

**TRENDS IN
FORESTRY LEGISLATION:

WESTERN
EUROPE**

by

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***FAO LEGAL PAPERS
ONLINE #10***

June 2000

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SUMMARY

In many countries of Western Europe forest laws have long histories, and have been subject to revision and amendment in light of new social, economic and environmental demands. As a result, there is a great variety of times of adoption, structures and contents in the principal forestry legislation as applicable at present. Nevertheless, a review of this body of legislation reveals certain overall trends and insights as to the evolutionary direction of forest law in the region. Generally, the content of most laws has become multi-purpose oriented and refers in particular to sustainable forest management, public participation, private forestry, Government support to forestry, integration of forestry and related activities, and protection against fires and the adverse effects from natural calamities.

New developments have been introduced by legislation governing related subjects such as protected areas, mountain regions and rural development. Public policies addressing nature conservation, land use planning and renewable natural resources management have produced legislation which is particularly relevant in this context. Important changes have occurred with regard to constitutional or regulatory transfers of competencies from national to sub-national levels. On the other hand, European Community legislation and international legal instruments have a growing impact on public policies and legislation at national levels.

The increasingly complex regulatory framework reflects the multiple roles of forests in sustainable development. It raises new issues with regard to the respective role of the public and private sectors, to the rights of landowners facing external demands, and to compensation arrangements between forest enterprises, user groups and public entities. Incentive and process-steering instruments have gained more weight in order to enable more efficient decision-making processes on sustainable forest resources management, balancing local, national and supra-national requirements.

This contribution reviews the present situation of forestry legislation in Western European countries, examines important issues regulated in forest laws, discusses briefly the role of European Community legislation, and identifies significant trends in recent laws addressing forest conservation and sustainable forest management. The list of legislative texts which have been reviewed is included at the end. It is followed by a bibliography containing references on general developments in the region as well as country specific references.

I. OVERVIEW OF CURRENT FORESTRY LEGISLATION IN THE REGION

Recent years have witnessed a rapid transformation of forest law in many parts of Europe. This phenomenon is most dramatically evident in Central and Eastern European countries, which are in the process of promulgating a profoundly modified legal network of forest, nature conservation and environmental protection legislation (Cirelli, this volume; Schmithüsen, Herbst and Le Master, 1999). But the process of change has not been limited to these countries –indeed, the adaptation of forest legislation to new political, economic and social developments has gained considerable momentum *throughout* the continent. Countries with new or amended laws range from Albania and Ukraine to Finland and Sweden (*Table 1*). They include Denmark, France, Germany, Great Britain, Portugal and Spain (Schmithüsen, 1999).

The focus of this study is on emerging trends in the principal forestry legislation in the countries of Western Europe. The forest laws presently in force in this region have been adopted over a period of time of more than a century, ranging from the Belgian *Code forestier* of 1854, to the Italian law of 1923, to the recent laws of Scandinavian countries. Where the principal forestry legislation has not been replaced or amended, new developments may have come from laws adopted separately, such as legislation on the protection of the environment or nature, rural or mountain area development, subsidies or other forms of support to economic activities. Significant innovations have also been introduced in laws adopted at the sub-national level, or in subsidiary legislation. Policy declarations or other government statements issued after the adoption of the laws may have determined new approaches in the implementation of existing legislation. The legislative framework applicable to forestry in these countries therefore tends to be particularly complex compared with other regions of the world, as, for example, Central and Eastern Europe, where there has been a tendency to replace all former legislation with comprehensive new texts (Schmithüsen and Iselin, 1999).

There is also great variety in the application and scope of the principal forest laws of the countries in the region. Recent ones tend to be more concise, leaving the regulation of various aspects to subsidiary regulations or to the legislation of state or local authorities. This approach is particularly marked with regard to institutional aspects, where countries seek flexibility to periodically revise the role of authorities dealing with forests and therefore tend not to include detailed provisions on this subject in parliamentary acts. The recent laws which do address institutional issues, such as the law of *Sweden*, limit their provisions in this regard to general duties. In some cases (as in *Finland*) the regulation of institutional aspects is addressed in principal legislation which, however, is separate from the forest law itself. Similarly, not all laws include exhaustive provisions on forest offences and on enforcement. Sometimes, this may be due to particular legal traditions. Countries may, for example, include all criminal offences in a criminal code or other separate legislation. Other times, however, this may simply be due to a lack of co-ordination between the principal forestry legislation and subsequent acts providing for offences.

Perhaps more profoundly, however, in this region than elsewhere, the management and use of forests, forest lands and their products are subject to a network of public policies and legal provisions which has expanded considerably during the last 20 years. With regard to the development of forestry and wood processing industry, public policies and laws determining macro-economic trends are of considerable importance. This refers for instance to employment, public finances, public infrastructure and communications, energy, research and technology development.

Table 1: Revision or Major Amendments of Forest Legislation 1990-1998

1990	<i>Belgium</i> <i>Croatia</i> <i>Spain</i>	Flemish Forest Decree Forest Act Forest Law (<i>Navarra</i>)
1991	<i>Liechtenstein</i> <i>Poland</i>	Forest Law Act on Forests
1992	<i>Albania</i> <i>Spain</i> <i>Switzerland</i>	Law on Forestry and Forest Police Forest Law (<i>Andalucia</i>) Federal Law on Forests
1993	<i>Estonia</i> <i>Finland</i> <i>Slovenia</i> <i>Spain</i>	Forest Law Forest and Park Service Act Forest Law Forest Law (<i>Valencia</i>)
1994	<i>Sweden</i> <i>Latvia</i> <i>Lithuania</i> <i>Norway</i> <i>Spain</i> <i>Ukraine</i>	Forest Act Law on Management and Utilisation of Forests Forest Law Forest Law Forest Development Law (<i>Castilla y León</i>) Forest Code
1990-1994	<i>United Kingdom</i>	Guidelines and Rules
1992-1994	<i>Germany</i>	Forest Acts in the five States of the Former German Democratic Republic
1995	<i>Spain</i>	Forest Law (<i>Madrid, La Rioja</i>)
1996	<i>Czech Republic</i> <i>Denmark</i> <i>Finland</i> <i>Hungary</i> <i>Portugal</i> <i>Romania</i>	Forest Act Forest Law Forest Act Act on Forest and the Protection of Forests Forest Law Forestry Code
1997	<i>Bulgaria</i> <i>Poland</i> <i>Russia</i> <i>Spain</i>	Law for the Restoration of Property of Forests and Forest Lands Law on Forests Forest Code of the Russian Federation Conservation of Nature and Natural Spaces Law (<i>Extremadura</i>)
1998	<i>France</i> <i>Norway</i> <i>Poland</i>	Revision of Forest Law Revision of Forest Law Revision of Forest Act

Source: Ministerial Conference on the Protection of Forests in Europe (Lisbon 1998), National Reports; and Schmithüsen, 1999.

There is also an increasingly complex network of regulations that directly and indirectly addresses forest conservation and sustainable forest resources utilisation. This refers to cross-sectoral policies and laws in areas such as environmental protection, nature and landscape

conservation, land-use planning and regional development. It also refers to sectoral policies and laws that may have been adopted at an earlier stage but have been modified and amended considerably over time, on subjects such as agricultural development, water protection and use regulations, fishery, hunting and wildlife conservation.

Because of these factors, many of the laws which have been examined can offer only a limited picture of the legal framework regulating forestry in a particular country. Yet, bearing such limitations in mind, a review of the principal forest laws of Western European countries nevertheless yields important lessons. The emerging treatment of important contemporary issues in these texts reveals interesting points of comparison and contrast that can usefully be considered in the context of forest law reform processes around the world.

Following are brief summaries of the present forest laws in specific Western European countries:

Austria: The Forest Act of 1975, amended in 1996, is rather detailed. It prescribes three types of management plans, regulates exploitation and protection against fires, pests and air pollution, provides for the creation of protection forests, and determines the responsibilities of the Forest Service and of a Torrent and Avalanche Control Service (Glück, 1988; Eckmüllner, 1992). Provisions on subsidies are also included. A specific part governs production, certification, import and export of seeds and nursery stock. Wood utilisation and pasture rights of third parties are regulated by Federal public law and subsidiary legislation of the member states (Herbst, 1996). Following the Helsinki Resolutions and the Rio Forest Principles, several national forestry programmes for the improvement of sustainable forest management and the enhancement of biodiversity have been carried out. The forest sector plan was elaborated and approved in 1997.

