

***Forest Policy in Austria:
Policy Making by the Sector
for the Sector***

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1 Austria and its forests

1.1 Forests: Part of nature

1.1.1 Ecological basis and genesis of forests

Austria is situated in the temperate climatic zone and a great share of its land consists of *mountains*. Austrian landscapes range from plains at approx. 100 metres above sea-level to the Alps with peaks at almost 4,000 m. The influence of the mountainous topography produces a diversity of climatic conditions and different forms of land use. The vegetation is determined by latitude (the southern part is warm, north is cold), altitude (higher is colder), distance to the Atlantic ocean (west is oceanic, east is continental), and the alpine elevation which influences precipitation patterns (central Alps – arid, peripheral – humid)¹. Another factor determining natural vegetation and possible forms of land use is the geological ground: A mixture of various crystalline and sedimentary rocks provides different possibilities for cultivation. In general, there are well-developed soils which are resistant to erosion, but there are also sites which are prone to erosive processes (steep slopes at high altitudes, lime-stone sites – karst, loess – wind erosion). In order to prevent erosion, forests on such erodible sites (site protective forests), have to be managed adequately as is provided for by the forest law.

During the glacial period (ice-age) with its last peak about 18,000 years ago, the Alpine region was completely covered with glaciers of up to 1,700 m strength. Forests started to grow again about 13,000 years ago from retreat areas in south-east Europe. In the stone-age the area was almost completely covered with forests. Only the high peaks of the Alps and bogs were spared. From the stone-age on (Neolithic: 4,000 years B.C.) settlers started to clear woodlands for agricultural use. Arable land was cleared while the forest remained untouched on steep and stony sites. In the Middle-Ages, settlement started gradually in alpine areas as well. The growing population cleared forests for farming and for pastures. The natural tree-line in the Alps was lowered due to clearing forests for summer pastures. Nowadays, the tree-line is often at 1,600 m, whereas it could potentially reach 1,800 or 2,000 m.

At present, about 47 per cent of Austria's territory is covered with forests.² Most of the forests are located in mountainous regions. In the plains, forests often cover less than 20 per cent of the land.

1.1.2 Dominant types of forests

Austrian forests are dominated by coniferous tree species (accounting for 69.2 per cent of the forests). Higher percentages of deciduous trees (in total 22.3 per cent) are found only in lower regions. The most important tree species in terms of both surface and economic importance is spruce (*Picea abies*). It grows on 55.7 per cent of wooded land. Other major tree species are: beech (*Fagus silvatica* – 9.2%), white pine (*Pinus silvestris* – 5.4%), larch (*Larix decidua* – 4.4%), fir (*Abies alba* – 2.3%) and oak (*Quercus sp.* – 2.0%).³

Whereas in alpine forests coniferous tree species dominate naturally, the original share of broad-leaved trees was much higher in lower regions. For commercial reasons, forestry has led to alterations in the composition of tree species, which has shifted to more coniferous

¹ BÄTZING (1991: 11ff)

² Austrian Forest Inventory 1992-96 – BMLF (1998)

³ Austrian Forest Inventory 1992-96 – BMLF (1998)

trees: Today, the share of broad-leaved and mixed stands is 35 per cent whereas its natural proportion would be approximately 71 per cent. Since the seventies, however, the share of broad-leaved and mixed stands has been increasing again.⁴

1.1.3 Nature protection values

Most of Austrian forests are managed for timber production. According to a recent survey on the degree of modification of Austrian forests by human intervention (*hemeroby*⁵), the majority of the forests can be regarded as “moderately altered” (approx. 40%). 27% are “altered”, 7% are artificial forests. Plantations for short-rotation production play only a minor role. 22% of Austrian forests are “semi-natural”, and 3% are without impact.⁶ A good part of the forests still close to nature are protective forests with hardly any economic value, which are located near the alpine tree-line.⁷

In order to comply with both the Helsinki Resolution H2 on the conservation of biodiversity of European forests and the Alpine Convention, the Austrian Ministry of Agriculture and Forestry has launched a programme aiming at the development of a network of *natural forest reserves*. The objective is to cover all potential natural forest communities in Austria. 159 natural forest reserves exist to date, comprising a forest area of about 6,000 hectares. According to the nature protection laws of the provinces other protected areas are *nature reserves* (most reserves are wet or dry biotopes only partly containing forest stands) and *national parks* (today there are 5 national parks, partly in alpine areas, partly in lower wetlands). These areas comprise estimated 45,000 hectares of forests, however, all interventions are strictly prohibited only in smaller proportions of them.⁸

1.2 Forests: Part of the economy

1.2.1 Use of Austrian forests

Forests, covering about 47 per cent of Austria’s territory, are an important element of the country’s landscape, economy and culture. Over the past years the areas covered by forests have *increased* by approximately 7,700 hectares per year on an average. A total of 972 million cubic metres of wood are found in the Austrian forests, the annual increment amounts to 31.4 million cubic metres. Only 19.8 million cubic metres are felled each year.

86 per cent of Austria’s forests can be classified as commercial forests (with 76 per cent high forest, 2.5 per cent coppice forest, and 7.5 per cent protective forest with yield), 14 per cent are forests without yield.⁹

Forests are not only used for timber production, but also for hunting. Some areas, especially in connection with alpine pastures, are still used for grazing. Another mainly non-commercial use of forests is recreation and picking fruits like berries and mushrooms, which is allowed for everybody in all forests according to the forest law.

⁴ BMLF (1996); KATZMANN ET AL. (1990)

⁵ MaB-Project on the hemeroby of Austrian forest ecosystems (GRABHERR ET AL. 1995; KOCH/KIRCHMAIR 1997).

⁶ KOCH ET AL. (1997)

⁷ FRANK/KOCH (1998)

⁸ FRANK (1995); FRANK/KOCH (1998)

⁹ BMLF (1995a and 1997a)

1.2.2 Structure of ownership and management goals

The Austrian forestry sector is characterised by a very *high fragmentation* of forest property: 3.88 million hectares of forest land are managed by about 214,000 forest owners. 99 per cent of the silviculturists manage enterprises of less than 200 hectares, 65 per cent of the forest enterprises have a size of less than 5 hectares. About one third of the entire forest area is looked after by major forest enterprises.

Approximately 80 per cent of Austria's forests are privately owned (with 10 per cent in the hands of local forest co-operatives). One fifth of the forests are owned by public authorities: 16 per cent are national forests in the hands of the Federal Austrian Forests (*Österreichische Bundesforste AG*), 4 per cent are other national, provincial or municipal forests. In comparison with other countries, Austria has an exceptionally high share of forests in private hands; within the ECE region only Norway and Portugal have a higher portion of private forests.

It goes without saying that the level of private forest land ownership shows repercussions in national forest policy and politics: Timber production plays a predominant role in the value system of forest owners and foresters.¹⁰ Professional thinking is dominated by a market-oriented model which implies harsh criticism of any restrictions to the forest land owner's freedom of choice. At the same time, this concept of liberalism does not prevent foresters and forest land owners from emphatically demanding public support in form of tax relieves and subsidies. So liberalism in forestry is a kind of *pseudo-liberalism*.¹¹

Management goals vary in different categories of ownership. *Larger forest properties* are managed primarily for timber production. They have well-trained personnel, detailed management plans and special harvesting equipment. Except for hunting licenses, the marketing of other forest goods or services is not well developed. It is important to notice that the forest owners' goals vary extensively and cannot primarily be found in management goals of conventional enterprises like "cash-flow", "return-on-investment", etc. Returns in forestry are very small (usually 1 to 3%). Forest owners' goals are rather found in long-term, low-risk investment, as well as in hobby and status aspects (property, hunting, etc.). For *farmers*, market-related considerations in forest management are of minor importance. The market value of their forest has to be seen in connection with the farm and in a subsistence economy. They use wood for fuel and timber for construction, and grazing is still potentially important in certain regions. It is typical of farmers to regard the forest as a reserve for unexpected or extraordinary expenses. *Public ownership* in Austria is characterised by the market-oriented goal of wood production. This feature distinguishes Austria from neighbouring countries like e.g. Germany or Switzerland, where public forest administrations are as much committed to the provision of forest services as to the production of wood. This difference can be explained by the fact that public forests in Austria are managed by separate organisational bodies, while in Germany, for instance, only one organisation is in charge of forest management and the administration of the forest law on private property. Because of the different organisational structures in these countries the institutions concerned seek legitimacy by pursuing different goals.¹²

¹⁰ GLÜCK (1995a)

¹¹ PLESCHBERGER (1989: 514f.)

¹² GLÜCK (1988)

1.2.3 Relative strength of the forestry sector within the Austrian economy

Although Austria is rather rich in forests, the forestry sector plays only a minor role within the economy of the country. In 1996, the share of the forest industry sector amounted to 3.8 per cent of Austria's gross domestic product (GDP) with only 0.2 per cent attributable to forestry and 3.6 per cent to the processing of timber.

