1976.
1980-	*Differentiated use* Focus on outdoor activities	- Regulation on forestry in Oslo and surrounding communes (Markaforskriften) 1983.
1990-	*Ecological questions* Strategies for preservation of biodiversity	- Book and courses "Richer woods" 1991. - Administration of protected forests. Guide, Ministry of Agriculture 1992. - Revised regulation on forestry in Oslo and the surrounding communes (Markaforskriften) 1993. - Book and courses "Biological diversity in forests" 1996. - Living Forests standard 1998
2000-	*Implementation of certification* Quality assurance of different areas.	- Specification of Living Forests Standards 2001. - Norwegian Accreditation's report "Quality assurance on certification of environmental control systems for forest administration" (NA Dok 53)

Table 9: Different aspects as described in earlier administrative regimes

Aspects	**Enriched forests (1991)**	**Markaforskriften (1993)**	**Living Forests (1998)**
Border zones	General recommendation of border zones between different nature types.	Demands for border zones toward roads, paths, rivers, streams, waters, mire, sump forest and arable land.	Demands to preserve or develop border zones towards streams, waters and mire.
Size of area	Only recommendations on shape.	Maximum shape of area 30 and 50 decare.	Demands for variation. No upper limit.
MiS/Key biotopes	No direct recommendations or demands.	Demands to take into consideration areas with endangered species.	Clear demands.
Driving damage	Focused with reference to planning on bare ground.	Demands for limitation and improvement.	Demands for limitations and improvement.
Old growth trees	No special focus except for unusual broadleaved trees.	Closed stand felling system is to be used on spruce where the conditions make it possible.	Closed stand felling system to be used on spruce where the biological and economical conditions are present.
Cutting regimes	Focus on cutting regimes adapted to place.	Closed stand felling system shall be used on spruce where the conditions make it possible	Closed stand felling system shall be used on spruce where the biological and economical conditions are present.
Swamp forest	Focus on ecological value.	Ban on draining land by means of ditches.	Whenever possible, closed stand felling system shall be used.
Outdoor activities	Focus on paths and trails.	Generally high focus with, among others, demands on removal of branches.	Generally high focus with some clear demands.
Scarification	Recommendation on how to avoid erosion.	Prohibition against stripes.	General demands on action against erosion.
Lying dead wood	Not mentioned. .	Not mentioned.	“Preservation” of lying dead wood older than five years.
Cultural remains	Focused on what is there.	Special demands for transport in the terrain.	Demands on taking precautions.

As we can see from this last table, there are especially three New areas in Living Forests compared to the earlier regimes: CHI//key biotopes, old growth trees especially of spruce, considerations to lying dead wood, no clear-felling of sump forest and special demands on border zones against mire and rivers/streams. The use of closed stand felling systems of spruce in lower areas was also used to a very limited degree.

> *"In the 1960-ies we were concerned about cleaning up the felling patches, so it would look nice. These days, everything looks fringier, but that's the way it's supposed to be now. Some trees are left behind, for instance. That's how the new knowledge works" (I 15).*

> *"We have seen the reactions to the LF Standards. Some conditions are very obvious: The clear-felling which was common earlier is no longer state-of-the-art. Think this has provided breeding ground for conflicts between the generations. I also think that people, who were used to earlier forestry, find today's forestry odd (I 3).*

The Certification Process

The certification process within Living Forests had a history outside the project. In fall 1995 the environmental organisations and the outdoor recreation organisations in Norway invited to a start up of a Forest Stewardship Council (FSC) certification system for Norwegian forestry. In 1996, 14 organisations in the Nordic countries made it clear that the FSC system was the only satisfactory alternative to them. They had also developed and agreed on a platform for their environmental claims on forest certification.

At the same time the LF Steering Committee decided to look into certification issues and appointed an ad-hoc committee to develop a proposal on how this could be done. The ENGOs primarily wanted an independent panel outside the Living Forests, but for economic reasons they found it necessary to cooperate with the Living Forests in the certification process (Levende Skog 1998c). A certification committee was thereby established July 1997. The committee consisted of people representing economic, environmental and social interests. The Ministry of Agriculture and the Ministry of the Environment were observers in the process.

There are mainly two systems of forest certification with an international perspective (Sverdrup-Thygeson et al. 2004): The Forest Stewardship Council (FSC) preferred by the ENGOs, and the Pan-European Forest Certification (PEFC) preferred by the forest sector itself. The PEFC system makes use of the environmental guidance system ISO 14001. The Living Forests standards are used as normative guidelines for the certifying bodies and this is also what they are meant to be in the field. The Norwegian system was approved by the PEFC Council May 24th, 2000.

The mandate of the certification committee was to "suggest practical solutions for certification of sustainable forestry in Norway, so that it could be used both in relation to ISO's environmental steering systems and in FSC certification and if possible indicate combinations of these" (Levende Skog 1998c). Different alternatives were evaluated by the committee.

Group certification was started in 1998 and by 2004 most of Norwegian timber (95 percent) distributed through ordinary channels originated from PEFC certified drifters (PEFC 2006). The fact that almost all Norwegian forest owners are certified with the PEFC system, has lead

to considerable pressure from the environmentalists, because this system is considered less environment friendly than the FSC. In comparison Sweden has a considerable part of their forest certified within the FSC-standards. On the other hand a smaller share of Swedish forest is certified.

In Norway there seem to be a dawning consciousness with the forest owners that also the FSC system will be beneficial since the market asks for this type of certification. An expressed goal of the revision has been to promote certification also in the FSC system and with the possibility of using both International Standards Organisation 14001 (ISO 14001) and certification from the Forest Stewardship Council-system (Levende Skog 2006b).