Belgium: Belgium is a federal State with a Federal Government, three Communities and three Regions. Forestry is a subject for which the three regions may develop their own policy and legislation. In the Brussels Capital Region and in the Walloon Region, the Forestry Code of 1854, together with more recent nature conservation and land-use planning legislation, provides the basic regulatory framework. The Forestry Code, as currently amended, is a long and detailed law establishing a "forestry regime" applicable to forests owned wholly or partly by the State or Communes. Separate provisions apply to private forests. The forestry regime determines that forests are subject to planning by ministerial orders, and includes a detailed procedure for the awarding of coupes, extending to their release after logging. The Code contains provisions on usage rights, offences and their prosecution, delimitation of State and Communal forests. Specific provisions concern access to forests by the public, subsidies and inventory in the Walloon Region.

The 1990 Flemish Decree on Forests, applicable for the Flanders region, replaces the 1854 Forestry Code, with the exception of the provisions for law enforcement. It regulates the definition of forests, the recognition of forest functions, the organisation of the forest service, forest management and protection, and provides for a planning system at strategic and executive forest policy levels. The Decree sets out requirements on management planning and for the declaration and management of forest reserves. The process of preparing the Flemish Forest Decree was an interesting example of formulation of regional forest policy by involving a large number of stakeholders, such as local authorities, rural planning entities and nature conservation groups.

Cyprus: The Forest Law of 1967 is fairly brief. It provides for the declaration of "Main" or "Minor" State forests and for the issue of licenses with respect to State forests. One section

grants and regulates rights to collect forest produce without a license to the inhabitants of specified villages. The possibility is envisaged to place private forests under Government control, to be managed by the forestry administration, at the request of their owners. Offences and regulatory powers of the Minister are set out in detail.

Denmark: The Forest Act of 1989, as amended in 1996, is directed at ensuring that the area of forest reserves is maintained and that they are managed in accordance with the rules of good and multiple-use forest management. Other legislation complementary to the Forest Act includes the 1992 Nature Conservation Act, the 1991 Planning Act, and the 1993 Act on Shelterbelts and Supplementary Deciduous Plantations. The Forest Act defines "good and multiple-use forestry" as management with due regard to increasing and improving wood production as well as nature conservation, landscape, historical values, environmental protection and recreational interests. It provides for the enhancement of forestry practices in accordance with this principle in existing forests, for permanent preservation of areas as untouched forests, for private afforestation of agricultural land with compensation for loss of income, for the development of products from forests and the timber industry, for consulting services in the forest sector, and for information, advisory and research activities. Agreements relating to forest management between the Minister and owners are envisaged. The Minister of the Environment is made responsible for implementation and enforcement of the Act, and is empowered, in case of violations, to order specific remedial measures. The Minister's power to delegate functions, as well as the power to inspect properties, is expressly set out. The procedure for appeals against decisions issued under the Act is set out. An advisory council with specified tasks is established.

Finland: The Forest Act of 1996 defines its scope of application, provides for the adoption of "regional forestry target programmes" and regulates felling, requiring the establishment of new tree stands as appropriate. It includes chapters on the protection of biodiversity and habitats of special importance and on "protection forests" and "protection zones". The provisions on enforcement envisage the possibility of setting up inspection committees to determine violations. Penalties are set out. Remedial measures may be negotiated between the administration and the violator. The procedure for prosecution of offences is specified. The responsibilities of "forestry centres" are briefly defined. A separate Act on Financing of Sustainable Forestry, of 1996, provides for State support to forestry. Institutional aspects of forest sector organisation are addressed by the 1996 Act on Forestry Centres and the Central Forestry Development Institute. In addition, a new Act on Forest Management Associations has been proposed in 1997. The Act on Insects and Fungi Damage has been in place since 1991, and requires owners and authorities to enact various preventive and remedial measures.

Important legislative changes refer to the reorganisation of administration (Tikkanen and Vehkamäki, 1996). The Forest and Park Service Act of 1994 establishes a state enterprise working under the Ministry of Agriculture and Forestry and, in matters of nature protection, under the supervision of the Ministry of Environment. The Forest and Park Service manages natural resources and other property under its competence in a sustainable and profitable way by taking into account protection and appropriate increase of biological biodiversity. Nature protection measures are carried out in accordance with the new Nature Conservation Act of 1997 and with determined operational and financial targets. Other duties refer to competencies under the Fisheries Act of 1982, the Terrain Traffic Act of 1991, the Hunting Act of 1993 and the Outdoor Recreation Act of 1973. In addition to timber production, nature protection and national parks, the tasks of the new service relate to recreational use of public lands, to unemployment relief in Northern rural areas, and to caring for local traditions and cultural heritage.

The 1997 Nature Conservation Act was prepared simultaneously with the Forest Act in order to harmonise conservation and biodiversity with management of commercial forests. It promotes the establishment of protected areas and their management, provides for compensations for the implementation of nature conservation programmes, improves the legal protection of forest owners and diversifies implementation methods for nature protection. The Act on Environmental Impact Assessment of 1994 requires the assessment of projects altering the nature of forest, peat land or wetland within uninterrupted areas of 200 hectares or more. Measures which qualify under these provisions are, for instance, new drainage, final fellings or regeneration with introduced species.

France: The *Code forestier* is an extensive body of law including both legislative provisions and implementing regulations. It includes rules on the organisation of the National Office for Forests, on the forestry regime in State forests applicable to sales of wood, on grazing, hunting, and usage rights. It also regulates forestry matters in private forests such as the establishment of regional forest owner centres, various kinds of management plans, and the constitution of forestry associations. Among the provisions on forest conservation, specific parts of the Code deal with clear felling and fire prevention and fighting. The Code regulates the status of protection forests and conservation measures in mountain areas. An inventory of forest resources is to be carried out and a national forestry fund is set up. The law Nr.85-1273 on management, development and protection of forests formally recognises production, protection and social utility as the principal objectives of national forest policy (Humbert, 1996). The law is an important clarification to the Code and consolidates previous legislation. It is complementary to the Nature Conservation Law of 1976 and its subsequent amendments. Following a recent governmental report on the national forest policy with important strategic proposals to realise the potential of forest resources (Bianco, 1998), a revision of the Code is in preparation. The Minister in charge of forestry matters has announced the intention of the Government to introduce the draft of a new forest law in Parliament in 1999. Lately this initiative was further developed in the aftermath of the catastrophic damages that French forests suffered as a result of strong storms and subsequent floods.

Germany: The Federal Forest Act of 1975 is a framework law which has not experienced major changes since its promulgation. It establishes the obligation for all forest owners to manage their forests in a sustainable manner and to consider the multiple functions of forests. Important elements in the application of this principle are the definition of forests, proper and sustainable forestry practices, the obligation of reforestation after final timber harvesting, the authorisation in the case of conversion of forest stands, the promotion of forestry development, the preparation of "framework plans" for forest districts or larger regional units, and the designation of protected forests and recreation forests. A considerable portion of the law deals with various forms of forest associations and with Government support. The law also requires the creation and updating of a Federal Forest Inventory. With regard to implementation of legal requirements, the competent authorities of the Federal Government have elaborated a National Forest Report in 1994, which contains a comprehensive sector analysis and general guidelines for sustainable management of the country's forests. In 1996 the Federal Ministry issued a Forest Policy Concept based on an up-date of the previous document.