The picture changes a bit when you look at the forest industry sector from a macro-level perspective. The *forest and forest industry cluster* (e. g. sawnwood, paper and paper processing, particle board, furniture manufacture, pulp and paper machinery) is one of the most important clusters of the Austrian national economy. In *foreign trade* as well, the forest industry sector is of considerable importance. It is the second most important positive contributor to the Austrian balance of trade, following tourism (accounting for 5 per cent of total imports and 10 per cent of total exports).¹³

Today, forestry loses significance as a primary production industry although the demand for timber is stable. Revenues from forestry are decreasing. At the same time other demands of society on the forests gain importance: provision of drinking water, recreation, nature conservation, protective functions etc. Up to now, most of these functions have been seen as public goods and external economies of forestry, but many of them can be regarded as private goods for which a market price could be achieved. A growing demand for these goods could result in either legal measures or market forces ensuring their availability.¹⁴

1.3 Forests: Part of society

1.3.1 Cultural aspects of forests in Austria

Forests play a prominent role in the culture of Central European countries. Trees and forests are found in myths and fairy-tales, in poems and paintings.¹⁵ In ancient times, however, when settlers put hard work into clearing arable land, the forest was seen as an evil to man and civilisation. Modern society has a rather romantic view of the forest. The forest is the place where unspoilt nature can be found even in a highly organised and technicised world. Forests are often used as metaphors for the destiny of mankind. People in Austria as well as in Germany are said to have a very strong relation to the forest. This can help to explain the steady concern about the health of the forest. Forest decline by air-pollution is seen as a first sign for the self-destruction of modern society which exploits natural resources and pollutes the environment. "Save the forest" is an important motive for people to take action in environmental protection.¹⁶

1.3.2 Role of forests for the community and for land owners

Besides economic values forests provide more services and functions for the community: Forests protect the soil against erosion, regulate the climate and the water household, and in alpine regions, which are of particular importance in Austria, they protect against natural hazards like torrents, landslides, mudflows, rock-fall and avalanches. Forest management is a rather extensive form of land use for the major part, which means that forest areas are very close to nature. Forests comprise ecologically unspoilt areas - this fact makes them important

¹³ SCHWARZBAUER (1994)

¹⁴ GLÜCK (1995b); GLÜCK/WEISS (1996)

¹⁵ RINGEL (1987)

¹⁶ SIEFERLE (1997)

for nature protection goals. Forests provide landscape amenities and space where people can experience nature or can seek refuge. They are highly appreciated as recreation areas.¹⁷

Opinion polls have shown that among the different interests of society concerning forests or their management, the *protective aspects*, i.e. the protection of the population from negative natural effects like erosion, floods or landslides and the preservation of the diversity of animal and plant species, are clearly favoured over the utilisation as a resource.¹⁸ Subsequently, social demands on forests and forestry are steadily increasing.

Forest owners gain income from managing forests for wood production and hunting. Forest management provides employment opportunities and income in rural areas. For land owners, the property has moreover identity and image values. Farm forests have many functions for the farmers: job, income, property value, capital reserve, fuel and timber, grazing, hunting, etc.¹⁹

1.3.3 Relative strength of the forestry sector within the Austrian political system

Parallel to its peripheral role within the Austrian economy, the forestry sector takes up a rather negligible position within the Austrian political system as well. Its ability to capture *resources* and its capacity to draw the *attention of politicians and decision-makers* are rather modest: Forestry receives about 260 million ATS of federal subsidies; this corresponds to 2.3 per cent of federal subsidies transferred to the whole agrarian sector. Within the responsible Federal Ministry, forestry plays a minor role. As to its professional priorities, the Ministry of Agriculture and Forestry especially emphasises agricultural questions whereas forestry is seen as relatively less important. As can be expected under these circumstances, forest-related interests have poor chances of standing up against lobbies backed up by powerful economic interest groups.

2 History of forest management policy: “Traditional” farm-related forest uses vs. “modern” industry-oriented forest uses

In the early Middle-Ages, alpine forests were managed as a commons and regulated by the *local communities*.²⁰ The settlers developed land for farming. Natural forests were converted into farmland where suitable or were managed in an agroforestry way for the grazing of pig, sheep, goat or cattle, and for the production of fuel wood and timber. Distinct management systems were developed according to the varying local ecological preconditions and the farmers’ needs. In general, these multiple uses were sustainable forms of land-management.²¹ Locally, though, the extraction of biomass from forests, e.g. leaf and needle litter collection, led to a degradation of the sites. Certain forest areas with a particularly high importance for the community benefited from a special protected status: the forest ban (*Waldbann*). Such “ban forests” (*Bannwälder*) were e.g. forests on steep slopes which protected settlements against natural hazards like avalanches or rock-fall.²²

When territorial sovereignty evolved, the *sovereign* claimed all forests his own and enfeoffed aristocrats with the land. The sovereign’s interests were less the supply of the common people

¹⁷ KOCH/RASMUSSEN (1998)

¹⁸ RAMETSTEINER (1998)

¹⁹ TERRASSON (1998)

²⁰ WOBST (1971); SIEFERLE (1982),

²¹ SIEFERLE (1982); KATZMANN ET AL. (1990: 20f); BÄTZING (1991: 25ff)

²² WEISS/SCHMIDERER (1998)

with fuel wood and food but hunting grounds and supporting the salt and ore mines.²³ According to the mercantilist doctrine the nation's welfare could only be increased by foreign trade and manufacturing. Furthermore, industries like saltworks and mines and the related trades constituted the most important source of income for the sovereign. The sovereign's policy was to gain total control of the forest resources. At first, forests were crucial for providing fuel wood for the salt and mining industries and later on for providing timber. In the early ages of manufacturing development all forest land in reach of the works was utilised. Trees were felled in huge clear-cuts and transported on rivers for distances of hundreds of kilometres. The formerly unlimited timber resources became a scarce and therefore valuable good. The communities had to defend their rights of use and the preservation of protective forests against the sovereign's interests. The sovereigns demanded all rights of forest use and reserved the right of using the wood as fuel for mines. Trade and export of wood were restricted.²⁴ With the argument of "timber famine" (*Holznot*), the sovereigns enacted forest laws and employed forest personnel to preserve the forests from overuse. In fact, the personnel also had to enforce industrial demands against the demands of the people.²⁵ The foresters developed sustainable forest management systems to ensure the efficient production of high-quality timber. It was a one-purpose management system, which was not compatible with agricultural forest uses and which is basically still today's forest management model. The implementation of modern industry-oriented forest management systems was possible by administrative power, the central state's strong interest in economic development, and the discovery of mineral coal as a substitute for fuel wood.

After the revolution of 1848, the aristocrats' privileges were abolished, and the *private farm and forest ownership* with full civil and property rights was established. Hunting also became a right connected with land ownership. The state's role in forest management was restricted to the administration of forest law (constitutional state). The liberal forest act of 1852 aimed at the preservation of all forest land and obliged all forest owners to manage their forests according to the principles of "sustainable forestry", which means sustained yield in timber. Today's foresters are still committed to this industry-oriented forestry model. The value system of today's foresters is still based on the prominent role of timber production.²⁶ Other forest uses like grazing (by foresters) are called "by-uses". The Forest Act states four basic »forest functions«: timber production, protection against natural hazards, welfare in terms of positive impacts on the environment, and recreation. Following from the strong position of private forest owners in Austria, the producing function of the forest is still regarded as the most important one, because its benefit is for the owner.

²³ General literature on forest history from different perspectives: RUBNER (1967); SIEFERLE (1982); RADKAU (1986); ALLMANN (1989)

²⁴ For the Austrian case see WÖPFNER (1906); OBERRAUCH (1952); JOHANN (1968); KOLLER (1975); HAFNER (1979); KILLIAN (1994); overview in: DIV. (1994). History of ban forests in Austria: WEISS/SCHMIDERER (1998)

²⁵ SIEFERLE (1982); RADKAU (1986); SCHÄFER (1991); SELTER (1993)

²⁶ GLÜCK (1995a)

3 Legal and policy framework for forest and forest-related activities in Austria

3.1 Legal framework: Constitutional and administrative setting

Austria is a federal state which consists of nine provinces (*Länder*). Legislative powers are divided between the federal state and the provinces, with the distribution of power heavily tilted towards the federal parliament. According to the Austrian constitution (Article 10), forestry is a matter of federal legislation and administration.²⁷ The federal government is also in charge of emission protection, air quality (except for emissions from heating systems), permissions for industrial installations, steam boilers and engines, and traffic.

At the same time, a number of areas directly or indirectly relating to forests or forestry are under the responsibility of the *Länder*. The most important issues are regional planning, airborne emissions from heating systems, agriculture, nature conservation, and hunting. The coexistence of national law and provincial law and particularly their application to the same object – in this case the same piece of forest land – inevitably leads to problems of co-ordination and conflict.

At the federal and provincial levels, environmental and forest-related powers are further subdivided by administrative units. For example, there is a federal environment ministry, but environmental questions relating to energy policy, mining, tourism, or road construction (and a few other issues) are dealt with by the Ministry of Economic Affairs.²⁸

With Austria's accession to the *European Union* in 1995, a third level with legislative powers was established. Up to now, there is no common EU forest policy, comparable to the common agricultural policy (CAP). A European forest strategy is still under negotiation, with intermediate results indicating that the basis for a common approach will not be too extensive. At the same time, there is a number of EU regulations with direct or indirect effects on forests and the forestry sector (including agro-environmental measures under Council Regulation 2078/92, forestry measures in agriculture under Regulation 2080/92, the Habitats Directive 92/43/EEC, the Birds Directive 79/409/EEC and others).

3.2 Policy network: Main interest groups

Austrian forest and environmental policies are influenced by a great number of different social actors. The »core« network of Austrian forest and environmental politics is depicted in Figure 1, with the columns indicating three distinguishable (but sometimes also overlapping) »discourse-coalitions«, i. e. groups of actors sharing values and attitudes and pursuing common goals. The following discussion will focus on the social relevance of the major actors in the forest and environmental policy arena. It will examine the formal role which the constitution and ordinary laws provide for them, as well as their actual role in the political process. In this context, only the most important social actors can be considered.

²⁷ »Forestry« (*Forstwesen*) in this context is meant to comprise all activities in connection with the tending, maintenance and protection of forest stands including the importing and exporting of roundwood, forestry education as well as torrent and avalanche control.