Related to the $LF^{2003\text{-}06}$ revision, the certification procedures were evaluated in 2004 by NINA (Sverdrup-Thygeson et al. 2004). Most of the following presentation is drawn from this evaluation. The aim of the evaluation was to clarify how Living Forests is incorporated into Norwegian forestry, if forest certification is applicable as a tool and as a comparison between forest certification in Norway, Sweden and Finland.

Sverdrup-Thygeson et al. (2004:51) concludes that the Norwegian system compared to international criteria for forest certification mainly functions well. The table below is from the report. The criteria selected are a cross section of different requirements and criteria for a certification system in the organisations Forest Certification Research Centre, WWF-Norway and the Confederation of European Paper industry (CEPI). Their assessment is based on review of descriptions, documents and interviews with key informants. The table is in our translation.

Table 10: Norwegian forest certification based on ISO 14001 with the Living Forests standards, assessed according to international criteria for certification schemes.

Criteria	Satisfactory?
- The system has to be voluntary, not based on authority	Yes
- It has to be about sustainable forestry, not environmental issues in general	Yes
- It is to balance environmental and social values with economy.	Yes
- It has to be neutral related to forest types and ownership	Yes
- The certification bodies have to be independent and impartial, without commercial interests in the certified businesses	Yes
- The certification bodies have to be accredited by competent bodies in accordance with international standards.	Yes
- National standards have to be based on internationally accepted criteria, both for adjustment of forestry and when it comes to structure of the certification system.	Yes
- The system has to have procedures to find and adjust mistakes and violations of the standards.	Yes
- The standard has to be in accordance with national forestry policies and laws	Yes
- All relevant interest groups has to be involved in the development of standards and certification systems in a balanced way	Partially[47]
- There has to be full openness about standards, systems and praxis.	Partially[48]
- The standards and systems have to be clearly documented.	Yes
- The standards and systems have to go through regular revisions.	Yes
- Certified entities have to publish a yearly overview of status and development of sustainable forestry	No[49]
- Personnel involved in various parts of the system, from the accreditation organs and the certification organs to the certified businesses and their underlying entities, have to have sufficient competence to utilise the system with good quality.	Partially[50]

Still the evaluation in 2004 showed that there was room for improvements. The evaluation specifically points to five main areas (p. 52-54):

1. The standards: The definitions on some of the standards are too general are difficult to use in a consistent way in praxis. The standards should be revised after some time. This is also part of the ISO 14001 system.

[47] All relevant interest groups were involved in the development of the standards, but the certification system has been developed by the forest owners and industry only.
[48] There is openness about the standards and the system, but there is not sufficient openness about all sides of the implementation.
[49] This is not emphasised in the current system, but should be able to satisfy easily by all certified businesses. Some already make these.
[50] The system of today has demands for competence in all parts, but there are questions if implementation is satisfactory.

2. Documentation: In the 2004 system the demands for data collection and documentation of environmental values and treatment of the forest to fulfil the standards are unclear. This lead to a significant degree of individual variation between properties and various certified businesses. The evaluation concludes (p.52) that in the 2004 system it is difficult to document if the system leads to improvement in praxis because the information is scattered and gathered in different ways by the different actors.

3. Differences between different certified units: Local adaptation creates variation between the actors, and makes comparison difficult. There seem to be considerable variation between the actors concerning: The motivation of the leadership. Different practices related to different standard areas. Different use of external competence. Different praxis related to internal control.

4. Openness: It is difficult to find out how the certification system really works. This has several reasons: The information available varies and the ISO 14001 system is based on a hierarchy between the certified actors and their underlying entities.

5. No formal structures for exchange of experiences; there are no formal structures for exchange of experience between the different organisations.

Several interest groups have in the period after the certification process expressed frustration that interests outside forestry has had very little influence on the certification system. ISO 14001 does not demand participation of various societal interests for the implementation of the system.

Complementary Hotspot Inventory (CHI)

Complementary Hotspot Inventory (CHI), is currently used nation-wide in Norway for mapping important areas for biodiversity at the forest stand level, and is connected to the Living Forests and the certification pro, but cannot be considered to be a direct effect of it. CHI is included here anyway because it has had a great effect on the actual forestry.

The CHI project was started in 1997, financed by the Ministry of Agriculture and run by Norwegian Forest Research Institute. The project can be seen as a part of the forestry sector's follow up of international agreements on biodiversity. "The method was founded on research on spatial distribution of species, and both hotspot and complementary aspects were implemented in the model" (Gjerde, Sætersdal & Blom 2005). The registration method is based on comprehensive research also within the overall project.

In relation to the CHI methodology is also a methodology for registration of cultural remains in forests, and also training schemes for this has been developed. The project's primary target groups have been the Ministry of Agriculture and Food, department for forest- and resource policy, rating institutions and forest owners (NIJOS 2007).

The projects and methods are connected to the Living Forests Standards and processes by the demands in the standards and for certification. Principle 14 in the LF^{2006} standards demands that every forest property larger than 10.000 acres to plan and manage important considerations in the forest. The CHI method is used in this connection. Connected to this, in the guidelines for certification based on the Living Forests standard, planning is an important

integral part. By 2006 such registrations were carried out in more than half of productive forest in economic use (Levende Skog 2006a).

The Specification Committee

Quite soon after the LF^{1998} standards were completed, problems arose. The standards gave room for interpretations and thereby different practices in different organisations and different geographical areas. The problems were expressed especially from the environmental organisations. The problem became apparent because there was no institutionalised body to interpret the standards whenever ambiguous (interviews, Arnesen et al. 2004). A working group was therefore appointed in 2000 to spell out some of the standards. The working group consisted of the $LF^{1995\text{-}1998}$ project partners.

