The social and cultural environment of National Forest Programmes

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Abstract

National Forest Programmes (NFP) lead to a broadening of the social and cultural environment and impacts on forest policies. It will do so by (i) changing the content of forest policies towards sustainable forest management (SFM) and multi-functionality of forests, (ii) thereby broadening the number of actors and stakeholders, and (iii) changing the legitimacy of the stakeholders. In addition rural restructuring and modernization of society will influence the overall social and cultural context for policy making within the framework of NFPs. The paper will outline a model of how the social and cultural environment may affect a forest policy. The social and cultural environment is seen as consisting of on the one hand the system(s) of goals, values and priorities informing the activities of various groups interested in forest issues, and, on the other hand, the institutions channelling the interactions among the actors. Thus the actors are constrained in their activities both by physical reality and by social reality. The system of values and the social reality are seen to have a historical dynamic, which can be analysed as discourses in a constructivist perspective. The social and cultural environment co-exists with political and economic environments and is intertwined with them in their historical dynamic. A changing social and cultural environment will have an impact on forest policy outcomes independent of other forces such as technology, market forces and eco-system considerations, but also contingent on the impact of economic and political factors. The impact is achieved partly by changing the priorities of various goals, partly by changing the perceptions of forest related issues and goods, and partly by (re) designing the institutions governing the activities. In order to optimise goal attainment a forest policy must allow for the direction and dynamic of the impact from the social and cultural environment. Thus the dynamic of the social and cultural forces needs to be studied and the interactions with various parts of the forest policy understood.

1. Introduction

The National Forest Programme (NFP) outlines a policy framework where the social and cultural forces will have more room for impact than in the more conventional models of policy formation. The present paper will try to explore what this means.

In our approach to this we must emphasis that both the standard operating procedures (SOP) of forest planning as described in the literature as well as the NFP are **models** of what goes on - or ought to go on. Working with models there is always the possibility that real world processes do not conform to our assumptions and that outcomes deviating from goals actually may come about because our models are deficient. Models will always represent simplifications of real world processes, but they might at their best provide us with concepts that improve our understanding of basic processes in policy making. Models and their concepts are also important in creating common "mental images" that can be communicated across groups of actors, and thereby improve overall communication and dialogue.

It is suggested here that the NFP model of forest planning do not so much add new dimension to forestry and forest policy as it recognizes and integrates significant forces, which the SOP models tend to ignore. While this may make the job of the policy analyst more difficult, it will also make the efficacy of the policy better and the policy failures less spectacular.

Three issues related to the National Forest Programmes makes the social and cultural environment particular important:

1. The core substance of the NFP, i.e. sustainable forest management (SFM), brings new actors or stakeholders into the process, with their perceptions, values and actions. SFM legitimate new actors in forest policies, particularly environmental NGOs, but also international actors. SFM is a global policy process, and there is today a profound interaction between national and global

actors in the policy making on SFM.

2. NFP is foremost the proscription of a process, i.e. a framework for policy making and implementation. All the main guidelines for the planning process; (i) participation; (ii) holistic and intersectoral approach; and (iii) iterative process and long term commitment; all these principles contribute to bringing new stakeholders into the planning process. These will bring a broadening of the social base, perceptions and values.

3. NFP will most probably change the role of the state in forest policy formulation and implementation. Forest policy will move away from a segmented policy making process which has traditionally been formulated in the corporate forest segment, where the State (Ministry of Agriculture, and forest extension services), forest owners and forest industry, and forest science has operated with little interference or challenges from outside actors. It will move towards a situation where new stakeholders assert themselves in the policy making process, and the state will for several reasons probably over time change towards a broker or mediator between stakeholders.

2. Principles for National Forest Programmes

Reviewing the development of the concept of a National Forest Programme, Egestad (1999) concludes:

«A National forest programme is a comprehensive forest policy framework, meant to be a generic term for a wide range of approaches to sustainable forest management within different countries and to be applied at national and sub national levels, based on a set of basic principles. (p.21).

The 11 principles are divided into two sets. The first set lists 6 principles that states can consider:

1. «Appropriate participatory mechanisms to involve all interested parties,

2. decentralization, where applicable, and

3. empowerment of regional and local government structures consistent with the constitutional and legal framework of the country;

4. recognition and respect for customary and traditional rights of, inter alia, indigenous people, local communities, forest dwellers and forest owners;

5. secure land tenure arrangements, and

6. the establishment of effective coordination mechanisms and conflict resolution schemes.