²⁸ LAUBER (1997: 88)

	Environmental protection	Forestry	Trade & Industry
<i>authority</i>	Ministry of Environment, Youth and Family Affairs	Ministry of Agriculture and Forestry	Ministry of Economic Affairs
<i>statutory interest groups</i>		Chambers of Agriculture	Chambers of Commerce
<i>voluntary interest groups</i>	environmental groups	forest owners' associations	Association of Austrian Industrialists etc.
<i>“grassroots”</i>	general public	forest land owners	business enterprises

Figure 1: Austrian forest and environmental policy network

3.2.1 Forest authority

There are three levels of forest administration in Austria. At *state* level the Ministry of Agriculture and Forestry has jurisdiction over forest-related matters. In the *provinces* the governor (*Landeshauptmann*) is the competent forest authority. The governor acts as general authority deciding not only on forest matters but also on other subjects like hunting, nature protection or trade and industry. A separate forestry department (*Landesforstdirektion*) assists the provincial governor in forest-professional questions. Formally this department has only consulting functions. The same applies at local level: The official in charge is the district commissioner (*Bezirkshauptmann*) who is assisted by a forestry department (*Bezirksforstinspektion*). The official formally in charge, the governor or the district commissioner, follows a concept of »political rationality« which means that he or she has to represent social interests according to their political weight. So this two-tier system, with its separation between political decision-maker and professional department, often leads to disadvantaged forestry interests that cannot make themselves heard when competing with other, more powerful social actors.

One of the major duties of the forest authority is the *implementation of the Forest Act*. By performing its statutory tasks²⁹, the forest authority gets in touch with its clientele, namely foresters and forest land owners. Due to this tight connection, the self-image of the civil servants changes from objective supervisor of forest management to intercessor and advocate of their clientele. Instead of trying to secure legal compliance on the part of the forest enterprises by exerting pressure on them, the forest authority tries to motivate the target group to act voluntarily in a lawful manner. Civil servants are on common ground with foresters and

²⁹ The authority has to fulfil the following duties (§ 171 Forest Act): supervision of the forest, elaboration of expert's opinions; extension service; assistance in the allocation of subsidies; survey of annual fellings.

forest owners with a system of shared values and attitudes serving to harmonise conflicting interests.

In addition to the implementation of the Forest Act, the forest authority, mainly the Federal Ministry, exerts a strong influence on the *making* of forest-related laws as well.

3.2.2 Environmental authority and Ministry of Economic Affairs

The »environment« was granted its »own« administration and jurisdiction rather late. When the Federal Ministry of Public Health and Environmental Protection was established in 1972, almost all areas of responsibility had already been divided up between other more powerful ministries. So the establishment of this ministry was mostly an act of symbolic politics: for almost 15 years, with a small staff of a dozen people involved in environmental affairs, the ministry remained virtually without powers and was rebuffed when it requested to participate in the preparation of environmentally relevant legislation carried out by other ministries. A comprehensive Environmental Protection Act which had been in preparation by the environment ministry over several years, was never completed.³⁰

In 1988, the environment ministry managed to get hold of real powers and resources for the first time. With a staff of about 300, the Ministry of Environment, Youth and Family Affairs (hereinafter shortly called »environment ministry«) now works on general environmental policy, air quality, waste, chemicals, the allocation of environmental funds to the provinces and part of environmental inspection. In many cases the environment ministry has to share its power with other federal agencies, usually the *Ministry of Economic Affairs*, which are stronger in most cases because of their political role. However, the position of the environment ministry has been strengthened thanks to EU membership, because it now co-ordinates more policy areas at the European level than at home.³¹

3.2.3 Forestry interest groups

Austria – a »Kammerstaat«?

In Austria, the representation of group interests is transferred from the state to self-governing bodies called »chambers« (*Kammern*). Chambers are statutory interest organisations, established by public law and with obligatory membership. As central pillars of the so-called »social partnership« (*Sozialpartnerschaft*), chambers are an omnipresent and powerful political player typical of the Austrian political system.

The Austrian social partnership is mainly rooted in the co-operation of five large economic interest groups, which in general represent all or all relevant individuals in their specific economic sector: the Chambers of Commerce (*Kammer der gewerblichen Wirtschaft*), the Chambers of Labour (*Arbeiterkammer*), the Chambers of Agriculture (*Landwirtschaftskammer*), as well as the Austrian Trade Union Federation (*Österreichischer Gewerkschaftsbund*) and the Association of Austrian Industrialists (*Industriellenvereinigung*).

Statutory interest groups

Agricultural and forestry interests are looked after by the Chambers of Agriculture (*Landwirtschaftskammern*). Statutorily the chambers engage in two different fields: (1) the representation of group interests, and (2) the consulting of foresters and forest land owners as well as the appropriation of subsidies. With that, the character of the chambers is to some

³⁰ LAUBER (1997: 82 and 88f.)

³¹ LAUBER (1997: 89)

extent ambivalent:³² on the one hand, they act as powerful and effective lobbyists, and on the other hand, they behave as semi-public institutions which carry out state functions.

At the federal level, the Presidents' Conference of Chambers of Agriculture (*Präsidentenkonferenz der Landwirtschaftskammern*) represents agrarian and forestry interests vis-à-vis other social interests within the social partnership.³³ In Austria's forest politics, the Presidents' Conference is a rather influential institution: As constituent part of the social partnership, the Chambers of Agriculture or rather the Presidents' Conference are granted institutionalised influence on policy formulation. Already in the preparatory stage, they get informed on draft legislation and are allowed to comment on it. This applies to laws as well as ordinances. Usually the comments are incorporated into the final draft before the bill is sent to parliament.³⁴ In addition, chambers often get the opportunity to send »their« experts into parliamentary subcommittees where draft bills are formulated and finally voted on.

Voluntary interest groups

In addition to statutory interest organisations, there is a network of interest groups based on voluntary membership. The most important voluntary interest groups in the Austrian forestry sector are the Austrian Federation of Forest Owners' Associations (*Hauptverband der Land- und Forstwirtschaftsbetriebe Österreichs*) and the Austrian Forest Association (*Österreichischer Forstverein*).

As a voluntary interest organisation the *Austrian Federation of Forest Owners' Associations* looks after the interests of private farm and forest land owners. Due to a high degree of organisation, approximately 80 per cent of larger estates actually join the association, the Federation is a powerful player in Austrian forest politics.³⁵ The Federation mainly tries to safeguard the rights of private ownership and to repulse any restrictions on the right of free disposal of private forest property.

The second powerful voluntary interest organisation is the *Austrian Forest Association*. The Association is open to forest land owners as well as forest professionals working in private enterprises, chambers and the bureaucracy. Roughly two thirds of the potential members belong to the Association.³⁶ For most forest professionals membership is taken for granted; it results from tradition. Public relations have always been an important task of the Forest Association – inwards, to find the “lowest common denominator” and outwards, to represent the “common position of forestry”. By using the instrument of »political language« (*Sprachregelung*) the different groups combined in the Association are oriented towards common forest-professional thinking.³⁷

3.2.4 Environmental interest groups³⁸

In Austria, the first organisations oriented at environmental questions were founded in the second half of the nineteenth century. Numerous »modern« environmental organisations were set up between the late 1970s and the late 1980s.

³² GERLICH (1992)

³³ GERLICH (1992)

³⁴ GERLICH (1992)

³⁵ GLÜCK (1976 and 1988)

³⁶ In this calculation, the approximately 210,000 owners of small farm forests are not taken into consideration.

³⁷ GLÜCK/PLESCHBERGER (1982)

³⁸ For further details see LAUBER (1997: 93f.).

Whereas the interests of groups relating to production (both trade and labour) are represented by statutory interest groups, the *chambers*, environmental interests are not organised on such a semi-official level and thus do not have access to neo-corporatist bargaining networks. A few years ago, the idea of an »environmental chamber« was born, to protect environmental interests as well as to liaise between the ministry and environmental organisations, which are usually very critical of the ministry.³⁹ After a brief discussion, the idea was abandoned. The ruling coalition parties were afraid of the potential power of such an institution; on the other hand, more active environmental organisations expressed doubts about the compromises such a semi-official status might require.

Regardless of the plans for an environmental chamber, contacts between government agencies and environmental organisations seem to have become more »relaxed« over the last ten years, as these organisations have become stronger and less hostile towards government. The environmental movement has shifted its energy from protesting to formulating plausible alternatives.

3.2.5 Economic interest groups

The major economic interest groups, namely the Chambers of Commerce and the Association of Austrian Industrialists as representatives of business interests and the Chambers of Labour as well as the Austrian Trade Union Federation as representatives of employees' interests have had a long reputation of being anti-environmental. The Chamber of Commerce is the social partner with the strongest influence on environmental policy-making. It usually rejects further environmental reforms, which it regards as a threat to Austrian trade and industry. During the last decade, the intransigent attitude of the social partners towards environmental protection has changed and the environmental subdivision of the Chamber of Labour has become a prominent promoter of environmental concerns.⁴⁰

3.2.6 Political parties

Political parties have little direct influence on Austrian *forest politics*. Policy formation is delegated to the forest authority and a myriad of special committees within the bureaucracy which elaborate the fundamental framework of sectoral policies.⁴¹ Nevertheless, political parties are relevant to the course of forest politics in Austria indirectly: The more political parties reserve judgement in programmatic questions, the easier selective clientelism will gain ground.⁴² As a result, political parties are reduced to the function of compliantly transforming plans negotiated by other social actors into legitimised policies.⁴³

In contrast to forest policy, the field of *environmental policy* is occupied by all political parties - although with rather varying credibility and insistence. *Green parties* emerged in Austria around 1980. They won their first seats in a provincial parliament in 1984 and entered the federal parliament in 1986 as a very small party. For a long time, the party had been associated (not always well-foundedly) with the rejection of industrial society. By the mid-1990s, the Green Party achieved a more moderate, »modern« image.⁴⁴

³⁹ KROTT/TRAXLER (1993)

⁴⁰ LAUBER (1997: 92f.)