By 2001 the group agreed on recommending specifications on six of the LF^{1998} standards. The specifications typically made the intentions of the standard more evident and also gave answers to difficult questions that had turned up when the standards were used in practice in the forests.

Living Forests in Laws and Regulations

Even though one of the objectives (if unspoken) has been to avoid governmental law and regulations, the Living Forests process has sneaked back into the governmental domain. The Living Forests standards are now a natural part of the forest policies. It is explicitly and implicitly referred to in governmental laws and regulations. An example is in the new regulations for sustainable forestry published in 2006 (our translations):

Article 4 on documentation and registration of the environment:

> *"(…) when felling in areas where such registrations are not yet conducted, the precautionary principle in Living Forests Standards shall form the basis."*

Article 5; environmental considerations in forestry:

> *"When conducting measures in the forest, the forest owner shall see to it that the values in important life environment and key biotopes are taken care of in accordance with the guidelines in Living Forests."*

The whole Living Forests process is considered part of the Norwegian Forest Programme and is thereby as a whole a part of what is considered the official Norwegian Forest policy. This is communicated both nationally and internationally (Landbruksdepartementet 1999).

The use of Living Forests Standards has also come up as an alternative to conservation of nature areas, in political discussions argument. An example of this is the struggle for a nature reserve in Trillemarka in the county Buskerud. While the environmentalists see the need for conservation of a large area, one of the arguments of those who oppose such a solution is that the Living Forests Standards are sufficient to take care of the biological values of the area.[51]

[51] For example in political *15 minutes* on NRK radio P2, 7.45-8.00 Monday January 8th, 2007; a discussion between the Socialist People's Party and the Centre Party.

The Living Forests[2003-2006] Standard Revision

Already in the LF[1998] Standards the parties intended to revise the standards on a regular basis. In 2003 several actors had pushed to start a thorough revision of the standards. A new committee was then appointed and the preparation for a revision of the Living Forests standard was started by spring 2003.

The revision took on as varied issues as working conditions, environmental factors and outdoor experiences to cultural heritage. The objectives for the revised standards are elaborated since 1995 (Levende Skog 2006c:2):

Forestry based on Living Forests' standards should:

- *Comply with the legal requirements nationally, and be worked out according to international agreements.*
- *In general attend to the qualities of the natural forests, and secure the diversity of ecosystems and species in Norwegian woods.*
- *Secure the signification owned to the forest as for the climate. The standards are also to give opportunity to increase this significance.*
- *Guarantee that forest pollution decreases.*
- *Give a contribution to the preservation of cultural heritage, to keep and further develop cultural environments.*
- *Give way for an active utilisation of the forest resources, maintain profitability and increase in value on a satisfactory level, as well as secure the marketing possibilities on the international market.*
- *Provide for future generations' resource foundation, on minimum the same level as today, and give way for development according to both volume and quality.*
- *Ensure that Norwegian forests contain qualities for a variety of nature based experiences.*
- *Provide for a safe environment for the forest workers.*
- *Attend to consumers' interests.*

It is underlined that this is not seen as an exhaustive list.

To make common ground for the revision work, and because one of the most important environmental organisation was hesitant to join the process (Naturvernforbundet), the revision started with a whole round of evaluations before the actual negotiations started in 2005. The participants have few critical remarks on the content of the evaluations, hence it seems like they were accepted.

The table below gives a general view of the content of the new standards and changes from the LF[1995-98] standards. It shows the headings of the standards, if they were included in the two processes and if and in what way they were revised. The standards are presented in the order of which they are presented in the LF[2006] standard.

The standards include normative statements on a wide range of issues, ranging from training of the work force to key biotopes, fertilisation and roads.

Table 11: 1998 standards and 2006 standards compared.

Theme	Standards 1998	Claims 2006	Revised?
1. The workforce	X	X	No
2. Waste management	X	X	Partially
3. Forest area protection	X	X	No
4. Areas of biological importance – key biotopes	Preliminary standard	X	Radically
5. Forest affected by fire	X	X	Expanded
6. Mountain forest	X	X	Partially/specified
7. Outdoor recreation	X	X	Partially
8. Old large trees and deadwood	X	X	Partially
9. Protection of genetic material – forest trees	X	X	Partially/Expanded
10. Fertilising	X	X	Partially/Expanded
11. Harvesting methods	X	X	Partially/Expanded
Cultural landscapes[52]	X		Replaced
12. Border zones		X	Radically/Expanded
13. Cultural remains and environments[53]	X		
14. Forest management planning[54]	X	X	No
15. Long term wood production	X	X	No
16. Scarification	X	X	Partially
17. Bogs and wetland forest	X	X	Partially
18. Afforestation/ Introduction of new species in afforestation areas	X	X	Partially/Specified
19. Forest structure		X	New
20. Forest roads	X	X	Partially
21. Herbicide spraying	X	X	Partially
22. Off-road transport	X	X	Partially/expanded
23. Tree species distribution – selection of species	X	X	Partially
Water protection[55]	X		Replaced
24. Openness and environmental information		X	New
25. Sami rights		X	New

To sum up the table:

- Four standards are kept in their 1998 form.
- Two standards are radically changed.
- 14 standards are partially changed. This means either expanded and/or specified.
- In two cases the standards have been replaced. In these cases to a more all inclusive form.
- Three standards are new all together.

[52] This standard is replaced and modified and included in "border zones" from 2006.
[53] "Cultural environment" was added in the 2006 standard.
[54] In 1998 Landscape ecology
[55] This standard is integrated into new number 12 "border zones".