Issues of forest resources protection and management are to a large extent regulated by member state (*Länder*) forest laws and regulations, adopted during the 1970's with subsequent amendments and modifications. They provide in particular for precautionary action with regard to environmental protection, limits on clear felling, protection of immature stands, obligations concerning tending and forest infrastructures, management planning, and

appropriate forestry practices. After reunification new forest legislation has been prepared in the five states which had belonged to the territory of the former German Democratic Republic (Weber, 1994). This process involved in particular establishing constitutional competencies, regulations with regard to the organisation of state forest services, determination of the rights and obligations of private and public forest owners, regulations referring to forest practices and sustainable management, and legal provisions dealing with applicable forest subsidies and compensations (Niesslein, 1992). An important aspect in reorganising forest utilisation has been the process of reconstitution of forest tenures by recognising private, communal and state forests, and by privatisation of land held previously under co-operative forest properties (Sasse, 1996). Both at the Federal and State levels numerous acts relate directly or indirectly to forestry matters. This refers, for instance, to the Forest Seed and Planting Stock Act, the Compensation for Forest Damage Act, the Forest Sales Fund Act, Federal and State Nature Conservation Acts, the Federal Emission Control Act and corresponding State Ordinances, Federal and State Hunting Acts, Regional and Landscape Planning Acts at Federal and Regional levels, and Federal and State Water Acts.

Greece: The main legal framework for the conservation and use of forest resources is formed by the Forest Code of 1969, the Law for the Protection of Forests and Forest Lands of 1979 and the Law for the Protection of the Environment of 1986. A Presidential Decree of 1981 on flora and fauna protection is relevant for forest conservation. Allowable interventions in forests and forest lands are regulated by a considerable number of presidential decrees (Goupos and Papastavrou 1992, 1996). Livestock grazing legislation has great importance for the management of forests and forest lands (Papanastasis, 1988).

Ireland: The Forestry Act of 1946, as amended, deals in some detail with the issue of felling licenses, and specifies offences and penalties. It includes detailed provisions on easements and rights of way and transfer and compulsory acquisition of land. The Forestry Act of 1988 provides for the transformation of the State forestry administration into a company for the development of forestry, which carries out forestry "on a commercial basis and in accordance with efficient silvicultural practices" (sec. 12). The Minister remains empowered to issue directions requiring the company to comply with policy decisions of a general kind, or to maintain specified services, or use specified land for particular purposes (sec. 38), as well as to make bye-laws to regulate access to or use of lands managed by the company (secs. 37 and 38). Relevant to forest protection and management are the 1976 Wildlife Act and the Planning and Development Act. The latter provides for environmental assessment and for a planting permission for adjacent initial afforestations of over 70 hectares. In 1996 a Strategic Plan for the Development of the Forestry Sector was launched. A Woodland Improvement Scheme, Urban and Amenity Forestry Schemes, a new Forestry Grant Systems as well as Forest Guidelines and a Code of Best Forest Practices have been introduced in recent years.

Italy: The regulation of forestry is still determined to a large extent by the Serpieri Forest Law of 1923, as amended, and by regulations issued to implement it. It deals with restrictions which may be imposed on owners of forested land in order to protect water resources or for other purposes such as protection against avalanches, land slides or wind erosion. The law sets out in detail the procedure which may lead to such imposition, and the penalties applicable in the case of violation of prescribed limitations. The law then specifies authorities and procedures for the arrangement and reforestation of mountain basins, regulating the awarding of contracts and access to credit in this regard. Specific provisions on the encouragement of forestry offer access to technical assistance and funding. Another part of the law deals with management of forests owned by local authorities and associations. It regulates land management practices of traditional associations such as the *università agrarie*, and the *comunanze*. The final part of the law provides for the functioning of the State forest

administration, and in particular the forest police (*Corpo forestale dello Stato*). The provisions concerning the forestry administration have subsequently been amended and complemented by various other pieces of legislation.

The Italian Constitution of 1948 (sec. 117), which is currently in force, and subsequent legislation transferred administrative responsibilities for forestry and related matters, including grazing and development of mountain areas, to the Regions, many of which have adopted their own forestry laws. A Central Ministry remains in existence, although with limited functions. Other relevant legislation includes laws for the protection of forests against fires and laws (including the Criminal Code) setting out offences and penalties.

Relevant regulations for forest resources management result increasingly from a broad range of environmental and primary sector regulations. New developments have occurred in fields like nature and landscape legislation, rural development and special programmes for mountainous regions with considerable impact on forest management (Merlo and Pettenella, 1990). This refers, in particular, to the Nature and Landscape Law of 1985 (*Legge Galasso*) which provides for regional landscape plans with consequences for the role of forest land and its management. Recent examples for the impact of this kind of regulation are the Presidential Decree of 1995 concerning the elaboration of a plan for the conservation and management of hydrographic basin resources, and the Presidential Decree of 1997 related to the conservation of natural and semi-natural habitats as well as wild plant and animal life. Another interesting development results from the growing impact of European Community regulations related to agriculture and from measures in favour of selected regions which are translated into specific plans and projects (Gajo and Marone, 1996). Italy offers an example of a country in which forestry is becoming more and more integrated into general land development schemes based on integrated planning and joint financial commitments under different programmes.

Liechtenstein: The 1991 Forestry Act's main objective is to maintain, cultivate and develop forests so that they can achieve their functions in a lasting manner. Regulations refer to the allocation of financial compensation and contributions in order to accomplish the law's objective.

The Netherlands: The 1961 Forest Law regulates cutting and reforestation, procedures and appeals, grants and loans. It establishes a Forest Information Council and sets out offences and penalties. With decentralisation, the provinces have gained an increased responsibility for forest management and application of the forest law. The Dutch Management Programme, adopted by Parliament, provides for reforms of the instruments for the purchase and management of nature areas and forests. Management agreements between government and managers tend to link objectives and financial means. Broader participation of private individuals in nature and forest management is to be achieved through instruments directed more towards defined results than target groups.

Norway: The Forest and Forest Protection Act of 1965, as amended, defines its objectives and scope, and sets out the functions of the Forest Authority and some related procedural aspects, such as the issue of decisions and appeals. Various provisions regulate harvesting, regeneration, afforestation and measures to be adopted in case of damage to the forest due to accidental reasons or inadequate management. A specific chapter is devoted to forest surveys and forest management plans. Another chapter regulates the declaration and management of "protection forests". Detailed provisions deal with the operation of the Forest Trust Fund. Most of the forestry regulations have been revised in 1994 with the aim to integrate preservation and enhancement of forest biodiversity more closely. In 1997 new regulations to be issued under the Forest Act have been proposed by the Ministry of Agriculture. Main issues

of the proposal include environmental requirements of the existing Forest Act, responsibilities of forest owners in terms of production, regeneration and environment, and the need for competence building in order to understand environmental values among those responsible for harvesting, silviculture and associated operations on forest properties.

Portugal: The Basic Law on Forestry Policy of 1996 devotes various provisions to objectives and principles which must guide forest policy. It then requires the preparation of regional forestry management plans (*pianos regionais de ordenamento florestal*), whose contents are specified, and of other management plans. The responsibilities of the State in the field of forestry are listed, and include the grant of appropriate financial instruments. They are vested in the forestry administration, whose functions are to be more specifically defined in other legislation. An interministerial commission and an advisory body on forestry matters are created. Basic provisions on research and on support to forest producers associations are included. Provisions on financial instruments establish a Forestry Fund with specified objectives, and require the setting up of a compulsory insurance scheme. An interesting aspect of the law are provisions which refer to the co-ordination with policies related to other sectors such as agriculture, industry, environment, taxation, and land-use planning.

Spain: The Forest Law of 1957 is very detailed, providing for a Register of forests of public importance, easements, purchase and exchange, exploitation of public and private forests, State financial support, reforestation, the functions of a special water resources protection service, protection against pests and fires, and control over the forest industry. The 1978 Constitution vests the "Autonomous Communities" with powers on a number of subjects, which include forestry, inland water fishing, hunting and aquaculture (sec. 148). The same provision envisages the possibility to extend their powers to other subjects, with the exception of those listed in section 149. These include basic environmental protection legislation and basic legislation on forests, forest exploitation and pastoral corridors.