The second set consists of five principles that *should* be recognized regardless of the approach adopted by individual countries to its sustainable forest management policy process.

These are:

1. National sovereignty and country leadership;

2. consistency with national policies and international commitments;

3. integration with the county's sustainable development strategies;

partnership and participation, and

1. holistic and intersectoral approaches.» (Egestad 1999:21-22)

Appropriate participatory mechanisms imply a broader base of participants. Effective coordination and conflict resolution must involve local participation. And the holistic and intersectoral approach will require input from all stakeholders. Thus, compared to the standard operating procedures of textbook policy development, a holistic and intersectoral approach to forest policy with extensive participation of stakeholders resulting in partnerships in the execution of the policy will create new ways for the social and cultural environment to affect policy outcomes. And as decentralization and empowerment of local structures and recognition of customary and traditional rights are taken into the policy this will be even more pronounced.

The long process known as «modernisation» is a frame for understanding much of the changes in perceptions and valuations of forests and forest related activities. Industrialisation,

education and leisure has fundamentally shaped the groups of actors involved and the forms of local communities. There are also reasons to expect that the restructuring of the rural economic and political landscape and the increased emphasis on multi-functionality of forests (and agricultural landscapes, i.e, rural primary production) will not only bring into the policy making new groups, but also lead to a fragmentation of existing groups, and new alliances.

Social change and modernization of the rural areas will further strengthen the broadening of the social and cultural basis of the stakeholders taking part in the forest policy making. As Bill Slee formulated it in the Workshop on *The role of forest and forestry in rural development* in Vienna in July this year, when he "characterized the late 20th century as a time of profound rural restructuring", where "forest has been transformed from a relative narrow production-oriented industry to a provider of multiple functions". One may reasonably expect that the restructuring of the rural economic and political organisation will have a long-term influence on policy making. The increased emphasis on multi-functionality of forests (and agriculture, i.e, rural primary production) will not only bring into the policy making new groups, new user and consumption patterns of forests and forest products. It will also lead to new interest coalitions, perhaps to fragmentation of existing groups, and to new alliances.

«Living Forest»: A Norwegian project in the spirit of NFP

«Living Forest» was a policy development project initiated in 1994-95 by the forest owners and forest industry associations. The goal of the project was to assist forest owners in developing sustainable forestry in the spirit of recommendations from the Brundtland commission of 1987 and the Earth Summit in Rio de Janeiro in 1992, and to construct a national consensus on principles of sustainable forest management (SFM). However, the force precipitating the project was the perception among the Norwegian forest owners and forest industry of a growing market demand in Europe for timber certified as coming from sustainable forestry. Therefore the work on standards that could be included in a timber certification system became the main work of the "Living Forest" Project. The urban consumers of central Europe had made their power felt among Norwegian forest owners.

The organization of the project certainly conforms to the NFP principles in the inclusion of stakeholders and the holistic and intersectoral approach to their problem. While initiated by the forest -owner, -labour and -industry associations, public authorities participated with financial contributions and expert advice. Research institutions were called on to provide knowledge by presenting existing and producing new interpretations of data on Norwegian forests. NGO's representing the general public's interests in outdoor recreation and nature protection also participated.

The outcome of the project, presented in 1998 (see Sanness 1999), was the recommendation of 23 operating procedures for the various forestry activities considered.

A closer inspection of the standards suggest that social and cultural factors enters significantly in several of them such as the considerations of outdoor recreation values and the protection of cultural landscapes. But also, apparently, in areas such as «Biologically important areas». The biologically important areas are old growth forest and key habitats. The identification and delineation of such areas are not always clear-cut and obvious to the ordinary forest user. Their identification requires trained biologists. We shall return to this problem later.

While the model of NFP presented here clearly acknowledges the role of social and cultural factors, the on-going development of forest policies in Europe are of course also affected by its social and cultural environment even though the older policy models did not recognize this. Let us first organize our conceptual model before we go into a discussion of how this comes about.

3. Thinking about forest policy outcomes

Forest policy is a government's effort to achieve specific goals by integrating and directing the various societal activities affecting forest resources.