To give an overall view of how the work was carried out, the considerations taken and the different problem areas, we will give a glimpse from the working papers of the project. By April 26th 2005 the work was divided into three categories: Work intensive standards, partly work intensive standards and none work intensive standards. That is; to start with the most demanding issues to agree on, i.e. issues as biodiversity (Levende Skog 2005). Areas of biological importance were considered the most difficult issue. While standards concerning old large trees and dead wood, harvesting methods, cultural landscape, forest management planning, bogs and wetland forest, forest roads, herbicide spraying and water protection were considered moderately demanding. The other standards were not considered work demanding. This working plan was later revised; still leaving a distinct feeling of what would be the most demanding areas.

The choice of terms is also changed from 1998 to 2006. While the LF^{1998} agreement consisted of 23 *standards*, the LF^{2006} agreement is made up of 25 *claims*. A characteristic change from 1998 is the fact that every claim is introduced with a specification of purpose.

Towards a Broader Coalition for Environmental Preservation: The Living Forests Council

The result of $LF^{1995\text{-}998}$ was the LF^{1998} Standards. There were however no institutionalised body to address disagreements between the parties after signing the agreement. The public media therefore became the only place to air different views and interests. This was considered unfortunate, because the public sphere gives very little leeway for compromise.

Having taught as lesson, a new council was formed in the aftermath of the $LF^{2003\text{-}2006}$:

> *"Now, the forum [LF Council] is appointed to handle conflicts. The council will control the agreement" (I 1).*

Thus, the right to manage the standards is delegated to the Living Forests Council. According to the council statutes, all organisations who were part of the establishment of Living Forests and who has signed the LF^{2006} agreement are entitled to membership rights and are represented in the council. The organisation is divided into three parties according to interests: Economy (Forestry and forest industry), Environment (Environmental organisations) and Social interests (outdoor recreation interests, trade organisations and the indigenous people). The Ministry of Agriculture and Food and the Ministry of the Environment have the right to meet at the meetings, but have no right to vote.

8.2 Impact

In this section, we will study more thoroughly what we see as the main changes of actors' behaviour as a result of the governance process. There seem to be two quite visible and well documented behavioural changes in our case study: 1) A change in actors' attitudes towards each other, mainly as a shift in attitude from the forest owners and the industry towards the ENGOs. The development of different training schemes and courses for forest owners and foresters strengthen this view. 2) A change in attitude towards regimes in governmental forestry administration. Does this stand for a democratic turn?

From Documentation to Environmental Sustainability

The LF[1995-1998] project was in the beginning rooted in the Norwegian Forest Owner's organisation and the intention was to document that Norwegian Forestry was environmentally sound. After some time however, it was clear that this approach did not suffice. Norwegian Forestry was not necessarily environmentally sound and a more thorough-going process was necessary (Interviews, Arnesen et al 2004:32)

During the first Living Forests process through the intermediate period to the revision, there seem to have been a change in attitude with the forest owners. Our interviews show this clearly:

> *"Yes, I would really say it has succeeded. It has resulted in increased commitment, and these processes are long-lasting. It was right to go for this, the attention is changed and science is changing. The most important effect is the considerable attention gained on environmental issues in the larger part of the country, not only around Oslo. It is very good, regarding the fact that forestry always have been skilled on environmental issues, but now a lot more people seem to notice this" (I 15).*

> *"To begin with, the forest owners wanted to document themselves from the environmental (…). They thought it would be "case closed" if they could just document what they were doing. Gradually the environmental standards came forward. The starting point was to document, to show will. This is not the thinking anymore…" (I 1).*

This is however a truth with modifications. Other informants claim that the actual change has not been very thorough, and that the discussion is economic efficiency versus preservation of the forests, as a choice between values.

One clear indication of this continuing controversy is the fact that The NNV withdrew from the negotiations on the LF[2003-06]. The reason for this was officially that *"NNV will not give priority to the "Living Forests" work among other things because our expectations for the result are too low"* (Levende Skog 2006a). The organisation believes that they in a better way can promote their views standing outside the revision. The organisation also expresses clear doubt about the alleged change of attitudes in forestry. An article on the organisation's official web-site from January 2005 has the headline: "Forestry's main strategy: Information instead of action." The article points directly to The Livings Forests negotiations. In the article the organisation goes as far as to say that the environmentalists have let themselves be fooled (NNV 2007).

The withdrawal from the negotiations was however controversial also within the organisation. There seem to have been two wings supporting different approaches: influence by monitoring independently from the outside or influence by participation.[56] The first wing gained ground, and the NNV has not been an official part of the revision process after evaluations.

Our interviews however generally point very strongly to the fact that trust and cooperation between different actors have been an important effect of the process. When asked "What is the most important effect of the Living Forests process?", many of the respondents point to issues like building of trust and cooperation, like some of the quotes below show:

[56] This difference between the parties is played down by our informant from within the organisation (I 11).

"Building of consensus through Living Forests (…) it has been of great national importance that there has been communication between the sectors. This accounts both for the environmental interests and the economic interests. A poorer result [that is to say less goal achievement] and more use of resources would probably have been the alternative to Living Forests" (I 18).

"That this creates trust between parties where there initially is mistrust" (I 8).

"Now, all actors ranging from forest owners to ENGOs know each other. With a few exceptions the actors have gained understanding for one another (I 15).

Another aspect is the possibility to communicate with the surrounding world through the various organisations. Again as an answer to the most important effect:

"Communication with society outside the forest sector through a broad representation in committees and in processes [is important]. This has also been important related to the political level" (I 20).