As a result of these constitutional changes, the Federal State level remains responsible for general forestry economic activities, planning and co-ordination, forest construction works of public interest, international activities, national statistics and inventories of erosion areas and special protection areas, management of forest fire combating by aircraft, and national parks management. The Autonomous Communities are in charge of forest management and forestry development activities. Forest laws and regulations have been promulgated for *Andalucía* in 1992, *Cataluña* in 1988, *Extremadura* in 1998, *Madrid* in 1995, *Navarra* in 1990, *La Rioja* in 1995 and *Valencia* in 1993. The financial instruments of the 1957 Federal Law have been transferred to the Autonomous Communities acting to a large extent in the context of EU economic policies. This means that public financial incentives for reforestation, protection of forests against air pollution and fires, and environmental measures are largely implemented within the framework of applicable EU regulations.

The 1989 Federal Law on Conservation of Natural Areas and on Wild Flora and Fauna includes basic principles for the management of natural resources and the preservation of biodiversity. It requires the preparation of management plans for natural resources and regulates the declaration and management of protected areas. The law has an important impact in establishing Federal State authority for the declaration and management of national parks (Rojas Briales, 1992). It is part of the process for redefining constitutional competencies both between forest and nature conservation legislation as well as between the Federal State level and the Autonomous Communities at regional level.

Sweden: In 1994 a new Forest Act was promulgated (Svensson, 1994; Thelander, 1996). It replaced the act of 1979 which was in force with slight amendments during the 1980's.

The Act defines "forest land", includes provisions on the obligation of forest owners to establish new stands on forest land where appropriate, and provisions on felling. A specific part deals with "selected valuable broad-leaved forests", mainly requiring that such forests be permanently maintained and regenerated. Requirements for environmental impact assessments of some forestry activities are established. The functions of the National Board of Forestry and of County Forestry Boards include power to prescribe or prohibit certain actions in order to ensure compliance with the law, and to require the provision of guarantees to assure completion of applicable regeneration measures. Procedural matters, such as appeals against the administration's decisions, are dealt with. On the whole the new law has been simplified in comparison with the previous one, is less restrictive and gives more freedom of action in land management.

The new law is of considerable interest and the result of important changes in forest policy direction. An important aspect of the country's new forest policy is the fact that environment and wood production are now considered as policy objectives of the same priority and of equal weight in managing forest resources. Forest owners are responsible for environmental measures required on land used for timber production and have to bear the related costs. Costs for national parks and nature reserves are to be borne by the State. Extension services and the transfer of knowledge and know-how receive strong emphasis since forest owners now have greater responsibilities in forest resources management. Subsidies are restricted to improvements of the forest environment. Based on the two national policy goals, production and environment, the National Board of Forestry has developed nine sub-goals which address reforestation, silviculture, harvesting, forest protection, soil and water protection, nature conservation and cultural heritage, protection of valuable habitats, management planning, and international affairs. An action plan for biological diversity and sustainable forestry has been prepared. The effects of the new forest policy have been evaluated in 1997. Some modifications will be necessary but major changes are not to be foreseen in the near future.

Switzerland: After a long process of review a new Federal Law on Forests was adopted by the two Chambers of Parliament in 1991 (Schmithüsen, 1995). As was the case with the previous law, which had been in force since 1902, it is based on a joint constitutional competence for forestry matters. The federal level has a frame competence, focusing on the protection of forest lands and on the protective role of forests in mountainous areas. The cantons are required to adopt more specific provisions and the federal authorities must approve the canton's legislation (sec. 52). Cantons are also responsible for the implementation of federal regulations. In addition, they have a fairly large domain of own competencies which include forest management planning, support to public and private forest owners, and organisation of the cantonal forest services. Following the coming into force of the new Federal Forest Law, the cantons have revised their forest laws.

The federal forest law regulates clear felling, delegating cantons to adopt more specific management prescriptions. It includes basic provisions on land use planning in areas which include forests, with particular reference to authorisations to build. A number of provisions concern financing of forestry by the confederation. The law puts particular emphasis on the conservation of biological diversity providing a framework for biodiversity protection over the entire forest area. Silvicultural practices have to respect natural conditions, which means that they make allowances for the conditions prevailing on the site, for the natural fauna and flora, and for the landscape. Natural regeneration should be used wherever possible and planting has to be carried out with site adapted species. For ecological reasons and for the protection of the landscape, the cantons may refrain from utilising forest areas. Clear cuts and the use of environmentally hazardous substances in forests, i.e. Pesticides and herbicides, as well as

fertilisers, are prohibited. The cantonal forest services are in charge of implementing these regulations.

Turkey: Exemptions of particular lands from areas which must be formally considered as forests are specified in the 1982 Constitution of Turkey. The Forest Law of 1956, as currently amended, includes a detailed definition of forests, providing also for further exemptions. Forest Cadastral Commissions are created by the law to delineate forest boundaries. Some provisions concern forest village communities, whose transfer to other parts of the country is envisaged in case local conditions prevent their subsistence. Activities which are prohibited in forests are specified in detail. Provision is made for the declaration of protection forests. A specific law on afforestation of 1995 aims at increasing forest areas by encouraging institutions and private people to plant trees. Forests thus established are expressly made subject to the Forest Law, although products “may be utilized freely” in accordance with the same law. Specific provisions determine the revenues to be paid into the “Afforestation Fund” utilized by the Ministry of Forestry in the implementation of this law. The law on forest villagers of 1991 provides for the development of villagers who have been compulsorily moved to areas which have been excluded from State forest boundaries pursuant to the Forest Law. The Seventh Five-Year Development Plan (1995-1999) provides policies and strategies for the forestry sector based on the principles of sustainable forest management and biodiversity conservation.

United Kingdom: Forestry is mainly regulated by the Forestry Acts of 1967 and 1979, and the Plant Health Act of 1967. Also important is the 1981 Wildlife and Countryside Act, with amendments of 1985. The Department of Agriculture for Northern Ireland carries out its responsibilities under the enabling legislation of the Forestry Act (Northern Ireland) of 1953, as amended, and the Plant Health Act (Northern Ireland) of 1967, as amended. The Forestry Act of 1967 sets out the basic functions of the forest authorities (Forestry Commission). Within this framework a progressive reorganisation of the Commission has taken place, which has led to a separation into “authority” and “enterprise” functions, with separate line management. The Act allows the conclusion of forestry dedication agreements, providing for afforestation and long-term forestry use, between the Forestry Commission and private owners. The Act also regulates felling and provides for the creation of advisory bodies on forestry matters. Changes in the forest sector are largely based on ministerial statements and policy declarations, combined with a system of legal restrictions, tax advantages, grants and extension. The current forest policy statement of the Government was written in 1991 and followed in 1994 by a programme on sustainable forestry (Miller, 1996).

A set of guidelines drawn up by the Forestry Authority between 1990 and 1994 refers to forests and water, forest nature conservation, forest recreation, forest landscape design, and community woodland design. They contain prescriptive statements that detail, for instance, forest design and management in order to minimise impact on water, or they are more of an advisory nature in connection with grant aid applications. The possibility to claim the cost of planting trees against tax relief was abolished in 1988. The intention was to offer an equivalent through grants to which conditions can be attached more readily than in the case of tax relief. Under the Woodland Grant Scheme, farmers can get annual payments in order to compensate for loss of agricultural earnings. An interesting aspect is the role of forestry consultants, many of which have passed examinations to become Members or Fellows of the Institute of Chartered Foresters. This implies that they are bound by the ethics and codes of behaviour of this professional institute and appear on the approval list of members in consultant practice.

II. SIGNIFICANT TRENDS IN COUNTRY SPECIFIC FORESTRY LEGISLATION

2.1. Sustainable Forest Management

As in other regions of the world, the objectives of forest laws in Western Europe have become more diversified and comprehensive. Moving from a perspective which focused on wood as a sustainable resource, forest laws are now addressing a wider range of private and public goods and values. They acknowledge the equal importance of production and conservation. Their goals refer to the role of forests as multifunctional resources, to their economic potential, and to their importance in the environment. Increasingly they recognise the variety of ecosystems, the need to maintain biodiversity, and the preservation of forest lands for reasons of nature and landscape protection. Regulations on management and utilisation stipulate the need to balance timber production, recreational uses and the protection of forests for soil and water conservation and against impacts from natural disasters.