⁴¹ PLESCHBERGER (1989: 522)

⁴² PLESCHBERGER (1989: 522f.)

⁴³ There are relations between interest groups and political parties, though on a rather selective basis: Forest owners' associations closely co-operate with the Austrian People's Party (ÖVP) (»parental relationship«) (GLÜCK 1992).

⁴⁴ LAUBER (1997: 91)

3.3 Political culture: Styles and patterns of interaction

Since World War II, Austrian politics have been typically characterised as consociationalist.⁴⁵ Austria's political culture is characterised by the institutionalisation of consensus and co-operation. *Corporatism*, in its broadest sense, implies co-operative policy styles in various arenas of the political system. In Austria, consensual politics has been practised both in party politics, especially within the grand coalition government, and in the interaction of interest groups, within the system of »*social partnership*«.⁴⁶

The organisations taking part in the Austrian corporatist policy network are characterised by the principle of *monopoly representation*. Within these organisations, actual power has been concentrated in the hands of a very small group of high-ranking functionaries. Forest policy in Austria is made within a close circle of powerful lobbyists who negotiate compromises by mutual accommodation.

The principle of *hierarchy* guarantees that their mutual arrangements will be respected by all the functionaries and members and that there are no relevant groups outside, which could effectively challenge their decisions. Such a set-up with permanent lines of communication between all decision-making factors strongly facilitates a continual process of bargaining and consensus-building.⁴⁷

Another important stabilising principle of Austrian corporatism is *political linkage*: Leadership positions in the parties, the associations, and the chambers are closely interlocked, top positions usually being held by the same persons, thus forming a close network of personal and political loyalties.⁴⁸

From a procedural perspective, Austrian corporatism is characterised by the principle of *introversion*.⁴⁹ The term introversion stands for a situation in which the social partners distract their attention from numerous alternatives and concentrate only on those positions which are mutually acceptable, neglecting other alternatives, which would be unpleasant for one of the partners.

This principle of introversion can be found in the Austrian forestry sector as well. A social phenomenon known as »*Green Pillarization*« (»*Grüne Versäulung*«) can be interpreted as an archetype version of this »old« co-operative, consensus-oriented policy style. Green pillarization aims at uniting the »pillars« of the forestry sector, that is the forest bureaucracy, private forest owners' associations, and forestry science, into a single bloc with conflicting interests equalised and with all social actors pursuing a common goal.⁵⁰ Psychologically, green pillarization is based on professional thinking characterised by shared values and a system of common beliefs.

4 Preservation and management of forests in Austria: A look behind the scenes

In the previous chapters we have briefly described the principal determinants of Austrian forest policy: the history of forest management policy, the current legal framework, the main

⁴⁵ LUTHER/MÜLLER (1992)

⁴⁶ GERLICH (1992)

⁴⁷ SZECSEI (1981) and GERLICH (1992)

⁴⁸ SZECSEI (1981); GERLICH (1992)

⁴⁹ GERLICH (1992)

⁵⁰ PLESCHBERGER (1989: 518f.)

interest groups and the typical patterns of their interaction. In the following, the *actual practice of managing forest resources* in Austria will be exemplified by discussing the efforts to prevent deforestation (4.1), by investigating social mechanisms with negative impacts on forests (air pollution – 4.2, game damages – 4.3), by closely scrutinising the sustainability of forest management practices (4.4) and by analysing the management of protective mountain forests (4.5).

4.1 Struggle against deforestation: A success story?

For the last decades, the target of preserving the *forest area*, i. e. the preservation of forests in quantitative terms, was more than fulfilled: The latest results of the Austrian Forest Inventory show that the forest area increased by approximately 125,000 hectares (i. e. 3.7 per cent) between 1975 and 1996.

The Austrian forest law stipulates that the use of forest land for purposes other than forestry is prohibited (*ban on clearing*) and that the forest owner has to reforest clear-cut areas immediately. The clearing of forest land is permissible only in cases where public interest in the alternative form of land use predominates over public interest in the preservation of the forest. In this connection, the indeterminate legal concept of »public interest« serves two different purposes: First of all, it enables forestry officials to give well-founded reasons for his or her behaviour, thus legitimising his or her decision. Secondly, it encourages forestry officials to come to a practicable solution by falling back on informal negotiations with different interest groups. Due to their occupational socialisation, forestry officials usually tend to preserve forest land. They can prevail, however, only against politically relatively powerless interest groups. Against powerful interests, such as national defence, public transport, or the energy industry, forestry officials can usually not insist and consequently try to secure at least a considerate form of clearing or compensatory afforestations.⁵¹

With Austria's accession to the European Union, the positive general development of the forest area is moreover enhanced by *financial incentives for reafforestation*. The Community aid scheme under EU Regulation 2080/92 is intended to promote afforestation as an alternative use of agricultural land and to encourage the development of forestry activities on farms. In 1996, roughly 600 hectares of forest land were reafforested under this scheme.

On the whole, the problem of deforestation in a narrower sense is of almost no importance in Austria. The reasons for this »success« can be seen in efficient political problem-solving, but also in favourable basic conditions: On the one hand, stringent legal regulations and the »pro-forest« institutional and personal interests of the forestry officials in charge have undoubtedly helped to relieve the pressure on forest land. On the other hand, however, one has to admit that at the moment the pressure on forest land is not that excessive because today forests grow only on more or less »valueless«, i. e. steep and stony sites. Moreover in spite of the total increase of forest area on a regional or local level, there are still areas – especially near major conurbations – with high pressure on forests and a sometimes drastically decreasing percentage of forest land.

While the target of preserving the forest area has been achieved quite well, the *health* of Austrian forests is in a poor state. The main problems are air pollution, damages by game and unsustainable forms of timber production.

⁵¹ KROTT (1990)

4.2 »Waldsterben«: Real threat or media hype?

At the beginning of the 1980s, the dramatic decay of forests in former Czechoslovakia, Eastern Germany and Poland raised fears of large-scale forest die-back also in Western European countries. Almost overnight, »Waldsterben« became one of the most important issues on the political agenda. In this climate of high political resonance, research programmes on the causes of forest decline were started and ad-hoc policy measures were taken.

4.2.1 Air pollution as one possible cause of forest decline

Research on the causes of tree mortality and increasing leaf or needle losses have shown that the ailment of trees and forests has usually *many causes*. All kinds of aggressors, abiotic and biotic, can be involved in the progress of decline. Thus forest ecosystems in Central Europe, which have been exposed to severe human impact for centuries, are expected to be highly alert to continuous strains caused by air pollution and climatic changes.⁵² The pollutants with the most serious effects on trees and forests are sulphur dioxide, nitric oxides, ammonia and ozone.

The identification of air pollutants as the main cause of forest die-back has led to strong public pressure for *clean air legislation*, which was passed in several stages in the 1980s: The Act on Steam Boiler Emissions was gradually tightened by several ordinances and replaced in 1988 by the Clean Air Act for Steam Boilers, which established even more stringent standards than EU regulations. Catalytic converters for automobiles became obligatory in 1985, well in advance of comparable EU regulations.⁵³

Consequently, *sulphur dioxide* emissions have been reduced by approximately 75 per cent from the 1980 level. Due to significant quantities of crossborder pollutants, however, the sulphate concentration in precipitation has declined only insignificantly. Today, 93 per cent of the sulphur depositions in Austria result from imports (mainly from Eastern European countries). In contrast to sulphur depositions, the deposition of *nitrogen oxides* could be reduced by only 12 per cent. The reason for this is the dramatic increase in traffic emissions.⁵⁴ At present, 96 per cent of nitrogen oxides come from abroad (mainly Western European countries). The deposition of *reduced nitrogen compounds* (NH₃, NH₄) has remained more or less constant for the last few years. For this type of substances, the share attributable to domestic emissions is considerably higher; the main source of pollution is agriculture.⁵⁵

Due to the lack of scientific knowledge on the real causes of forest degradation, it is difficult to assess to what extent or even *if* the stabilisation or reduction of immission levels has had consequences on the *state of health* of Austrian forests. In general, the premature loss of leaves and needles and the consequent thinning out of tree-tops serve as an indicator of the vitality of forest trees. In 1997, 32.2 per cent of Austria's forest trees showed losses of leaves or needles: The Forest Damages Monitoring System (*Waldschadensbeobachtungssystem*) identified 0.7 per cent of the trees as showing severe symptoms of thinning or even as being dead; 7.2 per cent showed moderate, another 26.4 per cent showed minor symptoms of

⁵² FÜHRER (1994: 1)

⁵³ LAUBER (1997: 82f.)

⁵⁴ Between 1980 and 1996 the number of vehicles has increased by 2.6 per cent a year on an average (RITTER/AHAMER 1998).

⁵⁵ BMUJF (1997); RITTER/AHAMER (1998)

ailment. In the last few years, the health of Austrian forests has been stabilising, primarily due to favourable weather conditions.⁵⁶

Today we know that »Waldsterben« – »discovered« by the media some 15 years ago –has definitely not »taken place«. Nevertheless, many scientists still describe the state of health of Austria's forests as worrying. Forest die-back (in the literal sense) turned out to be a media hype, whereas *forest degradation*, in the sense of unstable, risk-prone forest stands, has become a daily routine, which is largely unnoticed by the media and the public.

4.2.2 Success and failure of clean air policies

What are the underlying causes of the modest success in reducing air pollution? Reasons for failure can be found in Austria as well as abroad.