This change of attitude and focus seems also to be manifested through training schemes, courses and general competence building through out the forestry organisations. During and in the aftermath of the $LF^{1995\text{-}1998}$ process knowledge bases have been developed and training schemes have been carried out. These consisted and still consist of different levels of courses. Everything from study circles set up by the Forest Organisations to advanced formal studies at University colleges. The list below shows examples of courses and training schemes directly or indirectly related to the Living Forests process.

- The "Standards for a sustainable Norwegian forestry" study book was put out already in 1999. The book was formed to be convenient for self training groups in an 18 hours training programme. It is by 2006 distributed in 21.000 copies. Forest owners, forest workers and entrepreneurs and clerks have been trained 15.700 have completed study circles (Levende Skog 2006a).
- Complementary Hotspot Inventory (CHI)-courses for registration of biodiversity are developed.
- CHI-cultural heritage training schemes.
- According to ISO 14001, for certification, training of any person who can influence the environment is compulsory. The organisation is also obliged to document this activity.[57]
- Higher education in University Colleges in forest ecology, primarily with forest clerks in private and public forest management as target groups.
- Study circles "Enriched forests", "Biodiversity in the forest" and "Cultural heritage sites in forests" were partially prior to Living Forests, but are part of a gradual competence building among forest owners. By 2004 around 15.000 forest owners had taken the course "Enriched forests" while more than 6000 had taken the follow up course "Biodiversity in the forest" (Sverdrup-Thygeson et al. 2004).

[57] Information from guidelines for certification: NA Dok. 53. Retningslinjer for sertifisering av miljøstyringssystemer i skogforvaltning.

- In addition there are many related courses connected to different types of felling, planning and safety and working environment connected to The Forestry Extension Institute. The institute provides education and training in the forestry sector and forestry related fields. It is a non-governmental organisation organised in partnership with 39 forestry organisations and scientific institutions forming the membership. Examples of courses are: Basis course on forestry, "Establishment and care of forests" "Felling, progress and roads", "Cultural landscapes and multiple uses" (Skogkurs 2007).

The effect of this competence building is not necessarily given, and is not documented in this study, but the magnitude of the training indicates that the changes on national level have been taken out to the implementing actors.

One of out interviewees question the idea of sustainable forestry regarding cultural remains in forests. According to him, the requirements for sustainable management of these remains have not been met in the standards. He says there is a certain will among forest owners and other to act right on this issue, but there is a lack of ability (I 16).

Living Forests a Democratic Turn in Forest Management?

Based on what seem to be a broader representation of different interests in the forestry sector in the Living Forests, there seem to be a clear democratic turn of the work for sustainable forestry, in a sense that a broad range of people and sectors have been able to influence the Norwegian forest policies. When our respondents are asked if there has been a democratisation of Norwegian forest policy these are some examples of answers:

> *"Yes, because different parties have possibilities for influence, even though it is in its place to discuss how democratic each individual organisation is, we have several actors that would otherwise not have participated. Several interests influence the set of rules. It is no longer accepted that the forest owners can do as they please, independent of attitudes and opinions in the rest of the world" (I 7).*

And

> *"I think this has contributed to opening up the forest administration. It started with heavy media coverage before Living Forests that Norwegian forestry is bad, it came as a surprise. The lesson we have learnt, is that forestry needs to be more open, but still forest management is not very open to the general public. There is still resistance" (I 10).*

This conclusion still has some modifications: They are mainly connected to three aspects: 1) Participation in decision making occurs mainly on the national level, 2) Great differences in resources among the organisations, 3) That political representatives from the traditional representative democracy have not taken part.

The Living Forests process has broadly speaking been limited to the national level, and has not had a broad representation as such. The level of broader involvement has mostly been dependent on the structure and culture in the different organisations involved (for more on this see chapters intersectoral coordination and multilevel governance).

As mentioned earlier in the report, several of our informants emphasise the disparity of resource allocation among the different parties and organisations involved in the process,

mainly organisations representing the environmental and social interests. The Forest Owners' associations and the forest industries, on the other hand, have a larger portion of resources available.[58] This tendency is strengthened by the fact that the secretariat is situated in the Norwegian Forestry association. Concrete examples confirming this is also the fact that both the Norwegian Consumer Council and the Sami parliament withdrew from the revision giving up lack of resources as the reason.

The government was in the negotiations represented by administrative staff rather than political representatives. The political part in the process was limited to the allocation of funds to the process. To get a more in-depth understanding of this we asked our respondents about what effects it had that politicians were not directly involved. It is quite noteworthy that none of the informants saw this as a great problem. Quite the opposite; they see positive effects of political parties and interests being absent:

> *"It has made the process a real professional debate between economic interests, nature and market. We have come further than the politicians; a precondition for the process is that there are higher demands [in the market] than is provided for by the laws and regulations. This would not have been the case with the Ministry of Agriculture and Food's bureaucrats or the Centre Party's political actors. Wee for example the forest act and the environmental regulations which are much poorer" (I 5).*

This informant is supported by many others:

> *"(…) Then you can ask the question if the Parliament had found reason to pass a greener forest act and regulations without Living Forests. It is difficult to be sure of this, but I do not think the answer would be yes. Because the situation around the table – these rounds – has put a pressure on the Norwegian Forest owner's associations which are the most powerful here, to a larger extent than could have been achieved in other ways" (I 11).*
>
> *"Would say so, that there is no doubt that after the LF[1998] agreement, the Ministry of Agriculture was sidelined, but that was alright (…) we submitted the new environmental regulations to the Parliament, but they told us to await for some years. The governmental administration we were OK with that, even though the Minister [of Agriculture] was a little disappointed.*
>
> *We remain in power over forest policies, the forest owners stay in power on forestry, even though the ENGOs have increased their power. I wouldn't claim that forestry was not democratic before" (I 15).*

The actors' views on this seem to tend towards a total abdication of representative democracy's role in sustainable forestry development. This attitude is in accordance with a broader change in Norwegian attitudes towards politicians and representative democracy. The general belief in the market forces as superior to political involvement seem to be growing in Norway. Businesses' direct involvements in public policies generally also seem to have a stronger legitimacy than before (see for example Rye and Yttredal 2005).