In 1957, the forest law of *Spain* already required forest exploitation to be consistent with conservation and improvement. Subsequent laws have tended to extend the concept of sustainability beyond the simple objective of sustained yield, to cover the multiple functions of forests and the protection of biodiversity. This was already apparent in the law of *Germany* of 1975, which includes conservation and sustainable management as its first objective, aiming at the maintenance of economic as well as environmental and recreational functions (sec. 1). The law of *Austria*, of the same year, is based on the principle that forest land should remain as such, and that forests should be managed to maintain the productivity of the soil and assure the permanence of forest functions, in accordance with the goals of succeeding generations.

The more recent law of *Switzerland* (1991) lists among management principles the obligation to manage forests in such a way as to fully guarantee their protective, social and economic functions on a long-term basis (secs. 1 and 20). The law of *Turkey* of 1956, as subsequently amended, requires the State to take into account the multiplicity of uses of the forests in undertaking forestry production activities (sec. 25). The law of *Denmark* (1989) devotes a long section to the definition of “good and multiple use forest management” (sec. 15). The sustainable development of natural resources is also one of the main objectives stated in the Law on Conservation of Natural Areas and on Wild Flora and Fauna of *Spain* (1989). The law of *Portugal* (1996) expressly refers to sustainability among its “basic principles” (sec. 2-1-c): forest and related resources must be managed in a sustainable way in order to meet the needs of present and future generations, within a framework of integrated rural development. The national forest policy is essential to ensure the sustainable development of forests (sec. 1), which is one of its main objectives (sec. 4).

The law of *Sweden*, although recent (1994), is more focused on requirements to guarantee regeneration, establishing that felling on forest land must be performed “in order to promote the establishment of a new stand, or to benefit the development of the existing stand” (sec. 10), and establishes that the Government may specify the maximum percentage of forest holdings which may be felled during a given period (sec. 11). The law of *Finland* emphasises also the requirement to safeguard the forests’ biodiversity, identifying particular natural habitats which must in any case be preserved in utilising forests (sec. 10). It provides for the prevention of disputes over management (and particularly logging) methods which tended to arise under the legislation previously in force (Vihervuori 1998), clarifying that two basic kinds of felling are allowed: “intermediate” (or “improvement”) felling, which aims at raising the remaining trees, and “regeneration” felling, aiming at raising a new tree stand (sec. 5).

The expanding range of policy objectives finds expression in an increasing variety of regulatory strategies embodied in modern forest laws. *Protection* regulations emphasise environmental and biodiversity considerations, nature and landscape protection, and restrictions associated with cultural and spiritual values. *Land use* regulations include zoning of the forest

land, control of forest clearing, protection of the permanent forest estate, and the creation of new forests through afforestation. *Utilisation and management* regulations determine responsibilities of forest owners with regard to sustainable production of wood and non-wood products, the protection of soil and water resources as well as public access to forests and recreational uses.

These is evidence of a trend – explicitly recognised in some recent legislation (e.g., *Switzerland*) – in favour of silviculture measures that are close to nature and of limitations on clear cutting. Silvicultural practices close to nature are a modern form of management designed to safeguard the natural diversity and stability of the forests. In some cases, public financial measures favour the conservation of broad-leaved forests and promote silvicultural measures for regeneration, tending and thinning in broad-leaved stands. Increasingly, there is complementary emphasis on regulatory measures such as (i) requiring special authorisation of planting non-stocked areas with high potential for nature conservation; (ii) requiring information from forest owners about the incorporation of conservation objectives into their felling plans; and (iii) stipulating environmental impact assessment of alternative silviculture and logging methods and the supply of monitoring information which demonstrates that biodiversity is maintained.

2.2. Forest Management Planning

The preparation of plans for the management of forests is frequently a legal requirement, although the nature and scope of this requirement varies. The *Austrian* law, for example, requires the preparation of a forest development plan for the whole country, and a technical forest plan is to be prepared by each owner (Part II). The *Spanish* law requires forests included in the “Register” (having been declared of public importance under section 6) to be managed under “economic planning schemes” (sec. 29). Private forests may be made subject to the appropriate management scheme or technical plans if particularly significant (sec. 30-2). The law of *Finland* requires regional forestry centres to draw up programmes for the concerned regions, in co-operation with all interested parties, setting targets for the promotion of sustainable forest management and indicating details on funding of the relevant activities (sec. 4). In *Switzerland*, the federal law assigns the task of regulating management planning to cantons (sec. 18). In *Norway*, the County Agricultural Board may order that a forest management plan be made for a forest or part of a forest when there has been a violation of the provisions on harvesting, or a specific order following inappropriate forest management, or the forest administration intends to mark trees for at least ten years. The Board must approve the plan (sec. 30).

Not all recent forest laws require the preparation of management plans. In *Sweden*, for example, the administration has tested innovative management techniques which do not involve the preparation of plans for every parcel of forests, and there are no particular requirements in this regard in the law.

More rarely the laws also specify that the required management plans have a binding effect. The *Portuguese* law requires the preparation of regional management plans, in co-operation with the concerned holders (sec. 5-2). Silvicultural activities must be carried out in accordance with the approved management plans in public forests, as well as in private forests exceeding a certain size (sec. 5-5). In case owners do not comply with the general forest management plan, the forest authorities may act on their behalf (sec. 6-4). The Law on Conservation of Natural Areas and Wild Flora and Fauna of *Spain* requires the preparation of management plans for all natural resources and lists their required contents. These plans are to have a binding effect, overriding any land use or other plans.

The traditional legal means for the *implementation of management plans*, or in any case for the control of logging, is the issue of logging licences, upon application of interested persons. In the case of *Great Britain*, a licence is generally required in relation to all lands (sec. 9). It may be denied "in the interests of good forestry" or agriculture or of "the amenities of the district", or for promoting the establishment of adequate reserves of growing trees (sec. 10-2). The *Swiss* law generally requires an authorisation by the forest service for any logging, although cantons may envisage exceptions (sec. 20). In *Austria*, permits by the forest service are required for removals which leave less than 60% of the full canopy. In *Cyprus*, any rights with respect to State forests may be acquired exclusively with a licence issued by the Director (sec. 8). The *German* law does not require any formal authorisation for logging, although one is required for clearing land (sec. 9), and more stringent provisions may be included in the legislation of the *Länder*. The *Irish* Forest Act requires any person who proposes to uproot any tree more than ten years old or to cut down any tree to give notice to specified forestry authorities (unless the tree is uprooted or cut down under a limited or general felling license). The Minister may then serve a prohibition order on the applicant (sec. 39).

A different approach to the authorisation of logging is taken in some more recent laws. In *Finland*, owners interested in logging issue a declaration, following which the authorities, in case there is reason to believe that the law could be violated or that the activity would not result in adequate regeneration, may negotiate conditions, including the payment of a security as a collateral to the compliance with the obligations related to regeneration (secs. 14 and 15). In case the process is not successful, the activity may be prohibited (sec. 16). Similarly, in *Norway*, as long as the management of a forest is in compliance with the law, owners may mark trees and harvest them, except in specified cases (secs. 15 and 16). If harvesting is carried out in violation of the law, the Forest Service may prohibit it or issue specific conditions (sec. 21). Pursuant to the law of *Sweden*, permission is required for felling on protected forest land, or forest land which is difficult to regenerate (sec. 16). Otherwise, forest owners must simply notify of felling operations to be carried out, specifying how they intend to satisfy the interests of conservation (sec. 14). Pursuant to the *Flemish* Forest Decree, fellings which are envisaged in approved management plans do not need to be reported.

2.3. People's Involvement in Forestry

2.3.1. Stakeholder Participation in Forest Policymaking and Governance

Current Western European forest laws, like their counterparts elsewhere in the world, reveal an increased emphasis on opening up forest governance structures and policymaking processes to public scrutiny and participation. This trend manifests itself in a variety of ways in specific laws. Some require the participation of the public in the preparation of management plans or in the processes leading to the demarcation of protected areas. For example, the *Austrian* law enables concerned citizens to take part in the drafting of "regional forestry plans" and "danger zoning plans". The *German* Federal Law requires all concerned public agencies and owners to be consulted in the preparation of "forestry framework plans" (sec. 7). In *Finland*, in preparing the required "forestry target programmes", forestry centres must co-operate with "the parties representing forestry in the area" (sec. 4). The consultation of "owners, municipalities and other authorities" is required before the declaration of "protection forests" or "protection zones" by the Government (sec. 12).