Issues in forest usage perceived as public problems can be understood as problems of collective action (both first order and second order problems), and the policy solutions to the problems described as political compromises. These compromises will materialize in particular institutional forms assumed to «solve» the problems. Over time the set of problems as well as the set of solutions will change.

Policy analysis will usually start out with problem analysis, go on to information gathering, analyse possible solutions and present a proposal. If we situate these processes in a political context there is a «situation» before a problem is formulated. Let us call this the perceived forest conditions. Perception and interpretation is an essential part of the problem formulation. Policy changes are tied both to perceptions of forest conditions and to what has been learned from previous policy outcomes.

In this process the relevant actors involved are the owners of forest resources, the industries depending on access to forest resources, and the consumers of various types of forest products. But also, of course, the forest professionals staffing the various government agencies and private bureaucracies charged with duties towards the forest sector.

The perception and interpretation of the forest conditions are basically social and cultural processes. There may be smaller or larger chunks of scientific investigations. But also these are situated in a social and cultural matrix of competing valuations and interests. With a basis in the perceived forest conditions the actors go about securing their interests. In this we can rely on them to maximize their returns both in material terms and in mental terms. The trade offs between effort spent on material or mental gratification will vary across actor groups.

The struggle for government coordination and action in relation to perceived forest conditions is basically a political process. But also this process is affected by social and cultural forces. It is important to keep in mind that the outcome in the form of a forest policy impacts the forest conditions only though it's impact on the relevant forest actors. The way these groups perceive the policy and interpret its requirements are also social and cultural processes. In so far as the policy requires people to do something that they would not have done voluntarily, the policy requires power. But in a democratic polity a government's power to enforce its policy is a precarious commodity. Its use of power needs to be seen as legitimate. Without careful attention to problems of enforcement policies will fail. Null results and counterproductive outcomes of government policies (as measured against stated policy goals) are far from unknown (Sieber 1981).

But governments generally stay in power. One of their main powers lies in the ability to shape agendas and select problems for attention. Another is the politicians ability to persuade, to make people agree to a certain interpretation of the world. In this process the social and cultural environment plays a crucial role. We shall return to this later.

Standards for forestry activities (tentative translations from Norwegian, p.84 in Sanness 1999)	
1	Labor force and competence
2	Handling of waste
3	Protection of forest land
4	Biologically important areas (old growth forest and key habitats)
5	Forest affected by fire
6	Mountain forest
7	Outdoor recreation
8	Old, sturdy trees and dead wood
9	Protection of genes in trees
10	Use of fertilizer
11	Forms of logging
12	Cultural landscapes
13	Cultural heritage
14	Landscape planning
15	Long term timber production
16	Soil preparation
17	Bog and swamp forest
18	Planting of forest and change of tree species
19	Forest roads
20	Spraying
21	Transport across terrain
22	Tree species distributions
23	Water protection

The basic elements of the model and the general flow of causation are depicted in figure 1. Only causal flows from social and cultural forces are included. But to get a dynamic picture of what goes on we also need theories of social and cultural processes.

Figure 1 : The social and cultural environment in relation to forest policy outcomes

4. Theoretical approaches to social and cultural impacts

To interpret and give meaning to the figure above we shall use a fairly basic social science approach. It can broadly be characterized as constructivist and interpretative but applied with an institutional power structure as backdrop. This approach is not in opposition to the practical and managerial approach of ordinary policy making, but an effort to make these activities more sensitive to the contingencies and ambiguities inherent in them. And it will help to understand how social and cultural factors insert themselves into planning procedures and affect their outcomes.

The first thing to note about social and cultural forces is the importance of talk. In experimental studies of the assumptions of simple models of collective action such as the prisoners dilemma, it has been discovered that relaxing the assumption of no communication by allowing participants to talk, particularly face to face, significantly increases the level of cooperation (Ostrom 1999). The trust and reputation needed for sustained collective action are established primarily by talk, backed, of course, by performance.

The second thing to note about social and cultural forces is the way power is conveyed by words, concepts and speech habits. Those who are able to select and define words and concepts and to give them meaning, are able to shape our worldview and direct our attention. And in most situations the power and social standing of the speaker matters to the listener. The impact of talk, the impact of the social and cultural processes, varies with the positions of the actors within the institutional and structural fabric of the society.