[58] Arnesen et al. (2004) calls attention to this issue and it is also confirmed in the interviews.

8.3 Outcomes

A thorough evaluation of outcomes lies outside the mandate of this case study. However, since the Living Forests process has been in progress for more than ten years, it should be possible to see some actual changes in the forests. If this is not the case, then the process should be deemed a failure.

Related to the LF[1998] revision, a whole set of evaluations were conducted. In two of these is looked into the actual effects LF Standards might have had on forestry and in the forests. In the following we are using these evaluations quite uncritically to document outcomes of the Living Forests process. To cross-check the reliability of these evaluations, we asked our informants how they view them. All of the interviewees emphasised the need for more documentation on this, but they agreed on the trustworthiness of the studies carried out for the evaluations.

The stakeholders not taking part of the co-operation, is not as pleased. Some claim that new knowledge on different issues has not been taken seriously into account. It is also claimed that effects are not possible not detect, when fundamental knowledge still is missing, as is the case on cultural remains. Before speaking of taking considerations on cultural remains in forestry is meaningful, a lot of research needs to be done (I 16).

The leader of the Scientific Committee in LF[1995-98] was one of the evaluators of the certification systems in 2004. He is however interested in how forest policies leave traces in the real world and brings about these comments with regard to the evaluations:

> *"We had little time and resources and had to depend mostly on secondary sources. It was not possible to do proper field work. There should be a lot more resources allocated to a comprehensive evaluation of the whole of Living Forests."*

However; others question if more extensive research would have had a large influence on the further process. The reason is that the evaluations and the common store of knowledge already seemed to have developed a kind of general foundation for further discussions. The opinion of the general public also affects the issues brought to light, and what kind of knowledge is produced:

> *Right now biodiversity is the right thing, and now bio energy has also become increasingly important. These problems are related to forestry. These are environmental issues on another level, globally. It's quite different from the Red List Species issue. I believe so [that it LF has led to more sustainable forestry], because it has brought attention on these issues to the ones who did not pay attention to it before. I believe that the LF Standards and the quality assurance have led to a more even level on the environmental friendly forestry. But it is hard to measure to specific effects (I 15).*

In the following, the main results of the two evaluations conducted, is presented. In a last paragraph we also indicate possible outcomes from the fact that expertise on cultural remains have been left out of the co-operation.

Development of Norwegian Forests According to Some LF- Standards: NIJOS

The Norwegian Institute of Land Inventory (NIJOS) has evaluated the development of the Norwegian forests related to five of the 23 LF[1998] Standards (Hobbelstad et al. 2004).

The method of the evaluation is connected to the National Forest Inventory (NFI). This inventory was carried through in 1919 as a result of a hard exploitation of the forests at that time. Since then seven more inventories have been fulfilled countrywide. The methodology is based on measuring 130 variables on field plots distributed all around Norway. The variables can be grouped into: geographical variables, site variables, stand variables, incremental growth, forest operation and engineering variables, forest management and environmental variables. Variables regarding the Living Forests standards are predominantly registered in the 8th inventory in the period 2000 to 2004. These registrations show these changes on the five standards examined:

1. Biologically important areas:
The area of old forest has increased continuously since 1919.

2. Old growth trees and dead wood:
Dead wood has increased continuously during the whole period. The amount of big trees has also increased over time, both absolutely and relatively.

3. Regeneration cutting regimes:
90 percent of the possible cases have left 5 eternity trees per hectare, like the standard says.

4. Mire and swamp forest:
In 85 percent of the cases border zones are left when regeneration cuttings take place.

5. Water source protection:
Border zones have been left for 75 percent of the regeneration cutting areas.

When assessing these results, it has to be taken into account that only the recent registration is constructed to answer questions connected to Living Forests. On the other hand, the informants in our interviews have, as mentioned, for a large part confirm that the evaluations seem to be signs of improvement of environmental factors in the forests.

Environmental Concerns on the Felling Patches; Before and After Living Forests

Closely connected to the previously mentioned study is another study called *"Environmental concerns on the felling patches – before and after Living Forests"*. The research project was run by the Norwegian Forest Owners' Association (NORSKOG) and the Norwegian Institute for Nature research (NINA) from April 2003 to April 2005.

In the project forest areas cut before and after the introduction of forest certification based on Living Forests Standards and ISO 14001. 236 patches were tested in four counties. These variables were registered:

1. Treatment of paths, lying dead wood, cultural heritage sites and swamp forests.
2. Choice of regeneration cutting regimes and measurable criteria for the choice of these.
3. Driving damages and damages related to ground preparation.
4. Old growth trees (placing, compound, diameter distribution and stability).
5. Border areas towards mire, streams and water.

The report concludes that the conditions have improved connected to two aspects: The amount of old growth trees set behind when cutting. The largest improvement is with spruce being left on the patch.

The border areas also show a great improvement. Fewer waters, mires or streams lack border zones and the width of the border zones increase and are better adapted to differing environments. When it comes to outdoor activities (paths), cultural remains and ground preparation there seem to be a positive trend, but cases were too few to draw distinct conclusions.