Pursuant to the law of *Portugal*, the participation of different social, professional and socio-economic groups in the formulation and implementation of forestry policy must be promoted by the authorities, and citizens are also expressly called upon to participate;

responsible authorities must mediate among conflicting interests in the implementation of the forestry policy (sec. 3). Regional forestry management plans must be submitted to the public before approval (sec. 5-2). The law generally envisages the creation of incentives to support private forest producers associations (sec. 17). In the *Spanish* Law on Conservation of Natural Areas and Wild Flora and Fauna, the process leading to the adoption of natural resource management plans must necessarily include public information and consultation, and even during such a process any activities which conflict with the objectives of the proposed plan cannot be undertaken (sec. 5-7). A specific form of consultation of the concerned Sami village in the case of felling being allowed where reindeer husbandry takes place is envisaged in the law of *Sweden*, with a view to meeting reindeer husbandry needs (secs. 20 and 31).

In *France*, a form of participation of forest owners in administrative action regarding their land is envisaged in the appointment of administrators of the regional centres of forest ownership, which are responsible for promoting private forestry development and approving management plans. The Code requires the election of two thirds of these administrators by owners of forests above a certain size, and of one third by organisations representative of private forests (sec. L. 221-3). The law of *Norway* establishes a more stringent obligation for the administration, requiring that persons to be affected by any decision of the forestry authorities must be given the opportunity to state their views, except where immediate action is needed (secs. 12 and 13). It also requires that proposals for the declaration of "protection forests" be made available to the public for at least four weeks (sec. 32).

Even where public participation is not expressly required in the forest law, forestry decision-making processes may include it as a matter of practice or by other legislation. In *Switzerland*, for example, although the Federal forest law does not deal with this issue, in practice management planning in the cantons is always subject to consultation. The Federal subsidiary legislation issued to implement the Federal forest law requires cantons to keep the public adequately informed in relation to forestry management planning (sec. 18).

Various laws promote the involvement of different stakeholders in the making of governments' decisions by creating advisory bodies on forestry and related matters. A Forestry Advisory Council in which a wide representation of interested parties (including forest industry and trade, agricultural and environmental associations and research institutions) is created pursuant to the law of *Portugal* (sec. 15). A Forestry Council with advisory functions is also created by the law of *Denmark* (secs. 41 and 42), and central and regional advisory committees are established by that of *Great Britain* (secs. 37 and 38). The *Belgian* law envisages the possibility for the Government to appoint, in the Walloon region, an advisory commission including owners, users and nature conservation associations (sec. 186bis). The *Irish* Forest Act of 1946 also enables the Minister to establish a consultative committee, with experts in related subjects, as well as one representative of afforestation societies and one owner of woodlands (sec. 10).

The overall shift to a more open and participatory process means that issues such as access to information and procedural transparency are gaining increasing emphasis in forest legislation. This applies to information and debate in parliament and other political entities, to information and arbitration processes among different interest groups, and to continuous dialogues between forest owners and public authorities. It applies as well to the collection and availability of technical information about forests – new legislation provides for monitoring and evaluation systems which produce information on forest health, on the composition of forest stands, and on the impact of uses affecting forest ecosystems and biodiversity. There is also demand for more information on the economic performance of forest enterprises and on the financing of services rendered to the public. Process steering provisions regulate organisational

structures and competencies, as well as communication between governmental services and non-governmental organisations. This implies a legal framework for decision-making procedures among public agencies, the designation of lead agencies, the organisation of public hearings, and the implementation of environmental assessment and evaluation procedures. It also calls for a distinction between competencies related to investment and development versus those related to resources protection. As a result, there is an increasing tendency to separate more clearly the regulatory function of public forest services from their role as managers of forest lands.

2.3.2. Support for Collaborative Management Approaches

'Collaborative management' refers here to a variety of approaches that are designed to enhance the involvement of local people and groups in forest management. Such approaches may include collaboration *amongst* forest owners or users, as well as collaboration *between* private and community groups on the one hand, and public forest administrations on the other.

Collaborative management can and does take a wide range of forms. For example, there has long been a tradition of communal forest management in many parts of Western Europe, and communal forests continue to exist in a number of countries. There are few explicit legal provisions, however, that pertain to such forests or that otherwise tend to encourage the participation of local persons and groups in community forestry types of arrangements. Under the *Italian* law of 1923, in the case of forests belonging to Communes, Communes may form *aziende speciali* (special enterprises) for the management of forests and pastures. These *aziende* are created by the Communal Council, which is elected by the people, and supervised by a Commission whose members are appointed by the Communal Council among experts (secs. 139-149). The law of *Cyprus* allows the possibility of placing "Communal forests" under the control of Village Commissions, which may make relevant rules, subject to the approval of the Director of Forestry (reg. 9). Villagers are allowed to gather some forest produce without a license (sec. 9). The law of *Turkey* allows the possibility of allocating State lands to village communities for plantation purposes (sec. 57). In this case, technical assistance and seedlings must be provided on request. These plantations may be registered in the name of the planter after five years.

More common features of recent Western European laws are provisions that focus on collaborative action amongst private forest owners, given the high incidence of this form of forest tenure throughout the region. For example, the creation of associations and co-operatives for undertaking forestry activities is frequently encouraged by legislation and by funding programmes, including those enacted by the European Community described below. In addition, sometimes the law envisages co-operation, or the possibility of entering into specific agreements, between such joint private forest enterprises and government.

The *German* Federal Law regulates in detail the operation of "private silvicultural business affiliations", which may be set up by forest owners for the purpose of improving management and overcoming the disadvantages of fragmentation (secs. 16-20). In order to obtain recognition by the proper authority, these affiliations must, among other requirements, specify their tasks in a "Charter", which must envisage disciplinary instruments in case of violations by members. A "public law silvicultural business organisation", with the status of a public law corporation, may be set up in particularly disadvantaged regions among private owners, where at least two thirds of the owners agree to its establishment and the proper authority has unsuccessfully requested concerned owners to set up a private silvicultural business affiliation (secs. 21-36). "Forestry associations" set up by such affiliations and public

law silvicultural business organisations for the purpose of adapting silvicultural production to market requirements may also obtain formal recognition (secs. 38 and 39).

In *France*, “regional centres for forest ownership” are created for the purpose of developing the productivity of private forests, co-operation among owners, extension, and preparation of regional plans and approval of “simple” management plans (sec. L. 221-1). The latter must be prepared by owners of forests which may be considered appropriate for management and regular exploitation, whose size and other characteristics may be specified by the administration (sec. L. 222-1/2). Owners must then abide by the contents of the plan. Private forests may also be managed under contracts entered into with the *Office national des forêts* (sec. L 224-6). The *Swiss* Federal law also expressly envisages the possibility for the Confederation to assign forestry conservation tasks to forestry associations (sec. 32).

In *Italy*, regional forestry legislation provides for numerous financial incentives for activities carried out in a collective manner. For example, the law of Friuli of 1970 grants subsidies to consortia, co-operatives or other entities which may undertake to build forestry infrastructure. Common forest management for multiple purposes has long been experimented in some areas of Italy, especially in the North, but few relevant provisions can be found in the principal forest law. For example, financial support from the State may be given to pasture improvement works in mountain areas, also if undertaken by users' associations, regardless of the ownership of the concerned lands (sec. 93). Technical assistance is generally provided free of charge for purposes of protecting small landowners and to encourage associations among them in mountain areas (sec. 105).