To understand the dynamic of social and cultural forces we need as foundation a general model of human action. It is assumed that any actor is guided by an internal set of values, goals, and preferences. But the real world action sequences initiated in pursuit of these are also obviously constrained both by the natural environment and by the social and cultural (as well as the political and economic) environment of the actors and actions (the institutional and structural fabric). Whether the operating logic of the actor is maximization of profits (competition) or communicative understanding (cooperation) depends on the type of issue at hand and the context defined for it.

To build a dynamic understanding of social and cultural systems within which action takes place we need basic process concepts such as:

- the primacy of perception (Merleau-Ponty 1964, Cicourel 1972, Schutz and Luckmann 1973)

- the social construction of reality (Berger and Luckmann 1966)

- the construction of social reality (Douglas 1987, Searle 1995)

5. Perception and meaning in relation to «brute» facts.

Just to be sure there is no misunderstanding: the emphasis on perception and meaningful interpretations is not meant to dispute the brute facts of the real world. It is rather to remind us of the well known «Thomas theorem» (Thomas 1928): «If men define situations as real, they are real in their consequences». Or more to the point: also in resource management people are fallible, they make mistakes, they misunderstand both the world and each other. And they have to act in the real world her and now. But people are also learners. If circumstances permit, they make the same mistake only once. In other circumstances the same mistake may be repeated time and again. Nobody notices. Perception is sometimes impaired.

Perception is inextricably tied to language and availability of meaningful concepts. Real world phenomena are grasped through available instruments and tied to concepts in meaningful ways through available language. Interpretation is the ongoing (re-)negotiation of meanings and concepts.

This process of perceiving and interpreting the world can be seen in two subtly different ways. Seen in one perspective the process constructs the concepts and meanings we use to understand the world, seen in the other perspective the process constructs the social instruments we need to manipulate the world. And these two perspectives needs supplement by a critical view on the power relations created. The ability to «construct» concepts to interpret the world, as well as to «propose» the social and cultural «agreements» inherent in social facts, is power. Even if no

intentional design of power relations is involved, the outcome will distribute power to the person/ people) being in the right position at the right time.

6. The social construction paradigm

6.1. Social construction of reality

The perception of the real physical world as well as the interactions among people need interpretation and integration into meaningful systems of thoughts, world views, or thought worlds, before they can have an impact on the activities of people. The activity of perceiving and interpreting the world is basically social and cultural, and the dynamic is captured by the phrase «social construction of reality». However, this is not the «real» reality, but the perceived reality: the situation people believe to be real. Hence, it has real consequences. And hence, it can be falsified by «brute facts». Our hypotheses are sometimes wrong. However, testing hypothesis is not always done. Our ability to disregard evidence is often astonishing. Sometimes it is part of a conscious power strategy.

6.2. Construction of social reality: «the social forest»

In the process of interpreting and evaluating the reality of the world people also create pure social realities: institutional systems (e.g. parliaments, marriages, forest services, universities, market prices, biodiversity conventions, certificates of sustainable timber production, etc.). This social reality is as real as the physical nature in terms of explaining human activities and aggregate outcomes of policies. And like natural forces this social reality may impact the forest. But unlike our beliefs about the physical nature, the social reality we construct is neither right nor wrong. Instead it is more or less useful for the purposes we want to achieve. And often enough one must conclude that the powerful groups in a society are content to support the institutions which further their own power, rather than reforming them to satisfy societal goals.

It is this social reality which is the study object of social science. The processes creating the social reality is often labelled collective action. In so far as collective action is based on shared understandings of the values and priorities of forests, forest goods, and the goals of forest policy, these shared understandings are created or constructed in a communicative process running across groups and generations. Sometimes we are reminded that this is collective action to solve second order problems. The first order problem is to discover the interdependent nature of activities in the real world and to perceive that coordinated action might benefit both the users and/ or the resource. The second order problem is to create a social reality (institutions) where coordinated action is both possible and profitable to the actors.

In the process of perceiving, that is finding out the nature and dynamic of the processes shaping the physical as well as the social world, science has come to play an increasingly important part. But also science - and particularly its practitioners - are located in a societal context. Social and cultural forces affect science as a coherent system. And internally within various subgroups in science there develop sub-cultures.