Powerlessness in reducing crossborder air pollution

As mentioned above, Austria is a net importer of air pollutants, with more than 90 per cent of sulphur dioxide and nitrogen oxides coming from abroad. For this reason, the Austrian Government has actively pressed for *international agreements* providing significant emission reductions (e. g. Oslo Protocol, Sofia Declaration).⁵⁷ As immission levels indicate, international agreements have not yet shown any remarkable consequences. One reason for this is that international regulations have to be transformed into national law before they have any real effect. With nation states insisting on their national sovereignty, these transformation processes take very long in many cases. In addition to that, the formulation and implementation of stricter standards is hampered by powerful »polluting« industries and insufficient economic power of national economies (especially of Eastern European countries in transition).

In recent years, the Austrian Government has tried to reduce crossborder air pollution by granting *financial aid* to neighbouring countries (especially to former Eastern Bloc countries). This financial support aims at reducing the emission of highly polluting emittants (e. g. coal power stations, industrial plants), thus also at reducing the level of acid deposition in Austria. Although economically speaking, the granting of subsidies turns out to be the most advantageous option in many cases because outdated facilities and plants have the lowest marginal costs of emission reduction, budgetary constraints and the reluctance of the Austrian public speak against extending programmes of this kind.

While in the question of crossborder air pollution the potential of action is rather restricted, the Austrian Government has many possibilities to influence *national emission levels*. Up to now, the Government has made use of them only to a minor extent. The history of Austria's environmental policy in general should give us some revealing clues concerning the reluctance in clean air policy.

Orientation towards economic growth

On the whole, Austrian environmental policy was characterised by a long period of stagnation followed by a kind of breakthrough in the mid-1980s.⁵⁸ The stagnation was probably a result of the fact that the political leaders and social partners were almost single-mindedly set on pursuing economic growth and securing distributional stability. Until the mid-1980s,

⁵⁶ BMLF (1998: 19)

⁵⁷ LAUBER (1997: 100)

⁵⁸ LAUBER (1997: 86)

environmental discourse evolved around the *fundamental antagonism* between economic growth and the protection of the environment. LAUBER (1997: 97) describes this antagonism as follows: “Those who supported growth connected it with the belief in the blessings of industrial society, in particular increased material production, a higher standard of living, full employment and competitiveness on international markets. In this view, pollution was either portrayed as insignificant or its control was presented as a luxury that could be financed only out of high rates of economic growth. In contrast, support for the environment was frequently identified with a fundamental rejection of industrial society, full employment and a high standard of living in favour of some sort of return to nature.”

Only in the last decade, this alleged antagonism has been overcome by an alternative approach which *evens out the contradictions* between the environment and economics: Companies have started to strive for a »green« image, and increasing efficiency by using new technologies has been identified as the appropriate way to satisfy both economic and environmental criteria.

Since the mid-1990s, however, the high *environmental awareness* of the Austrian population has been negatively affected by increasing economic concerns caused by austerity programmes and growing unemployment. As environmental problems lose their top positions on the political agenda, the pace of environmental reform has slowed down. At present, Austria’s environmental policy is mainly restricted to transforming EU regulations into national (and provincial) laws and ordinances.

Patronage of economic interests in a neo-corporatist setting

The orientation towards economic growth has been stabilised by a number of structural features typical of a neo-corporatist political system as described in chapter 3.3: In many cases the Austrian Ministry of the Environment has to share its power with other federal agencies, especially the Ministry of Economic Affairs. Under these circumstances, the Ministry of Economic Affairs is normally stronger because of its political weight which is partly due to its constituency. Ministries are usually closely linked to »their« polluters, with whom they share a common understanding of priorities and a network of mutual support, i.e. a political setting typically referred to as *clientelism*. Instead of controlling the polluters, agencies are emphatically promoting the interests of their clientele. In contrast to this, the environment ministry still lacks a strong constituency of its own.⁵⁹

The predominance of economic interests affects even the implementation process: Even though in theory, administrative decisions should be fully determined by laws and ordinances, in practice the *exercise of discretion* is unavoidable. In the past, this discretion was frequently exercised to the detriment of the environment. The civil servants in charge were under pressure from economic interests and from superior officers usually affiliated with one of the two big parties (who were in turn linked to the interests of specific producers). In former times, political interventions in administrative proceedings motivated by economic interests were not uncommon and even regarded as normal. During the last decade, however, civil servants seem to have emancipated to some extent and have become more independent. One reason for this could be that they now have the possibilities to consult a greater number of independent and more critical environmental experts than they could in the past.⁶⁰

The debate on an *ecological tax reform* is illustrative of the massive influence of economic interests on the progress of environmental policy making. In Austria, proposals relating to

⁵⁹ LAUBER (1997: 88f.)

⁶⁰ LAUBER (1997: 96)

such a reform date back to the early 1980s. But up to now, no decisive action has been taken. Green and liberal parties, but also the Chambers of Agriculture support the implementation of an »eco-tax« whereas industry and trade unions are fervently against it. The government, although it recognises the importance of economic instruments in environmental policy, has committed itself to proceed only in pace with other Western European countries on the issue of energy taxation. However, no action has been taken by the EU or by neighbouring countries. In the aftermath of the economic recession of 1992, with soaring unemployment and the initiation of a governmental austerity programme, an ecological tax reform was again postponed. What remained was a modest tax on oil products in 1995 and on gas and electricity in 1996.⁶¹

The strong influence of economic interests is also reflected in the revision of an ordinance intended to regulate *air pollution* with negative effects on forests: Under the current regulations, the forest authority's potential for action is rather limited: The Forest Act stipulates that the forest authority is only responsible for finding out the origin of air pollution. The forest authority is entitled to take measures against the pollutant only in special cases. Beyond that, the onus of proof is on the forest authority.⁶² In the case of forest damages caused by air pollution, forestry has to face strong interests from the transport sector as well as from trade and industry. The Ministry of Agriculture and Forestry, backed by forestry interest groups, is currently preparing an amendment to the Forest Act aiming at the extension of the list of airborne pollutants hazardous to forests and the reduction of threshold values of emissions with a special emphasis on the synergistic effect of pollutants. The persistent vetoing of the revision of this ordinance by the Ministry of Economic Affairs gives clear evidence of the predominance of economic interests.

Lack of inter-policy co-ordination

The overall concept of sustainable development is still far from being widely understood and accepted. Efforts to integrate sustainable development into sectoral policy making have not been entirely successful. The »destiny« of the Austrian *National Environmental Plan* (NUP) is a case in point. The foundation stone for an NUP was laid in 1992, and the plan was completed in 1995. A great number of organisations and institutions, including all ministries, labour and industry associations (neo-corporatist actors) as well as environmental groups, participated in its drafting. With that, the claim of inter-policy co-ordination was taken quite seriously. With regard to its contents, the NUP cannot fulfil the expectations: The core elements of the plan are mainly qualitative, long-term environmental goals. The NUP lacks quantitative targets, accurate timetables and a detailed description of the necessary measures. Furthermore, its possible policy impacts are restricted by a lack of formal policy commitment because the NUP has had no legal basis so far. A parliamentary resolution urging the Austrian government to adapt plans and measures according to the set targets is intended to promote the plan. The Austrian National Environmental Plan can be taken as an impressive example on how the interference of powerful social players has reduced an ambitious planning approach to a political symbol without real social impacts.⁶³

⁶¹ LAUBER (1997: 106f.)

⁶² LOTTERSTÄTTER (1991)

⁶³ JÄNICKE/JÖRGENS (1997)

4.3 Game: Integral part of or dangerous threat to forest ecosystems?

According to the Austrian Forest Inventory, the regeneration of fir and beech has suffered a negative trend over the last years. Damages caused by game are one reason for that change to the worse in these young stands.⁶⁴

After World War II, *game populations* in Austrian forests have risen constantly. There are many reasons for this: Concentrated feed has been provided in winter to keep the numbers of game high, and to keep red-deer in alpine areas to which it is not naturally adapted. Additionally, hunting goals are often good trophies rather than venison.⁶⁵

Economic losses to the forest owner caused by damaged plantations or by bark-peeling are compensated by the hunters. Besides this *economic damage* also ecological damage occurs by selective browsing on certain tree species. Selective browsing results in a creeping decrease of tree species. Especially fir and deciduous trees are ecologically valuable species which slowly disappear from many forests. On sites which would bear naturally mixed stands only spruce is left.

Hunting has a high economic value for the forest owner and is a high-image sport. The hunting tradition dates back to the old monarchies⁶⁶. In the absolutist state, hunting was a privilege of the sovereign and the aristocracy. Today the hunting rights are connected with land-ownership, and a hunting permission can be acquired by everyone by completing a course and renting a hunting license. Many forest owners consider hunting very important because of its economic and emotional value. Hunting is carried out by the “ordinary man” as well as by upper-class people but is particularly typical for people in high positions in economy, politics, public administration etc. Due to the passion which goes along with hunting, the high traditional value of hunting, and due to the fact that many hunters are in highly influencing positions in society, this sport has a very powerful lobby. Therefore, the forest authority is hardly successful if damages in forests occur.

Traditionally foresters were also hunters and today there is still a close connection between these two professions (or the hobby, resp.). Yet, in recent time a confrontation between hunters and foresters and a passionate debate has arisen within the foresters’ community on protecting forests from damage caused by game. Hunters were successful in building up an image of being protectors of wildlife. The fawn is known as the nice and sweet “*Bambi*”, a fairy-tale figure from a popular children's book. Therefore it is difficult to argue in public debate that deer is doing damage to the forest, that winter-feeding should be reduced, and that shootings should be increased⁶⁷. With that, environmental NGOs which would actually stand up for the protection of forests, are also reluctant to choose game damages as a central theme.