2.4. Regulation of and Support to Private Forestry

Newly enacted or amended forest laws have generally moved in the direction of reduced regulation and control of communal and private forests in management planning, forestry operations and commercialisation of forest products. New legislation focuses on setting frame conditions by defining minimum requirements and performance standards. It confirms forest owner rights to use services offered by the private sector. Guidelines for best management practices and approvals by exception are increasingly used. In addition to incentives designed to increase forest production, new ones relate to maintaining biodiversity and nature conservation. Stronger support is given to measures designed to overcome structural deficiencies by stimulating research and technology transfer, more integration between forestry and other sectors of primary production, and more investment in increasing the competitiveness of the wood industry sector in national and international markets.

Most of the laws reviewed for this study impose a number of restrictions and obligations on private forest owners. Many of the same laws, however, allow them to obtain compensation for the limitations thus placed on their rights. In many countries, restrictions on the utilisation of private forests are not imposed only by the principal forestry legislation; they may also result from conditions for access to funding (as noted in the following section).

The law of *Great Britain* requires a license for felling trees on private lands, except for thinning or small quantities (sec. 9). However, paying compensation to owners to whom a felling license is denied is envisaged (sec. 11). Private land may be devoted to forestry under forestry dedication covenants or agreements entered into by the Commissioners and the concerned owner (sec. 5). In this case, a specific working plan is approved and a felling license, requested in compliance with it, may be denied only in exceptional cases (sec. 14). Under the law of *Cyprus*, forests may voluntarily be placed under Government “protection, control and

management". Conditions regarding liability for expenses, duration etc. are agreed between the owner and the Director of Forests (sec. 10).

In *Italy*, the 1923 law allows owners of land requiring reforestation to carry out the required works themselves and request reimbursement of expenses (sec. 55). For the purpose of carrying out works in lands which have been made subject to restrictions under the law, the forestry administration may form consortia with local authorities. In this case, owners may offer to carry out themselves the required works, or hand over their lands to the authorities for the duration of the works (sec. 76). They may also set up consortia with other owners for the same purposes (sec. 79). Consortia may also be compulsorily set up, and in this case, if concerned landowners do not wish to participate, they may sell the land to the consortium, or lands may be expropriated by it (sec. 79). In the ancient forms of associations among forest owners for the management of forests, such as *università agrarie*, *comunanze* etc., the law establishes that decisions may be taken by the majority of "interests" and at least one third of components, thus becoming applicable even with respect to the minority which may be in disagreement.

In *Spain*, pursuant to the law of 1957, the Forest Administration may regulate or limit the exploitation of forest products by forest owners. In cases where a privately owned forest is of importance from the productive, economic or social standpoint, the Forest Administration may require that exploitation of its products be subject to the appropriate management scheme or technical plan. Forests included in a list of protection zones must in all cases be utilised in accordance with technical plans prepared by the Ministry of Agriculture. The Forests Administration may require their owners to carry out improvement plans which may receive the maximum amount of financial assistance allowed under the same law (sec. 30). The possibility of grouping forests, whether public or private, must be investigated when various forested areas, taken together, have a large yield capacity and at the same time are capable of constituting management zones, or when this would be useful for the co-ordination of forestry and pastoral interests or for reforestation. Associations for this purpose may be voluntarily (if at least 60% of the total land area is covered) or compulsorily formed, and may then receive financial assistance for improvements (sec. 31). The Directorate-General of Forests may also, after hearing the views of the concerned Commune, undertake the procedure for consolidation of holdings set out in other legislation (sec. 36). Owners may be required to take specific pest control measures, for which purpose they may have recourse to financial assistance provided under the law (sec. 65). The Forest Administration may form associations with landowners for purposes of reforestation, thus acquiring timber rights (sec. 42). Reforestation may be compulsorily ordered by decree if it is of public importance (sec. 50).

In the principal forest law of *Turkey*, management plans for private forests (whose definition excludes areas below three hectares) must be prepared by the owners, and in case they fail to do so by the administration at their expense (sec. 51). The *Portuguese* law requires any silvicultural activities in forests above a certain size (to be established in regional plans) to be carried out on the basis of a management plan to be approved by the national authorities (sec. 5-5). State support to private owners includes access to a Financial Fund to compensate owners of sensitive ecosystems with respect to which restrictive measures have been imposed, and activities of delimitation of forests among neighbouring owners (sec. 18). Pursuant to the *Flemish* Forest Decree, owners of forests which are larger than 5 hectares are required to prepare a management plan. Once the plan is approved, fellings which are envisaged in it do not need to be reported to the administration.

Some *Scandinavian* countries tend to grant a higher degree of independence to forest owners. As already noted, the legislation of *Finland* and *Norway* allows owners to identify and harvest trees as appropriate, without reporting to the administration in every case, as long as

management is carried out in compliance with the law. The authorities may take initiatives, prohibit particular activities or request specific information on management. The forest administration may request an extract of voluntarily prepared management plans in specified cases – mainly suspected violations or where the owner has requested that forest service authority do the marking of the trees. The *Finnish* law requires owners to establish a new seedling stand after regeneration felling (sec. 9). The *Norwegian* law generally requires owners to restore productivity after felling (sec. 16). If managing forests in a way that preserves biodiversity results in a significant loss to the owner, special permits may be granted in order to minimise losses, unless State funding is provided (sec. 11). If, in protection forest areas, even the taking of wood for domestic use is restricted, compensation must be paid to the owner (sec. 12-3). Proposed harvesting in “protection forests” must be reported in advance to the administration, which must mark trees (sec. 33).

Pursuant to the law of *Sweden*, owners are responsible for establishing and tending new stands (sec. 8) and for notifying the County Forestry Board of felling operations, drainage works and how they intend “to satisfy nature conservation and cultural heritage preservation interests in connection with the planned felling” (sec. 14). In *Denmark*, the Minister may agree silvicultural measures with forest owners (sec. 21). A specific provision concerns fragmentation of properties, requiring the Minister to promote “amalgamation” of stands or the adoption of joint silvicultural measures (sec. 26). The Minister has the power to consider areas neighbouring forest reserves of significant importance for their management as forest reserves, even if private (sec. 7-2).

2.5. Government Financial Support to Forestry

Rules on funding of forestry activities by the State occupy a considerable part in the legislation of various countries. In some cases, State funding is used to compensate owners whose rights have been limited or lost. For example, the *Italian* Forest Law of 1923 already required that, in case particular restrictions are imposed on forest owners, these should be compensated for any financial loss (sec. 17). It also allowed owners of lands which are slated as needing particular works to obtain compensation in the form of a fixed annual amount (sec. 50). More frequently the laws envisage funding of particular initiatives, such as setting up plantations or managing existing forests.

The *Finnish* Act on the Financing of Sustainable Forestry grants State support to specified “measures” which promote the sustainable management of forests, including protection of forest (sec. 1). Financial support is granted upon submission of a satisfactory plan of activities (sec. 3). The Act expressly excludes the possibility of financing works resulting from the devastation of forests or which are in any case an obligation of the owner (sec. 4), thus reserving funding to more entrepreneurial activities. Admitted types of works are specified and include regeneration, tending of young forests, harvesting of energy wood, ditching and road construction (sec. 5). Support may consist of grants or loans, depending on the type of activity to be financed (sec. 8). The country is divided into zones which may be entitled to different percentages of funding (sec. 9). Basic conditions for loans are specified (sec. 12).

In *Germany*, the federal law establishes that forestry must receive State support, particularly with a view to guaranteeing the profitability of investments on forest conservation and sustained management. Grants may be awarded to forestry associations set out under the same law or private owners (sec. 41). A Forestry Marketing Fund Act of 1990 establishes a specific fund to enhance the marketing and promotion of German forestry products. In *Sweden*, subsidies from the State may be granted particularly to assure the regeneration of selected valuable broad-leaved forests (sec. 28).

The *Spanish* law envisages the possibility of providing technical assistance, subsidies and advances for improvement works in forests, subject to a number of listed conditions, which include the requirement that the proposed reforestation is auxiliary to the treatment of the main forest stand, that provision is made for forest roads, or that the objective be pasture land development (sec. 32). Similar provisions envisage support to reforestation and related activities (secs. 43 and 44). In this case, the conditions are that the proposed work must have a definite economic and social purpose, or that it must contribute to the protection of watersheds. Where assistance has been provided for reforestation, the concerned forests are placed under the supervision of the administration (sec. 49). A specific provision envisages economic aid for soil conservation works in both public and private land (sec. 59).