7. The sociology of knowledge in forestry

- Knowledge and decisions (Sowell, 1980, Douglas 1987)
- The certification of professional «know-how» (Freidson 1986)
- The selection of instruments (Jasanoff and Wynne 1998)

The constructivist approach also applies to activities such as forest science and professional forestry. The knowledge needed in forest policy goes through a process. Ideas are filtered and transformed into knowledge and certified as reliable in guiding decisions. Within the various forest institutions problems are recognized and defined, relevant knowledge is sought out and various instruments recommended. The constructivist perspective is most obviously useful in areas where uncertainty rules, and action is needed. In such cases the social and cultural forces outside the professional group can more easily be seen to shape the agenda, suggest solutions and infuse the possible instruments with legitimacy. But also in cases where certainty about what to do is high, the explanation for choice of action may basically be cultural. Belief in the comparative efficacy of various policy instruments is too seldom based on empirical verification.

The upshot of this is that decisions do not depend only on «the facts», but as importantly on who makes the decision, through what processes, with what incentives. under what constraints, and with what learning mechanisms. Forest policy is no exception. The institutional setting and the

procedures followed matter for the policy outcomes. Therefore the recommendations of the NFP on procedures are important. And therefore the formal institutions of a society are of prime importance for understanding a policy and its outcome. Or more to the point: it is of prime importance in the implementation of a forest policy. Without institutions tailored to the policy, outcomes may deviate significantly from those intended.

8. The social construction of institutions

- Property rights regimes (Eggertsson 1990, Ostrom 1990)
- Regulation regimes (Kahn 1970/71)
- Bureaucracies (Ostrom 1990)

Institutions consist of a rule system and an organization with a mandate to interpret and apply the rules. In democratic polities rule systems are either legislated or mandated by legislation or founded on customary practices. Organizations that are charged with the duty to implement rules founded on legislation are called (public) bureaucracies. The bureaucrats will have the authority to monitor all potential users of the rules and to initiate sanctioning of those who are not following the rules when they should. Customary rules are more often designed to be self-enforcing. It is the actual practice, which both define and monitor the rules. But also the rules are often legitimised and monitored through local, neighbourly associations or assemblies.

The rule systems consist of two types of rules: property rights and public regulations. The two rule types could be said to define two types of regimes.

8.1 Property rights regimes

Rights and duties exist in the minds of people. It consists in what people believe they can legitimately do to the physical world. The precise limits to the rights and duties are the result of negotiations among stakeholders trusting that their agreements will be enforced by the state (or its equivalent). Political processes will from time to time impose new rights and duties or alter the definition of old ones. Discrepancies in understanding the precise content of rights and duties in given situations may on the one hand cause conflict and sanctioning, but also on the other hand, learning and adjustment to the new content of the rights regime.

8.2. Regulation regimes

In situations where property rights are absent or where the societal environment is changing so rapidly that old rights become inapplicable, the state can promulgate direct regulation of activities. In time these may stabilize as (new) property rights.

Also the system of property rights will invariably generate some negative externalities. These may be addressed by imposing regulations on activities regardless of established rights and duties. As such rulings are enforced, the perceptions of owners and users, and hence the property rights, will be adjusted.

8.3. Bureaucracies

Rights and duties need guardians with power to monitor, interpret and sanction breaches. The structure of power in such organizations, and the worldviews brought to bear on the perception of activities and the interpretation of rules, is critical for the long-term sustainability of the institution.

Also the design of regulations need commitment from people with power to monitor, interpret and sanction behaviour in relevant contexts.

8.4. Customary rights and duties

Forest institutions comprise not only the formally created institutions (property rights and public regulations), but also the customary practices based on local culture and perceptions. Customary rules may add to both property rights regimes and regulation regimes. These local social and cultural environments (customary rules) co-exist with, and works together with the formal institutions in framing the activities in the forest.

The construction of forest institutions gives a solution to the second order collective action problems. The existence of these institutions comes to be so much taken for granted that people can use them to overcome at least some of the first order problems. They have been constructed by trial and error throughout history. In the various professional as well as non-professional practices there

have been established ways of perceiving and interpreting forest problems, developed a repertoire of procedures for deciding on solutions, and designed a set of feasible instruments for implementing the solutions. The forest institutions thus constructed, the social reality of forestry, is, however, in its turn shaped by impacts from availability of technology and strength of market forces.