Damages caused by game give evidence that several different *sector laws* applied to the same object – in this case the same piece of woodland - lead to problems of co-ordination and conflict. Different agencies pursuing different policy goals and a lack of co-ordination frequently lead to a situation where game damages are detected but the forest authority does not have effective regulatory instruments to tackle the problem because game-related questions are in the jurisdiction of the hunting authority.⁶⁸ Formulation and implementation of hunting law is highly influenced by the strong interest groups of hunters.

⁶⁴ BMLF (1998)

⁶⁵ WILDBURGER/LEBENITS (1995); ZEILER (1996)

⁶⁶ SYRER (1987)

⁶⁷ SUDA ET AL. (1998)

⁶⁸ LOTTERSTÄTTER (1991)

This scenario is the struggle between two land use interests. While the debate either argues pro “forests” or pro “game”, there are scientists who make the point that game and trees are all part of only one ecosystem: only an *integrated management* approach considering the whole ecosystem (and also all interests) will lead to a sustainable resource management concept. Not only measures in game management but also practices in forest management considering the requirements of game can contribute to reducing game damages.⁶⁹

4.4 Forest management: Use or misuse of forests?

While the target of preserving the Austrian forests in quantitative terms is unanimously considered to have been achieved considerably well,⁷⁰ various interest groups hold divergent views on the *state of health* of Austrian forests, i. e. the target of preserving forests in qualitative terms. The catchwords »sustainable forestry« and »forest degradation« describe the two end-points of this continuum of contrasting assessments.

4.4.1 Self-assessment of foresters ...

In the view of forest owners and foresters, the present situation concerning the *naturalness of forest ecosystems* can be characterised as considerably satisfactory. The fact that two-thirds of Austrian forests correspond to the modern concept of an intact ecosystem⁷¹ is regarded as evidence for the sustainability of forest management carried out by forest enterprises and/or the stringent supervision on the part of the forest authority.

The Austrian Forest Act contains a number of *regulations* which are intended to prevent forestry from producing negative external effects. It aims at safeguarding the favourable effects of the forests for the public by prohibiting to devastate and clear forest land, by obliging the forest owner to reforest after harvesting and to utilise the forests in a sustainable way (secured by the protection of immature stands, the prohibition of large-scale clear-cuts and the supervision of fellings by the authority).

4.4.2 ... versus conservationists' claims

Conservationists partly disagree with the overall positive self-assessment of foresters. The regulations currently in force are considered to be inadequate to guarantee the conservation and the sustainable management of forest resources. The crucial point relates to the high share of *coniferous tree-species*.⁷² In the last decades, afforestations of spruce and pine have been pushed for economic reasons. As a result, the ecological tolerance of fragile forest ecosystems has been exceeded in many cases, which has led to the deterioration of the soil, the increased appearance of pests, as well as more severe damages by storm and snow occurring more frequently.

Consequently environmental groups have been formulating ambitious demands. Here the »WWF Conservation Strategy for Austria« shall serve as an example. Under the slogan “*Von der Forst- zur Waldwirtschaft*”⁷³, WWF demands that in addition to the production of timber, forestry should aim at the preservation and development of forest ecosystems close to nature. In its strategy paper WWF, *inter alia*, calls for the protection of existing virgin forest relics, the installation of natural forest reserves with a total area of at least 100,000 hectares, the

⁶⁹ ZEILER (1996)

⁷⁰ see chapter 4.1

⁷¹ see chapter 1.1.3

⁷² see chapter 1.1.2

⁷³ MANG (1992: 36)

promotion of close-to-nature forest management practices (especially increased use of deciduous tree-species instead of spruce or pine and renunciation of clearcuts), and the reduction of activities with negative impacts on the environment (e. g. construction of forest roads and use of heavy machinery).

It goes without saying that the objectives formulated by non-governmental organisations are not formally binding. Expressed by social actors, who know how to make use of the media in a skilful way and backed up by a high environmental awareness of the Austrian population, these demands still obtain considerable political weight.

4.4.3 Causes of forest degradation

The causes of forest degradation can be found on both a technical as well as on a socio-political level.

Inefficient transfer of knowledge

In Austria extension services, though well developed, suffer from structural shortcomings: In the wake of the discussion on »*Waldsterben*«, many efforts have been made to find out the factors causing symptoms of tree mortality and increased leaf or needle losses. The »Research Initiative against Forest Decline« (FIW) came to the conclusion that many forest ecosystems in Austria needed restoration and that integrated management concepts instead of single curative measures were needed. On part of science, such management concepts are already available, due to barriers in knowledge and in social acceptance, however, the translation into action frequently fails. One reason for this is that, in contrast to other countries, the Austrian University of Agricultural Sciences (*BOKU*) does not have an extension programme. Due to this isolation, *BOKU*'s latest scientific findings cannot be disseminated within the forestry sector. So far, the university has been denied access to experts in the field because the institutions presently offering extension services – the forest authority and the Chambers of Agriculture – do not want to give up this highly attractive task which enables them to prove their achievements towards their clientele.⁷⁴

Primacy of timber production

Approximately 80 per cent of Austria's forests are privately owned and more than half of the forest owners expect financial returns from their property which come primarily from timber sales (and to a modest extent from hunting leases). Consequently timber production plays a predominant role in the value system of forest owners and foresters.⁷⁵ The primacy of timber production which strongly influences many aspects of Austrian forest policy, finds its ideological justification in the so-called »*wake theory*« (*Kielwassertheorie*), which assumes that the non-timber products and services of forests are provided in the wake of regular forestry for timber production.⁷⁶ Non-timber goods and services are only seen as by-products. Wake theory blinds to these by-products which, subsequently, are provided in insufficient quantities (e. g. protection against natural hazards) or are even destroyed (e. g. nature protection values). Sustainable forest management practices won't gain common acceptance as long as the insight into the (sometimes negative) consequences of traditional forms of forest management is missing.⁷⁷

⁷⁴ PREGERNIG (1998c)

⁷⁵ GLÜCK (1995a)

⁷⁶ GLÜCK (1982)

⁷⁷ PREGERNIG (1998a)

The predominance of timber production and hence also the compliant attitude towards forest land owners is noticeably reflected even in the Forest Act: Basically, the Austrian Forest Act aims at the surveillance of forest management (*»forest police«*) and the provision of non-timber products and services of forests which are in the public interest. Actually however, the Austrian Forest Act grants clear priority to the production of timber, and thus is rather a Forestry Act than a Forest Act.

This bias towards the economic interests of forest land owners is reflected in the system of *forest subsidies* as well: According to the Forest Act, financial incentives should aim at preserving and developing the protection, welfare and recreation functions of forests as well as at improving the timber production function. The guidelines for subsidies stipulate that projects aiming at preserving and promoting a healthy environment or projects aiming at promoting a whole region are preferable.⁷⁸ The task of allocating public funds is divided among two administrative bodies: the forest authority on the one hand and the Chambers of Agriculture on the other hand. When distributing public funds, both groups have to observe the formal objectives presented above. But at the same time, they try to pursue informal interests as well. Irrespective of any forest-political objectives, the state fails to fend off demands expressed by powerful interest groups whereas groups with inadequate social backing can be easily ignored. So three quarters of the available public funds are used in accordance with the economic interests of private forest land owners. Only one quarter is assigned to infrastructure projects that are genuinely in the public interest.⁷⁹

4.5 Protective effects of mountain forests: How can integrated management be achieved?

4.5.1 Regulations on protective effects of mountain forests

Forests in alpine areas are of special importance because of their protective effects: they protect the soils against erosion (site protection) and they protect settlements and infrastructure against natural hazards like avalanches, rock-fall, mudflows and landslides (natural hazards protection). The forest law comprises specific regulations for the preservation and the proper management of these forests, the regulation of “protection forests” (*Schutzwälder*) and “ban forests” (*Bannwälder*):

- According to the forest law, *protection forests* are forests on easily erodible sites (site protective forests) and therefore they benefit from a special protected status⁸⁰. Owners of protection forests are obliged to manage their forests in a way that the protective function is maintained. They have to bear the management costs as long as there are revenues from fellings in these forests.
- The regulations on *ban forests* refer to forests that directly protect settlements or traffic lines against natural hazards. Ban forests have to be set up by an official act. The owners of the properties below protective forests may claim specific forest management measures in order to ensure the protective effects of the forest. The authority has to prescribe adequate measures to the forest owners and the forest owners have a claim for compensation with the beneficiary of the measures.

⁷⁸ BMLF (1995b)

⁷⁹ KROTT (1986)

⁸⁰ The legally defined term “protection forest” (*Schutzwald*) is a site protective forest that has to be protected. In colloquial usage the term is unclear because often also protective functions for settlements are connected with it.

Besides these regulations following the polluter-pays-principle (in the case of site protective forests) and the beneficiary-pays-principle (in the case of ban forests), public funds are available for improving forests with protective functions.⁸¹

4.5.2 Forest uses and forest condition in mountainous areas

The forest authority reports a *poor condition* of many mountain forests. Forest stands that have been clear-cut in past times are now growing old but lack regeneration. For these forests the authority fears sudden break-down and the loss of protective functions. This situation is on the one hand caused by historic and present forest management practices: clear-cutting and preference of spruce have resulted in even-aged monoculture stands susceptible to wind-throw and bark-beetle attacks. Agricultural and hunting uses on the other hand prevent the natural regeneration of the forests and due to decreasing revenues from forest management, owners cut back on investments in forest regeneration as well. Especially in alpine areas where wood increment decreases but management costs rise, forest owners reduce forest management measures and rather increase the number of cattle for grazing or the number of deer for hunting purposes. These multiple forest uses may result in an overuse of the forest ecosystem in certain places. The maintenance of the forests is endangered at many sites.

