

SUSTAINABLE FOREST MANAGEMENT -
ON THE MEANINGS AND FUNCTIONS OF A CENTRAL TERM IN FORESTRY

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INTRODUCTION

Sustainable Forest Management (SFM) is more and more frequently viewed as an ideal in managing forests worldwide. Numerous declarations have been recently published on national as well as international levels in which SFM is claimed to be the main objective of all future efforts in forestry. In spite of the frequent use of the term, many questions regarding its meanings and functions and its implementation in practical forestry still remain unanswered. Beside this lack of comprehension, the long tradition of the concept of SFM at least in Central Europe for more than 250 years has resulted in a huge variety of far-reaching interpretations and myths about SFM. Some authors identify more than 14 different categories of definitions of SFM (Peters 1984). In order to avoid the evolution of a meaningless buzzword it therefore seems necessary to analyse the advantages and limitations of SFM on the level of practical forestry.

MEANINGS OF SUSTAINABLE FOREST MANAGEMENT

What does SFM mean? There are numerous answers to this question, many of them contradictory. In order to understand the concept of SFM, it seems preferable to analyse the reasons that lead to these different interpretations in forestry science as well as in practical forestry instead of merely comparing them, as is usually done.

First of all, it seems reasonable to assume that different interests of actors in forestry are the reason for the bewildering variety of different interpretations. Indeed, signs may be found that back up that thesis. For example, the results of a nationwide mail survey of over 2.000 foresters in Germany on

the meaning of SFM revealed that the different interpretations given by private, community and state foresters can be put down to different interests due to different ownership arrangements (Schanz 1994). Furthermore, the viewpoints of different organizations and institutions in the international arena on setting indicators and criteria can easily be interpreted as the expression of different interests (Egestad 1995). On the other hand, different interests alone cannot explain why interpretations vary among those who share almost identical interests, e.g. in the scientific community or within the same management institution.

Another assumption could be that different interpretations of SFM are not always based on facts and can thus be rejected when their scientific basis is investigated more closely. But it turns out that even the most contradictory views can be based on empirical results and therefore do contain at least part of the truth. There is no way to decide, for instance, whether free market forces should be controlled or kept free of any control in order to implement SFM best. Both lines of argument are based upon experience and cannot be rejected, so that one's position obviously depends on one's perception and convictions of reality. It must therefore be concluded that it is not just different interests or facts, but conflicting views of how reality works that result in different interpretations of SFM.

As the interpretations are susceptible to different views of reality, SFM runs the risk of being irrelevant as a common objective in forestry, because there are as many meanings imaginable as actors in forestry exist. Discussions on SFM are therefore very prone to becoming stuck in a tangle of ideologies and emotions. It is obvious that if SFM is to be implemented, the idea of finding an objective rationality must be jettisoned so that ways of dealing with the huge variety of contradictory certainties may be developed. This is where the 'Cultural Theory' propounded by Thompson et al. (1990) comes into play.

Cultural Theory's points of departure are the grid-group typology proposed by sociologist Douglas and studies about the intervention of managing institutions in ecosystems, where the diversity of institutional response within exactly the same sort of situation can be accounted for by introducing four myths of nature into the analysis. Based on the assumption that there is a reciprocal, interacting and mutually reinforcing congruence between social relations and cultural biases 'Cultural Theory' posits four basic political cultures (Thompson et al. 1990, Schwarz and Thompson 1990). Basic determinants of the four political cultures are 1) the preferred way of organizing, 2) the preferred certainty (myth of nature), and 3) the preferred rationality (Fig. 1).

| | Hierarchical | Egalitarian | Individualistic | Fatalistic |
|------------------------------------|--------------------------|---------------------------|------------------------|-------------------|
| Preferred way of organizing | Nested bounded group | Egalitarian bounded group | Ego-focused network | Margin |
| Certainty (myth of nature) | Nature perverse/tolerant | Nature ephemeral | Nature benign | Nature capricious |
| Rationality | Procedural | Critical | Substantive | Fatalistic |

Figure 1 The basic determinants of the four political cultures (Schwarz and Thompson 1990: 61)

The important thing is that political culture shapes the perception and convictions in all fields of an individual's reality: "Each of the four political cultures is a consistent package of biases. Our ideas of fairness, our views of resources, our awareness of needs, our engineering aesthetics, our ways of learning, our perception of risk, our definition of pollution, our strategies for reconciling our needs and resources, and many, many more factors that make for conflicting assessments of what is possible and of what is desirable vary dramatically across the political cultures. It is these patterns of bias, endlessly affirmed, endlessly acted upon, and endlessly pitted one against the others, that actually make policy and technology possible." (Schwarz and Thompson 1990: 61/62).

Therefore, it seems reasonable to assume that these four different political cultures are the underlying reason for the different interpretations of SFM in forestry as well. Four basic definitions of SFM based upon different political cultures can be derived taking social, economic and ecological factors of SFM into account (Fig. 2). And indeed, it can be shown that all different interpretations can be traced back to one of these four basic definitions of SFM regardless of time and space (Schanz 1996). Because of their social determination these four basic definitions of SFM are always simultaneously present in society. All of them are based on facts and experiences and are therefore true, so that none of these interpretations can be disproved. The question of which definition will predominate in a certain region and during a certain time period is therefore one of political acceptance and power, not of objective rationality.