The social reality of forestry embeds the thinking and informs the activities of the various forest users. Thus

- forest owners,
- local users of the forest
- workers in the forest,
- professional foresters,
- urban forest consumers and users, and
- representatives of forest industries

all pursue their goals, values and preferences within the constraints of both a physical and social reality. The various actors and interests groups organize their resources to

- affect the forest policy in a desired direction, and to
- optimise their returns from activities within the forest by utilizing the existing institutional environment.

The outcome from both activities is to change the forest. The impact is immediate in so far as it affects the activities in the forest. It is indirect if the changes affect the future action parameters.

The NFP recommendations present a model for the policy process which will force the social reality higher on the agenda of forest policy. Forest policy will need some ideas on how to design appropriate forest institutions.

9. Variations in the perception of forests

In the description of the process of perception it is implied that we reasonably may expect that segments such as

- owners,
- users,
- industries,
- consumers, and
- scientists

will perceive the forest differently. Differences in perception will affect their actions towards the policymakers and their interpretations of the policy. Sometimes the differences in perception are tied to cultural differences.

A local culture or sub-culture can be seen as a coherent system of knowledge, ideas and beliefs deemed relevant for the pursuit of certain goals and linked to certain practices which again are interpreted and legitimised in local discourses. This concept of culture allows for example that «the forest» is perceived differently by the various groups. The available stream of information will be weighted differently and integrated into the local discourse differently. The significant aspects of forests will not be the same for all groups.

In each grouping the perception process can be divided into first hand and second hand perceptions. The first hand perception of the forest is «framed» by institutions affecting basic requirements such as

- access rights to forested areas, and
- crowding phenomena in accessing the forest.

Second hand perceptions are acquired through

- mass media & science
- everyday discussions

The second hand perceptions are today shaped extensively by the «virtual world» created by

the rapidly shifting stream of items in the mass media (including science publications). In earlier times learning about other people's experiences through the everyday talk and discussions were the most important source of second hand observations. Today these are still a significant source for learning about other people's perceptions, but they are even more important in the interpretation and evaluation of first hand and second hand experiences (the social construction of the forest). The shape of the contact networks is crucial in understanding the dynamic of these processes and goes a long way towards delimiting the local culture.

10. The construction of the social forest

While the societal discourse constructs an image of the forest by selecting and connecting items and ideas about the forest, transforming them into goals, the ensuing efforts to reach those goals requires people to compete or cooperate. In this they start to create the social institutions which will make their goals possible. They define property rights, regulate behaviour and mandate bureaucracies. They devise systems for monitoring activities and meter out sanctions to those who misbehave. It is in this social world that forest users set out to achieve their goals and maximize their values.

11. The social construction of forests

Goals and values tied to forests exist in the minds of people. They are created - increasingly - in an interactive virtual process where media and museum forests leave an imprint on the consumer. In a democratic polity these private images of forests tend to make their way into political priorities somewhat independent of their reality standing. Through a societal discourse the socially constructed idea of a forest is implemented in the institutional priorities of the state.

Bureaucrats charged with the duty of formulating the policy may or may not share the popular conceptions of what a forest ought to look like. They may therefore understand and interpret the political signals in a more or less faithful way. But the direction of change will be given. It is also possible that conflicts in the forest policy arena might temporarily be strengthened by other rural-urban conflicts or tensions.

12. Knowledge in forest activities

In their day-today activities the forest users, both professional foresters and the ordinary workers, need to consider the relations between means and ends. They need knowledge about causes and effects in their actions and interactions with nature.

The feeling of certainty in deciding on a course of action is a crucial aspect of shaping the forest. The ordinary forest owner as well as the professional forester «know» with varying degrees of certainty how to achieve the various goals they have set or have had set for themselves. The sources of certainty and uncertainty can broadly be described as originating in

- science and/ or
- customary practice

The more certain the actor is on the «rightness» of the course of action taken, the more «natural» the result will seem. And the more consensus there is among actors and actor groups on the «rightness» of the course of action, the more «natural» the result will beseen.

Thus, as uncertainty about the link between means and ends increase, the more social and political the forest becomes. The forest leaves its «natural» state and enters the social: in need of study and interpretation. It changes from the «natural» forest to the social forest: the forest in people's minds enters the realm of the political. The nature and qualities of the forest become contested and parts of the social and political struggles about means and ends for the forest users.

13. The «production» of forests

Within the institutional environment, stocked with available knowledge, and imbued with the socially constructed ideas about forest values and forest products people perform their day-to-day activities cutting timber, pasturing cattle, and harvesting non-timber products.