4.5.3 The implementation of forest laws in protective forests

The situation described above is a result of the poor implementation of regulations laid down in forest, hunting and agricultural laws. The reasons for this can be seen in the pursuance of *group interests* and the *power distribution* within the actors' network during the implementation process.⁸² The relevant group interests within the local community and the main political-administrational actors involved in the implementation process are shown in Figure 2.

<i>political-administrational actors</i>		<i>interest groups</i>	
<i>authority</i>	district commissioner	transportation agencies and property owners benefiting from protective effects	<i>beneficiaries</i>
	local government (town/village)		
<i>sector administrations</i>	forest administration	forest owners	<i>land users</i>
	hunting administration	hunters	
	agriculture administration	farmers	

Figure 2: Actors' network in implementing forest law in protective forests

⁸¹ This chapter is based on an ongoing research project on protection forest policy in Austria (WEISS 1997). Preliminary results have been presented in GLÜCK/WEISS (1997) and WEISS (1998).
⁸² OTTITSCH/WEISS (1998)

- *Authorities*: Both district commissioner and mayor of the town/village act as authority and »politician« at the same time. Both are interested in protection against natural hazards but also have to represent the interests of all user groups in the town/village or the district: next to security interests they have to support the interests of farmers, hunters, and persons benefiting from the protective effects of forests.
- *Sector administrations*: The officials in charge for forestry, hunting and agricultural matters assist the authority in the administration of the sector laws. Formally, they represent sector policy goals; informally, they also pursue organisational goals like maximising influence and resources.
- *Beneficiaries of the protective effects of forests*: Owners of private and commercial properties as well as operators of road and railway lines below steep slopes are interested in maintaining protective forests but they try to externalise management costs (into the future, upon other parties or upon the public).
- *Land users*: Forest owners are interested in income from wood production, hunting licenses or grazing. Maintaining or improving protective effects is not in their interest because there is no income from these forest effects (which are public goods). Farm forest owners and holders of grazing rights in forests are interested in grazing, hunters are interested in high game populations. Since there is more forage in »open« forests, the »orderly« maintenance of forests is against hunters' and farmers' interests.

Consequently, this has led to a situation of non-sustainable forest use. In order to solve the problem, the forest authority uses subsidies for restoring the degraded mountain forests. Although the underlying causes of forest degradation (i. e. overuse) cannot be resolved by restoring the forests, subsidies and restoration are preferred over regulatory and prevention instruments. The reasons for these poor implementation results are as follows⁸³:

- The public administration tries to *avoid conflicts* with its main clientele. The forest authority tries to achieve public policy goals rather *with* the private interests of the forest owners than *against* them. Therefore, no orders are made in forests which are not managed regularly by the owners.
- Although only one ecosystem is concerned, i.e. the forest, forest as well as hunting and agricultural laws are under *different jurisdiction*. The single sector administrations pursue different policy goals, all oriented at the interests of their clients. Only the forest administration considers the maintenance of protective forests as a policy goal. Yet, the forest administration holds a rather weak position compared to other administrations because they are backed by more powerful lobbies than forestry.
- With its demand that *beneficiaries* should bear the costs of protective forest management, the forest administration stands against the interests of settlers as well as road and railway operators. While the forestry sector is of only low economic and political significance,⁸⁴ transport agencies are affiliated to strong administrative bodies (e.g., ministry of transport).
- *Subsidies* are highly welcome because they are (as distributive instruments) to the benefit of all parties directly concerned: the forest administration can secure its influence by getting access to management decisions in protective forests, the forest owner receives income and investments in his forests, hunters and farmers can still carry out their uses, the protective functions for the community are ensured without costs for the direct

⁸³ GLÜCK/WEISS (1997); WEISS (1998)

⁸⁴ see chapter 1.2.3 and 1.3.3

beneficiaries, and money is invested in the town/village and the district. The costs are transferred to the public and there are no incentives for the local users to introduce sustainable land management methods. In addition to that, politicians and civil servants see subsidies as transfer payments to rural populations.

It seems that people benefiting from the protective effects do not care adequately for the maintenance of the forest. This could be explained by the fact that they do not know enough about the forest, or ignore its protective effects. But we do not know either, what would happen if no forest administration was there to restore the forest. If no subsidies were available, would catastrophes inevitably occur like the forest administration contends, or would it force beneficiaries to provide for their protection themselves? From a neutral standpoint, it cannot be decided if (in economic terms) too many protective services are provided or too few. One thing is clear: Tolerating damages and restoring the forests with public funds is not an efficient way to care for the forest. This inefficient system is only viable as long as enough (public) resources are available.

5 Conclusions and perspectives

Chapter 11 of Agenda 21 (Combating Deforestation), *inter alia*, calls for the sustainable management, conservation and sustainable development of forests, and the sustainable utilisation and production of forests' goods and services. When comparing the stated goals with the current situation in Austria, correspondence as well as discrepancies are evident.

5.1 Current situation

The target of preserving the *forest area*, i. e. the preservation of forests in quantitative terms, could be more than fulfilled: The latest results of the Austrian Forest Inventory show an increase in forest area, growing stock and increment.⁸⁵ Concerning the *naturalness* of forest ecosystems, the present situation can be characterised as quite satisfactory as well: Two-thirds of Austrian forests correspond to the modern concept of an intact ecosystem. But at the same time, the share of coniferous tree-species (esp. spruce) is abnormally high. As a result, the ecological tolerance of fragile forest ecosystems has been exceeded in many areas.⁸⁶

While deforestation in a narrower sense poses no problem, the state of *health* and *stability* of Austrian forests is considered to be unsatisfactory. The Forest Damages Surveying System shows some worrying results: more than 40 per cent of all regeneration areas in productive stands are browsed by game; 8 per cent of all stems have bark-peeling damages; abies stands have dramatically decreased;⁸⁷ protection forests are in a highly unsatisfactory condition;⁸⁸ part of the Austrian forests show symptoms of defoliation (possibly due to air pollution).⁸⁹

5.2 Major underlying causes of forest degradation

There are many reasons for the partly unsatisfactory state of health of Austrian forests. In the previous chapters, the underlying social mechanisms were described in detail. In the following, the most important underlying causes of forest degradation will be summed up briefly.

⁸⁵ see chapter 4.1

⁸⁶ see chapter 1.1.2f. and 4.4

⁸⁷ see chapter 4.3

⁸⁸ see chapter 4.5

⁸⁹ see chapter 4.2

Predominance of economic interests within the political system: Only a few years ago, Austrian politics were rather anti-environmental with political leaders and social partners almost single-mindedly set on securing economic growth and distributional stability. Environmental interest groups, although they have solid and constantly increasing social support, are not officially part of the Austrian neo-corporatist policy network (the »*social partnership*«) and are thus excluded from many decision-making processes. The environment ministry was established only rather late and remained virtually without powers in the beginning. In contrast, the Ministry of Economic Affairs can rely on a powerful constituency. Economic authorities are usually closely linked to »their« polluters, with whom they share a common understanding of priorities and a network of mutual support (selective clientelism).⁹⁰ The result of all this is that economic interests have had massive influence on the (sluggish) formulation and (lenient) implementation of environmental policy.

Although better integrated into the neo-corporatist political framework than environmental interests, also the forestry sector holds a relatively weak position within the Austrian political system compared to the political strength of trade and industry.⁹¹ Forest damages caused by air pollution serve as an illustrative example: With the transport sector and trade and industry profiting by soft emission standards for air pollutants, the forestry sector has had to accept the negative external effects of this.⁹²

Delegation of authorities between the federal state and the *Länder*: While forestry is a matter of *federal* legislation and administration, a number of areas directly or indirectly relating to forests or forestry are under the responsibility of the *Länder* (e. g. regional planning, agriculture, nature conservation, and hunting). The coexistence of national law and provincial law and particularly their application to the same object – in this case the same piece of land – inevitably leads to problems of co-ordination and conflict.⁹³ The conflict of interests between forestry and hunting and the resulting problem of game damages is a good case in point.⁹⁴

Forestry is not only a »victim« of negative external factors, but sometimes also produces negative external factors itself, namely in those cases where forests are managed unsustainably both in terms of ecology and/or social interests. Besides economic arguments, ideological and institutional factors give clues why forest management is still oriented at one-sided, short-term goals in many cases.

Pursuit of short-term economic goals: More than half of the forest owners expect financial returns from their property which come primarily from timber sales (and to a modest extent from hunting leases).⁹⁵ Although the forest owners' goals are very diverse,⁹⁶ most of Austrian forests are managed for timber production with economic goals prevailing against long-term sustainability considerations such as maintaining the fertility of soils or reducing ecological risks.

Primacy of timber production: At the moment, the (sometimes negative) consequences of traditional forms of forest management are often ignored. »*Wake theory*« (*Kielwassertheorie*), a central ideological pillar of forestry, starts from the assumption that non-timber products

⁹⁰ see chapter 4.2.2

⁹¹ see chapter 1.3.3

⁹² see chapter 4.2

⁹³ see chapter 3.1

⁹⁴ see chapter 4.3

⁹⁵ see chapter 4.4.3

⁹⁶ see chapter 1.2.2

and functions of forests are provided in the wake of regular forestry for timber production. Non-timber goods and functions are only seen as by-products.⁹⁷

Green pillarization and selective clientelism: The forest authority, formally in charge of supervising the regular management of forests, actually tries to keep on good terms with its clientele, viz. forest land owners and professional foresters. Civil servants are on common ground with foresters and forest owners with a system of shared values and attitudes serving to harmonise conflicting interests. With this they become uncritical mediators and advocates of their clientele.⁹⁸

5.3 Possible actions to counteract underlying causes of forest degradation

In the following, possible actions to counteract underlying causes of forest degradation in short, medium and long term will be outlined briefly. The following options for solution are formulated against a scientific (particularly a sociological) background. They are intended to serve as an intellectual suggestion and not as normative prescription.