But, even in these same areas there is need for improvement. More than 40 percent of the patches still lack old growth trees or the spruce stand is too scarce. In the border zones towards mire and streams, the largest trees are removed and therefore the upper layers of trees are removed. Most of the new areas with swamp forests are altered by clear-felling or damage caused by transport. This does not comply with the intention of the standard. Lying dead wood is also overrun by forestry machinery (42 percent compared to 17 percent earlier). The use of closed stand felling systems have not increased and about one third of the field plots cut after Living Forests show machinery damages that should have been repaired.

Generally the most visible improvements are undergone in areas in which forestry has focused on environmental issues for many years also prior to Living Forests. The new areas handled by the Living Forests standards seem to have undergone less change.

Environmental Considerations the Most Important Effect of the Living Forests Process

The findings from the evaluations are confirmed by our more general and subjective answers from the interviews.

The goals expressed at the beginning of the Living Forests project in 1995 have not been formally changed through the time period (see 8.1 for goal formulation). As we have shown earlier, the attitudes of the actors however have changed, and this might have changed the entrance point of the work conducted. This might partially be the explanation why our informants clearly see environmental factors as the most important effect of the Living Forests process:

> *"Better protection of the bio diversity in non-preserved forests in Norway. For the 95 percent of the non-preserved forests, this means an important contribution to the goal of putting an end to the loss of biodiversity within 2010" (I 5).*

> *"I think there is an increased understanding on the forest side that environmental considerations have to be taken, and that there is a good process in this direction" (I 2).*

This view of the process is confirmed in the answers to two other questions: One on the process' effect on sustainable forestry and one on strong and weak sides of the Living Forests process. Some of the informants modify this view quite strongly:

> *"Living Forests has started a competence building process in all of Norwegian forestry, which from an environmentalists' opinion point in right direction. Soberly judged, we have to take into account that such a change-over will take time. Still we are many who are dissatisfied with the progress, with the clear messages Living Forests gives in most areas. But (that it has…) , it is not possible to say that we have an environmental friendly forestry, but it is more environmental friendly than it was before, one step in the right direction" (I 11).*

The Norwegian Society for the Conservation of Nature turns this upside down. On its' web page they characterise Norwegian forestry in this way (NNV 2007):

> *"We will show that Norway is not in any way better than other, actually quite the opposite. The situation for biological diversity in Norwegian woods shows that all who wants environmental friendly products have to avoid Norwegian timber, or make strict demands on forestry's operation."*

The emphasis on environmental effects does not mean that the economic effects on forestry in general, with special focus on market effects have been forgotten. This is pointed out by several of the interviewees. Still, the project has probably contributed to a slide of focus as reflected in the interviewees' answers.

When asked if the Living Forests process has reached its' goals, most of the respondents answer yes, or like this affirmative answer: *"On a scale from 0-10, about 7" (I 2).*

These answers however, have to be taken with some amount of scepticism, since they seem to reflect different departure points and are not necessarily related to the original goals of the project.
Still, the alleged imbalanced representation between environmental and cultural considerations in the co-operation stands. Our interviewee indicates what comes out of this regarding cultural remains. As only the already known remains are dealt with in the standards, ultimately a considerable amount of cultural remains are in danger of being damaged (I 16).

What started out as a project for the forest sector has developed into an ongoing policy making process related to environmental improvements in forestry. The preceding presentation shows that the effects have been many and has taken place on different levels. Some of them are quite clearly connected to the Living Forests process, while others might be more indirect effects of the process or even just peripherally connected to the Living Forests work.

We have generally been able to distinguish these **main outputs**:
The Living Forests 1995-1998 project:

- New environmental standards (1998)
- Group certification is accomplished (1998-)
- Complementary Hotspot Inventory – CHI (1997-2000)
- Specification on some LF^{1998} Standards (2000-2001)
- Living Forests becomes part of public policies

The Living Forests 2003-2006 revision:

- New Living $Forests^{2006}$ Standards
- The Living Forests Council

Two **main impacts** have been distinguished:

- A change in attitude, especially on the landowner side, towards environmentally sound forestry. Connected to this is also competence building and building of trust and cooperation between different interests.
- Extended participation in forestry. More interests are represented and have the chance to influence forestry, especially on a national level. Representative democracy's and politicians role in the process has however been limited to allocation of funds.

When it comes to **outcomes**, we have combined evaluations conducted by other research institutes with our own material:

- Evaluations conducted in the intermediate period between the two formal Living Forests processes seem to show that the Living Forests standards lead to a more environmental friendly forestry.
- Our interviewees seem to support such a view, but it is also argued that what is achieved is not enough.

This is generally a positive impression. We can, however, not overlook critical voices especially voiced by the NNV who withdrew from the negotiations, and who question that any improvement from the Living Forests process has taken place.

As in all evaluations it is difficult to establish direct causal links between the effort and the effects. This accounts especially when the distance from action to the effect is large. In connection to this we also bump into the problem that we do not know the alternative, and if this would have been better. Some of the work for an environmentally sound forest sector had already started before the Living Forests process was properly started, and some work has been initiated partially independent of the process.

Still the effects of the work seem to be impressing on all levels.

9.0 Summary and Final Reflections

In this final chapter we take a glance at the findings of the GoFOR case study of Living Forests process 1995-2006, and what they may imply. In addition, the question whether Living Forests can be considered a success, is answered in short terms.

9.1 Short Summary of the Findings

The Living Forest Process was initiated by industrial actors and the government mainly as a response to new market demands regarding documentation on sustainable forestry, and a general change of attitude towards a more "green opinion" . Other participants in the process were NGOs on social and environmental issues, trade unions, and consumer organisations. NGOs entered into the project to gain influence on forestry policy making, and to ensure environmentally sound forest management. They saw Living Forest as an opportunity to achieve this through cooperation and dialogue with the government the forest owners and industry, in other words those who affect forests.