Thus the real world physical forest emerge from the interaction between the forest ecosystem and the day to day activities of the people who use the forest for their various ends.

In the activities producing the physical forest, the direct and indirect impacts of the social and cultural environment will be different for the different actor groups. The urban consumers are

basically interested in the aesthetic and moral values they have come to see in the forest of their mind. Forest industries will have the economic survival as its bottom line. But as long as that is ensured they are sensitive to demands, particularly from consumers of their own products.

In Norway the project «Living Forest» was initiated to cater to the perceived increase in demand from consumers for sustainable forest products. The project resulted in new guidelines for forest owners and forest workers. Following the guidelines will result in certified timber.

14. The role of the social and cultural environment in forest policy.

Several factors contribute to shaping a forest policy. In a democratically governed market economy the following four groups of factors are important:

- politically formulated goals,
- market forces
- the «policy know-how» and bureaucratic culture of forest professionals, and
- public perception of forests and forest products.

As distinct from the political processes going into the formulation of goals, and the economic processes shaping the markets, the local culture of forest professionals and the public perception of forests and forest products can be said to belong to the social and cultural environment of forestry policy.

14.1. Public perception of forests

The public perception of forests and forest products affects the forest policy in several ways. Most directly through its impact on the values and priorities of the stakeholders in the forest sector: the forest owners and their associations, the forest workers and their associations, the NGO's with stakes in the forest, and the people partaking the direct consumption of forests and forest products. Indirectly the public perception of forests and forest products will affect the policy through its impact on politically formulated goals, the values and priorities of forest professionals, and the changes in the demand for different types and qualities of forest products. These changes will also reflect the general cultural and social change taking place in society. One example of this is a period of increased conflict in forest policy in Oslo in the early 70s. This was a period with strong discussions and conflicts about urban forestry, i.e. the forest policy for the forest surrounding Oslo (Oslomarka). New stakeholders representing the general publics' access to and use of the forest entered the policy debate. However the debate and the solutions also reflected a profound change of the society with more leisure time, (introduction of five working days a week) and a modernization of cultural life.

14.2 The culture of forest professionals

Also the bureaucratic culture of professionals involved in forest policy belongs to the social and cultural environment of forest policy. In this context bureaucratic culture is seen as a system of values and priorities, which frames the technical «know-how» and directs the attention to and interpretation of the flood of day-to-day occurrences which possibly might be relevant to the mandate of the bureaucracy.

The staffing of the institutional bureaucracies is important. The quality of the professional education is important. But besides this we must recognize that the professionals have a social and cultural background giving them an identity as citizens of the state. This implies values and priorities on par with other citizens. However, the selection of persons given professional training does not guarantee that the values and priorities of the staff is representative for the average citizen. And there is no way to avoid that the values and priorities of the staff will affect their interpretation of the rule system as well as shape their agenda of problems worthy of attention.

15. NFP, new forest policies and discussion of the «Living Forest» project

That values at the societal level have been changing is easily enough observed, and also that this influence forest policy making. In Norway Nyrud (1999) notes how the expressed policy goals of the 1932 and 1965 acts on forestry emphasis production (the acts were called «Act on forest production»). In 1976 the name of the 1965 act was changed to «Act on forestry and forest protection» and the first paragraph amended to include multiple use. Forest protection was given higher priority than before. But it took more than 10 years before the forest policy bureaucracy

started to elaborate on what this would mean in practical terms (Vevstad 1992:262). In this respect one may say the foresters were laggards.

The "Living Forest" project is not an isolated phenomena, but should be seen as part of a broadening of the stakeholder basis for Norwegian forest policy making. There has been debate on the possible inclusion of an environmental paragraph in the Norwegian Forest Law, strengthening the legal base for forest conservation, and sustainable forest management. In 1998 the government published a white paper on Norwegian Forestry and Forest Policy, which is the paper usually referred to as the Norwegian National Forest Programme, by the Ministry of Agriculture (Forest Division). After the publication of the White Paper the decision has been taken by government to come up with a new forest law by the year 2004.

The impact of changing values and priorities among citizens can also be seen in the project «Living Forest». The project was initiated in response to demand for new documentation on forest products, that wood products had to be produced by «sustainable forestry». This demand originated in new perceptions and changed values among consumers. However, there are reasons to qualify this statement. The demand came from publishing houses (paper consumers), acting on perceptions that the demands would be forthcoming from consumers (buyers of their publications), but also acting in response to campaigns and pressures from international NGOs (Greenpeace).