First of all it has to be mentioned that there is no universal remedy for fighting the causes of forest decline: Complex problems always require complex solutions. It is hard to predict how far or even *if* these actions can be implemented and what kind of socio-economic and environmental impact they will have as long as the relevant social actors are not taken into consideration. So with every option given below, both actors which could implement or at least support such actions and actors which might oppose them will be identified.

Stricter regulations for the management of forests: The most obvious and direct way of securing the promotion of close-to-nature forest management practices and the reduction of activities with negative impacts on the environment are stricter regulations laid down in laws and ordinances.

The tightening of regulative instruments, however, is bound to meet with fierce resistance from private forest owners and their interest groups: They are suspicious of any type of state intervention and want questions of forest management not to be affected by interventions of external planning agencies. The special property structure of the Austrian forestry sector with its large share of forests in private hands constitutes an important obstacle for the »compulsory« implementation of SFM.

For years, various actors, including environmental groups, have called for a reformulation of the Austrian Forest Act. Forest interest groups, however, are fighting passionately against the »opening up« of the existing legal framework. They fear that in the case of a fundamental reform, conservationist claims could not be rejected any more and that further regulations restricting the forest land owners' right of free disposal of their property could find its way into the forest law. So at the moment, the chances of having new regulatory instruments formulated and implemented are rather poor. By falling back on *voluntary* policy instruments this political resistance could possibly be overcome.

Raising the social visibility of forests and the forestry sector: The predominance of economic interests vis-à-vis the interests of forestry or the protection of the natural environment in general could possibly be overcome or at least reduced by raising the social visibility of forests and the forestry sector. The value of forests and the contribution of the forestry sector to national economies are in many cases considerably underestimated.⁹⁹ By documenting and drawing attention to the full value of forest lands and resources and their contribution to a

⁹⁷ see chapter 4.4.3

⁹⁸ see chapter 3.2.1 and 3.3

⁹⁹ FAO (1996: 20)

nation's economy and culture, forests, or rather their protection, would be granted higher priority on the national political agenda. Subsequently, the externalising of costs by third parties (such as trade and industry, transport, but also hunting) would become more difficult. A good basis for raising awareness and mobilising commitment for forestry matters is the emotional closeness many people show towards trees and the forest.¹⁰⁰ Public awareness puts pressure on political decision-makers as well as on professionals in the field. Strong public support towards SFM presses politicians to reformulate the legal framework and helps the forest authority to prevail against forest land owners when they try to »persuade« them to manage their forests adequately. In the long term, a public debate on ecological forest management could even influence the value systems of foresters and forest land owners themselves: »Close-to-nature« forestry would become a matter of daily routine.

Strategic alliances in agenda-setting: Interest groups, especially environmental NGOs, often use public debates to put pressure on political decision-makers. Some of the topics chosen are directed against the interests of forest owners (e. g. preservation of biotopes, renunciation of clear-cuts etc.); in other cases, however, protection goals and forestry goals coincide (e. g. wood as an environmentally friendly material, game damages threatening forests etc.). In these areas of agreement, the idea of forest protection could be introduced more effectively into public debate and into the political process if the two partners co-operated. The strength of strategic alliances lies in their ability to draw upon the specific skills of each individual partner.

Co-operation between forestry and environmental groups within a neo-corporatist setting: In the beginning, environmental NGOs defined themselves as »*protest groups*« in fundamental opposition to economic interest groups and the public administration. Over the last few years, they have gained access to neo-corporatist bargaining networks. In order to establish themselves in these networks, they have to change their behaviour. By building up stable lines of co-operation with the main actors of a policy field, they can pronounce their viewpoints and can slowly change institutional values. Institutions tend to develop stable belief systems and behaviour patterns. If their environment changes they have to adapt to the new situation in order to survive (institutional learning). Opening up to new societal demands is a possible strategy for forestry to secure its legitimacy.

Positive image of forestry and wood: A strong potential of the positive image of forestry lies in its product: *wood*, which serves as a prototype of an environmentally friendly material. Raising the image and the market position of wood with environmental arguments can simultaneously strengthen the commitment of forestry to SFM.

Instruments that strengthen the market position of wood (such as timber certification or eco-taxes) could extend a forest enterprise's (economic) potential for employing more ecologically production standards. At the moment, forestry and timber industries are passionately rejecting calls for *timber certification* (as formulated by environmental groups). They are afraid of higher standards without corresponding revenues.

Similarly, the introduction of »*eco-taxes*«, discussed for years, has been »successfully« prevented by economic interest groups.¹⁰¹ Yet the taxing of non-renewable resources (like oil or coal) would result in a comparative advantage for timber products.

External pressure from international regimes: External pressure can increase the chances of establishing SFM in Austria. International initiatives and conventions such as the Convention on Biological Diversity, the Ministerial Conferences on the Protection of Forests in Europe (Strasbourg 1990, Helsinki 1993, and Lisbon 1998) and the Alpine Convention have

¹⁰⁰ see chapter 1.3.1

¹⁰¹ see chapter 4.2.2

introduced a »new« set of sustainability goals into Austrian forest policy and thus have put a certain strain on forestry.

The major problem, however, is that most of the international regimes dealing with the conservation and sustainable use of forests are legally non-binding or – if legally binding – difficult to implement on an international basis. Nevertheless, international regimes still represent an important political commitment of the signatories to achieve the stated objectives.¹⁰²

Political claims by (environmental) NGOs: Claims emphatically brought forward by non-official social groups, particularly environmental NGOs, can act as a counterbalance to powerful economic interests. It goes without saying that the objectives formulated by non-governmental organisations are not formally binding. Expressed by social actors who know how to make use of the media in a skilful way and who are backed by a high environmental awareness of the Austrian population, these demands still obtain considerable political weight.

New financial incentives: As mentioned above, both regulatory and informational instruments to achieve the goal of SFM show only limited effects. While regulatory instruments cannot be implemented because they are confronted with powerful social interests, voluntary instruments, like moral suasion or education, show only indirect and long-term effects. To give an impetus to approach the goal of SFM on short- or medium-term, additional incentives are needed. The successful implementation of policies depends in many cases on the allocation of (sometimes large amounts of) public funds. This could apply to the implementation of SFM as well.

In the future, financial incentives, especially if co-financed by the European Union, can be legitimised increasingly only if the political targets are founded on a broad societal basis, if the criteria are stipulated in an operational and unequivocal way, and if the progress is evaluated regularly. In this case, strict (ecological) criteria would have to be worked out and additional funds would only be provided if the criteria were strictly fulfilled.

This could help to persuade national actors who have severely opposed stricter standards up to now to take part in the elaboration and support the implementation of such an instrument. Rather than doing completely without funds provided by the EU, forest land owners and their representatives could be prepared to give in.

Winds of change in Austrian politics: Policy change in most cases cannot be planned in advance. Therefore, the chances of implementing SFM in Austria could increase unexpectedly, as soon as there are momentous changes in the Austrian political landscape. Some positive aspects are coming into sight, as Austrian politics in general are touched by noticeable »winds of change«¹⁰³. Long-established functioning principles of Austrian corporatism, and in particular the very style of its co-operative interactions, are becoming controversial. The »old« introverted policy style is increasingly getting inconsistent with new patterns of politics geared to conflictual interest articulation, open decision-making and clear responsibilities for the implementation of decisions.

The small size of the forestry sector, especially when seen in relation to the Austrian economy as a whole, entailed that, so far, forest policy has been made *by* the forestry sector *for* the forestry sector. With new claims expressed by other sectors or society as a whole, such a closed policy system, with its restricted capability to be open, to learn and to adapt to an ever changing national and international environment, is no longer viable. So even the Austrian

¹⁰² GLÜCK ET AL. (1997: 14)

¹⁰³ GERLICH (1992)

forestry sector will not manage to be shut off completely from this trend towards a more »open« policy style.

Participation and partnership: International resolutions, such as Agenda 21, the Forest Principles or resolution L1 of the Ministerial Conference on the Protection of Forests in Europe (Lisbon 1998) point out that a necessary prerequisite for this new type of policy is *participation*, i. e. bringing together stakeholders at all levels – local, regional, national, and even international – in a joint effort to achieve SFM.^{104 105} Only if stakeholders feel integrated in the process, they will be fully committed to it. Participatory decision-making and consensus building can help to raise awareness of the importance of forests and environmental conservation, it can contribute to identifying consultation mechanisms and to promoting the exchange of information. When calling for enhanced participation one must realistically not forget that observing this principle inevitably leads to a loss of power for those presently in command.¹⁰⁶ Therefore, any attempt to translate this idea into public policy will meet with opposition – opposition which can only be overcome with the support of fundamental social changes.

¹⁰⁴ FAO (1996: 16ff.)

¹⁰⁵ National stakeholders include politicians, government officials, community-based organisations, local communities and populations, NGOs, private interest and users groups as well as private enterprises and their associations.

¹⁰⁶ PREGERNIG (1998b)

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List of abbreviations

ATS	Austrian Schilling
BMLF	Bundesministerium für Land- und Forstwirtschaft [Federal Ministry of Agriculture and Forestry]
BMUJF	Bundesministerium für Umwelt, Jugend und Familie [Federal Ministry of Environment, Youth and Family Affairs]
BOKU.....	Universität für Bodenkultur [University of Agricultural Sciences Vienna]
ECE	United Nations Economic Commission for Europe
EU	European Union
GDP	Gross Domestic Product
SFM.....	Sustainable Forest Management
WWF	World Wide Fund for Nature

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