| | Hierarchical Polit. Culture | Egalitarian Polit. Culture | Individualistic Polit. Culture | Fatalistic Polit. Culture |
|--|--|---|---|--------------------------------------|
| SUSTAINABLE FOREST MANAGEMENT means the structuring of the relationship between man and forests through | | | | |
| Social Dimension | regulated action | conscious and responsible action | free action | passive reaction |
| of individuals and social groups which is | | | | |
| Institutional/ Economic Dimension | guided and controlled by institutions | coordinated by institutions | facilitated/guaranteed by institutions | determined by erratic events |
| with the aim to satisfy the needs and demands of society by | | | | |
| Ecological Dimension | using forest ecosystems within certain limits | using being embedded in forest nature | using forests | reacting |
| for today and through | | | | |
| Time (Uncertainty) | anticipation of future events and corresponding precaution | preservation of as many options as possible | preservation of appropriate options | luck and accident |
| also for the future. The structuring of the relationship is thereby | | | | |
| Time (Horizon) | short- as well as long-term | predominantly long-term | predominantly short-term | present |
| orientated and takes into account | | | | |
| Space | larger spatial | smaller spatial | appropriate spatial | personal spatial |
| dimensions | | | | |

Figure 2 The four primary definitions of 'Sustainable Forest Management' (Schanz 1996: 87)

Returning to the original question, results indicate that there cannot be a single or common definition of SFM. At the same time, it is clear that one way of dealing with the huge variety of different interpretations is to take these four basic meanings of SFM into account and to integrate them as much as possible in any efforts to implement SFM in order to stimulate productive discussions.

FUNCTIONS OF SUSTAINABLE FOREST MANAGEMENT

One of the main aims of all effort towards SFM is to establish certain standards of forest management. SFM thereby serves as the vehicle with which the underlying norms and values of these standards can be expressed. SFM is thus a concept of conflict and not of harmony, as it is often misinterpreted. By supporting a certain understanding of SFM, personal preferences and value judgments are expressed, but nothing has been harmonized, no value conflicts have been solved. The only thing that happens is that certain values are discussed so that social bargaining processes may begin. It is very obvious that the success of any effort to initiate SFM is therefore directly dependent on the possibility of finding a consensus on or advocating a certain understanding in these social bargaining processes, so that SFM may primarily be regarded as a social challenge.

There is widespread agreement on the fact that most viable solutions in social bargaining processes are achieved if as many different views and standpoints as possible are taken into consideration. This is what participative planning instruments are renowned for and why they have become more and more important in natural resource management issues over the last decades. One of the disadvantages of participatory concepts is that only the active parts of society are addressed, whereas many passive but nevertheless relevant viewpoints are not included. As discovered, there are only four basic understandings of SFM. These are always present simultaneously in society, but their degrees of importance fluctuate, so that a so called anticipative approach becomes necessary. By anticipating changes in dominance in various situations and under specific conditions, it seems possible to assess foreseeable conflicts in implementing SFM. In the following, concepts of SFM are developed that integrate most viewpoints and which are applicable under specific circumstances, so that real conflicts or unproductive discussions may be avoided.

Furthermore, the anticipative approach can be made use of by managing institutions to improve their strategic positions in society, as in discussions with environmentalists for example (Schanz 1996b). The analysis of forestry conflicts in several countries revealed that in most cases, forest management institutions were not aware of changes in their social surroundings (Hellström and Reunala 1995). Bound to an obsolete political culture (in Central Europe, the hierarchical political culture predominates in forestry), foresters have not realised that other political cultures now predominate in society (particularly to the egalitarian political culture as it is expressed in the aims of the main environmentalist groups now-

days). Different political cultures underlying the views of the main actors in forestry make interactive discussion very difficult because of the different "languages" used. If the basic political culture of a critic can be identified, it may be possible to react more sensitively towards critics or even to avoid them, because the defender can speak the same "language" as the attacker.

The most important conclusion for all discussions on SFM is that there is no right or wrong standard of SFM, only more or less appropriate ones. The application of 'Cultural Theory' to the question of implementing SFM makes clear, that it is impossible to concur on ultimate ends. Convergence on standards of SFM must be achieved through overlap, complementarity and integration. Any setting of standards is thus only temporary; the achievement of SFM cannot be sustained. Efforts to implement SFM should therefore not focus on finding criteria and indicators through social processes, but on the processes themselves. Rather than being process-orientated, negotiations on standards are still too often result-orientated. Furthermore, in the discussions on SFM thus far no institutional arrangements have been set up that are able to deal with conflicting views of reality.

Yet even if no consensus on criteria and indicators can be achieved, SFM is not without importance for forestry. Research results indicate that the main functions of SFM may be found in the emotional and symbolic aspects of the term (Schanz 1994): its ability to provide a common spirit for the forestry profession, to help provide a guideline for foresters in coping with uncertainty and ignorance, and, of course, its mediating function which serves to bridge the gap between different interests by providing a uniting term.

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SUMMARY

Sustainable Forest Management (SFM) is more and more frequently viewed as an ideal in managing forests worldwide. In spite of the frequent use of the term, there is no consensus on its meanings or how it may be implemented.

In order to understand the meaning of SFM, the reasons that lead to the huge variety of different interpretations are analyzed. It is shown that it is not only conflicting interests, but more often different views of reality that lead to different interpretations of Sustainable Forest Management. 'Cultural Theory' is introduced as one method of dealing with different views of reality. By utilising it the huge variety of interpretations are reduced to only four basic definitions of SFM.

Based on on these four basic definitions the functions of SFM are discussed. An anticipative approach is introduced as supplemental to the participative approach in order to further implementations of SFM.

Key Words:

Sustainable Forest Management, Social Processes, Cultural Theory