However, it was the forest owners and forest industry which took the initiative and funded 50% of the project. Their need for a certification system, became the main driving force for the project. Although the project was a participatory process including representatives from government, NGOs and (forest/natural) science, the forest owners and industry seem to have remained in the leading position and in control. This can be seen in the problems remaining after the project was concluded. Two years after the initial "Living Forest" project was concluded the Forest owners Association has taken the initiative to start up a second project, to define in more detail the standards for two areas: (i) old growth forest (naturskog), and (ii) key habitats (nøkkelbiotoper). Although the environmental NGOs insisted on including this work in the original "Living Forest" project, this was refused in the first project period.

There remains however two unsolved problem areas, (i) open access to data and information on forest conditions. This remains a contested area. (ii) Sustainable management guidelines for urban forest areas, and better legal basis for this.

In the preface to the textbook «Biological Diversity in Forests» (Rolstad 1996), Molteberg notes that «During the last few years research has brought us new knowledge of ecological relationships, and detailed knowledge of the individual species that have their habitats in forests. We have especially gained knowledge about *how the northern forest ecosystems function naturally, without human intervention. This gives us insight into how we can plan our management* of the forests without the risk of exterminating species of animals or plants.» (Rolstad 1996:5, emphasis added).

We are sure Molteberg did not mean this the way we now will interpret it. It could however be taken to mean

- that nature works best where there are no humans present,

- that knowledge of nature without humans is sufficient for sustainable management of nature, and

- that knowledge of humans and their institutions are irrelevant for sustainable management of nature.

We do not believe this is what Molteberg means by his statement. But we do think that the professional opinion expressed reveals a problem. The problem is not that humans are taken to be irrelevant, but that humans and their institutions are taken for granted. They are outside the professional attention of foresters. For example, looking a bit closer at Rolstad's (1996:83-105) texts where management is discussed it would seem that it is taken for granted that forest managers will behave just like the textbook advises - at least once they have read the book.

This inattention to how humans actually work, the variability of goals, the socially produced constraints, and less than perfect execution of plans, is characteristic of the professional worldview of too many science based professions.

The «Living Forest» project proposed «Standards for Sustainable Norwegian Forestry». The standards were confirmed on March 27, 1998, by the project board representing forest owners, forest industry, forest workers, environmental NGO's, consumer organizations and public authorities

(Sanness 1999). The standards have since then been used by Norske Veritas in the certification of individual companies producing timber. A certificate from Norske Veritas that the timber is produced according to the standards will bring the timber company a higher price. Already in the fall of 1998 the first certificate was awarded the company Vestviken (now Viken). On February 5, 2000, the newspaper Aftenposten reported on serious breaches of the standards, particularly the destruction of key habitats. The result was that Viken on March 14 lost its certificate. They got it back on July 1. But already on August 29 Aftenposten reports on breaches from another certified company: Nidaraa. Again the problem is destruction of key habitats.

So, why don't forest managers behave like the model forester assumed by the textbooks? The newspaper debate around the Viken case is focused on the explanation that they are all knaves, out to squeeze the last buck from the buyers. However, this is a too simplistic explanation. There can be a number of reasons. One common cause for such failures in certification is that there are imperfections in newly set up systems. Institutions and qualifications are wanting on all sides both from the certification institution (Veritas) and the direct producer who is to get his/her products certified.

In order to avoid problems like those Viken has experienced, there should have been given some thought to the construction of the social reality the employees of the company had to be working within after the certification was approved. They needed to design and internalise the new institutions, which would govern their day to day activities.

16. Conclusions

The limited ability to see management of humans as a part of the management of nature, or to see the complexities involved in the management of humans, will time and again return to forestry and forests as undesired outcomes of policy changes.

If forest policy is moving in the direction outlined by the NFP, the need for sensitivity to the social and cultural environment of the policy will become more explicit. One will need to understand the social and cultural dynamic of each state or province to see how differences in the social and cultural environment affect the links between target measures, legitimate means, and outcomes. It is not unreasonable to expect that differences in the social and cultural context of a forest policy will require different procedures and targets to achieve the common goals set by NFP.

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