During a long, complex and shifting process, housing large disagreements, conflicts, and even exits, the process has developed into an ongoing process related to environmental improvements in forestry organised through the broad constituted Living Forest Council. The council forms a stable basis for future cooperation and the parties have now agreed on a five year schedule for revising the standards.

The Living Forests Process has from the beginning been a broad participatory process. As such, the process can also be considered as a democratisation of forestry by including new interest groups into forest policy making. An important hindrance in this respect is that participation demands significant resources which are a scarce in most NGOs, and that some stakeholders were defined out of the cooperation as "not relevant".

Intersectoral coordination forms the basis of the Living Forests process. It is widely recognised among the stakeholders that intersectoral coordination is crucial for efficient forest management. This sharply contrasts the lack of intersectorial coordination between the Ministries of Agriculture and Food, and the Ministry of the Environment.

There is extensive collaboration taking place between levels in Living Forests. The actual negotiations between the parties were carried out on a national level, but large efforts were made to found this work within the organisations. Most organisations, except the ministries, have had thorough debates on the formulation of standards on several levels.

Expertise has played a major role all through the process; still the Living Forests process has not been expert-driven. It has first and foremost been a tug of war between different interests and considerations. Still, there is a broad consensus among the participants that the use of expertise is important for progress in the negotiations and understanding between the parties.

The Living Forests process has both been iterative and adaptive. We can expect this to continue, or even grow further since the parties reached an agreement upon routines for how this is going to be conducted in 2006.

Besides the direct output represented by the Living Forest Council, an equally important result from the process is the development of mutual understanding, trust and reciprocity between the important stakeholders in the governance of forestry.

9.2 Can the Living Forest Process be considered a Success?

Living Forest can generally be considered as a successful process on several levels. Some of them are quite clearly connected to the Living Forests process, while others might be more indirect though not less important outcomes of the process. A distinction can be drawn between direct outputs, institutional effects, and relational effects.

The main direct outputs are the development of a Living Forest Standards. The institutional effects are the establishment of a group certification system and the Living Forest Council. The relational effects consists of a change in attitude, especially on the landowner side, towards environmentally sound forestry, as well as competence building and building of trust and reciprocity between different stakeholders.

9.3 Impediments and Success Factors

Living Forest has been a very complex process involving a large and heterogeneous group of actors. During the process it faced at least two important challenges. Still, largely due to two important success factors, the result of the process vastly outweighed the expectation.

The first impediment to the process was to be found within the group of participants. In the first part of the project the different groups of actors involved, not only harboured opposing interests and distrust towards each others, but also a quite different understanding of the actual situation in Norwegian Forestry.

The second impediment has hampered the process the whole period. Participation in such a process, besides admittance, requires a significant amount of resources such as work, travelling costs, technical skills etc. For most NGOs this was a challenge, and for some this prohibited them from participating. For those participating, the lack of resources tipped the power balance in favour of the industry and forest association whose resources vastly outnumbered those of the NGOs.

The Living Forests process has lasted for a considerable period of time. Although the co-operation has fluctuated strongly, the actors have carried out negotiations, specifications and evaluations for more than 10 years. It is very likely that the success of the process can be strongly connected to the length of the time span, giving the actors involved a better opportunity to overcome hindrances, elaborate a good system by trials and errors systems, and build trust, understanding and reciprocity towards each other.

However, being a necessary condition for the outcome, time alone did not solve the challenges to the Living Forest Process. Another necessary condition has been a sufficient commitment from key participants. The will and ability for action and compromises throughout the process has been impressive, especially given the long uncertain outcome of their effort. This goes for NGOs, forest owners and the industry. All actors had potentially a lot to lose; integrity and legitimacy on the NGOs' side, costly and time-consuming restrictions on the forestry's side.

9.3 Final reflections on the Findings

Living Forests is a remarkable process, not only by its results represented by the two times development of the Living Forests Standard, a group certification system, and the establishment of the Living Forests Council. Even more interesting is the process in which they came into being.

The process itself would not have taken place had it not been for the fact that the forest sector has been forced to take these measures by international market demands. As such the main objective of the initiators, mainly representing economic interests, was to establish a system that showed international customers that present Norwegian forestry was conducted "sufficiently sustainable" at the time. To give the process more legitimacy, NGOs and other stakeholders were included in a process. As a consequence, the early phase of the process was characterised by a lack of trust and common understanding between the fractions. This situation hardly laid the best foundation for a successful outcome.

Still, Living Forests though facing severe challenges and setbacks during the process gradually developed a common understanding, as well as trust and reciprocity between the different participants, which was needed to produce the final outcome.

Arguably, the length of the project period was a necessary condition for this outcome, but it was not a sufficient one. Participants committed to the process also proved important, but it can not explain the final outcome. Lots of processes i.e. some of those investigated in the GoFOR project, has similar characteristics, but opposite outcomes. This indicates that an additional explanation is to be found in the actual development of the process itself. This certainly deserves a closer investigation.

To conclude, the Living Forests process can truly be considered as a laboratory for new modes of governance in forest policies. It will be interesting to follow the process further, to see how the collaboration evolves, how the parties also in the future will handle conflicts and setbacks, which likely will occur at times. In addition, the Living Forests process may pave to way for similar processes on other fields. WWF-Norway has already notified that this is of relevance also to the fishery sector. It remains to be seen whether the experiences and knowledge from the Living Forests is passed on, and whether the non-commercial actors with the LF process have become more able to take part in these kind of processes in a way the secures their fields of interest.

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[59] There is no official title in English; this is the authors' own translation.

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