The law of *Portugal* lists the objectives which must be pursued by State support in the field of forestry, which include the enhancement and expansion of the forest estate, the improvement of reproductive materials, building infrastructure, training and technical assistance (sec. 9). A Financial Fund is established for these purposes (sec. 18). The law also requires the setting up of a system of compulsory insurance, with affordable costs, to be gradually extended to all forestry practices (sec. 20). A National Forestry Fund is established by the *French* Code, mainly to cover expenses in relation to afforestation, reforestation, forest improvement works and any activities aiming at an increase of availability of forest resources (sec. L 531-1). These objectives are a responsibility of the Minister, and may be imposed upon particular private owners who, in this case, have access to the Fund to cover expenses. Revenues derived from a forestry tax are paid into the Fund (sec. L. 531-2). In France, various other public funds (for rural development, land management etc.) may provide grants or low-interest loans for forestry.

A particular mechanism to provide funds for investments in forests tied to specific revenues derived from them is set out in the *Norwegian* law. A Forest Trust Fund is established, with the purpose of promoting "silviculture, forest production and forest operation to the advantage of the forest from where the wood is supplied" or other forest belonging to the same owner (sec. 46). Payments into the Fund are made on sales, expropriation of trees or timber, or use of it by the owner other than for farming or forestry purposes (sec. 41). The County Agricultural Board may prescribe silvicultural measures in particular forests whose productivity has been hampered, using a portion of the Fund, plus any possible public grant (sec. 23-1).

Some laws include provisions which ensure that proposals submitted for funding, once they have received it, are actually and properly implemented. One example is the law of *Denmark*, which envisages State subsidies for the enhancement of broad-leaved woodlands, and particularly for planting or tending to the regeneration of forest reserves, production of seeds, research (sec. 19). The Minister may order reimbursement of subsidies in case false information has been given, or conditions have not been met, or a project is not carried out in accordance with the application (sec. 34).

Under the *Italian* law of 1923, funds which may be made available for afforestation or improvement of degraded forests by the State can be fully paid only five years after the cultivation is fully established (sec. 90). Comprehensive provisions on the obligations of beneficiaries are found in the *Finnish* law. In the case of a loan, the property is pledged as a security (sec. 13). The areas which have benefited from financing must be appropriately maintained for at least fifteen years. Loans must also be immediately repaid in case the utilisation of the area for commercial purposes is prevented (secs. 15 and 16). Specific provisions concern the recovery of loans (secs. 28-30).

2.6. Harmonisation with Forestry Related Policies and Legislation

The integrated planning and management of forestry and related activities such as agriculture, grazing, and others which could take place in forested areas or neighbouring areas has become a necessity. The forestry laws which have been examined rarely offer examples of provisions which embody this concept in practical terms, for example by requiring the preparation of integrated management plans. The need to integrate forestry policy with other related government policies is, however, recognised in the law of *Portugal*, which for this purpose requires that an inter-ministerial commission be set up (sec. 13). The issue may be addressed in Western European countries in various ways, in particular through environmental or land use planning legislation. The *Italian* Mountain and Regional Development Acts of 1952 and 1971 concern the establishment of *comunità montane*, local authorities with specific responsibilities in integrated agro-silvo-pastoral territorial management.

Provisions on activities related to forestry, and especially grazing, are not uncommon in the principal forestry legislation. For example, the *Italian* law regulates grazing in lands which have been made subject to "restrictions for hydrogeological purposes", prohibiting it in young or degraded forests (sec. 9). The legislation of *Spain* requires grazing in forests to be organised in such a way as to be compatible with forest conservation and improvement and to permit the maintenance of the largest possible head of livestock. In case of forests with full tree cover, as well as land liable to erosion, if the owner fails to carry out conservation measures prescribed by the administration, grazing may be limited or prohibited (sec. 35). In forests of public importance, priority must be given to livestock belonging to local inhabitants and meeting their needs, and surplus pasture land may be alienated (sec. 35).

The *Belgian* law of 1854 regulates grazing among other usage rights, generally tending to phase out such rights (secs. 84 and 85), and vesting the administration with all relevant powers to decide their extent and applicable conditions (secs. 93-102). The *French* Code also regulates grazing (secs. L. 136 and 137).

A pressing issue in many countries relates to the utilisation of forest land for other uses, and whether and how this should be addressed in the forest law. In most cases, general *land use planning* aspects are not dealt with in the forestry legislation. The *Swiss* law does, however, address this issue in some detail. It allows clearing of forest land upon an authorisation which may be issued under "exceptional" circumstances, provided that: (a) the proposed development cannot be placed elsewhere; (b) conditions relating to land use management are met; and (c) the clearing of land does not involve serious risks for the environment. It specifies that financial interests cannot be considered significant, the interests of protecting nature and landscapes must be respected, and that in any case such exceptions to the general prohibition to clear forests must be temporary (sec. 5). These provisions have clarified the relationship between forestry and land use planning legislation, since no forested areas may be classified as building areas without a prior authorisation by the forestry authorities. The applications for deforestation and building of an area are to be dealt with in a co-ordinated way by the respectively responsible authorities (Petitpierre, 1999).

The lack of adequate land use planning mechanisms may easily lead to disputes affecting the state of the forests. In *Turkey*, the legislation (Constitution and principal forestry legislation) provides a detailed definition of forests, which has progressively been modified to exclude particular categories of land. Delineation of the forests' boundaries, however, tends to be done in isolation from the consideration of conflicting land use needs, although often under the pressure of building speculations. Many of the amendments have been widely criticised,

having resulted in the legalisation of the deforestation of vast areas. There has been an enormous number of disputes and consequent court cases in this regard.

2.7. Protection against Forest Fires

Provisions on protection against forest fires are frequent in the legislation which has been examined. The law of *Spain* includes a specific chapter on "Fire protection and forest insurance", establishing activities such as "study of fire-fighting methods", to be carried out by the Ministry for this purpose. When a forest zone is declared to be a "danger area", concerned private owners must create and maintain firebreaks as specified (sec. 70), and agricultural fires must be authorised by the forestry authorities (sec. 71). Under the *Norwegian* law, when a forest has been damaged by fire, pests or other natural incidents, an insurance company which may be obliged to compensate damage must pay directly to the Forest Service Authority compensation for replanting and up to 30% of the remaining compensation. If it appears that silvicultural measures to facilitate regeneration may not be otherwise funded, the County Agricultural Board may order that a portion of the amount deposited in the Forest Trust Fund be used (sec. 22-2).

The *Italian* Law on the Protection of Forests against Fires of 1975 requires the preparation of specific regional and inter-regional plans, which should indicate the degree to which the various forest areas are prone to fires and the existing means of prevention and fighting, identifying additional measures to be taken (secs. 1 to 3). Regional administrations must notify the periods in which the risks of fire are the most serious every year, and during these periods lighting fires and any other activities which may cause the spreading of fires are prohibited. An important provision introduced by this law is the prohibition to build on land which has been destroyed or damaged by fire. This obviously tends to prevent fires set with a view to property speculations. However, subsequent legislation de-classified this type of offence, making it only an administrative (rather than a criminal) one.

The law of *Portugal*, as noted above, requires the establishment of a system of compulsory insurance, to be used, among other purposes, for damages caused by fire in forests.

III. FORESTRY RELATED EUROPEAN COMMUNITY LEGISLATION

A substantial expansion of international law on the environment and development has taken place during the last twenty years. Several agreements on sustainable use of natural resources have been adopted, but the international legal instruments which address forestry matters still have, to a large extent, the character of soft law (Sand, 1990; Tarakovski, 1995; Humphreys, 1996; Glück et. al., 1997). The two instruments specifically related to forests which were adopted at UNCED in 1992 –Chapter 11 of Agenda 21 and the Forest Principles– are comprehensive in scope but not legally binding, although they have enabled governments to institutionalise world-wide and regional co-operation (Schmithüsen and Ponce, 1996).

In Western Europe, however, a considerable amount of legislation regarding forests has been adopted by the European Community. The greatest part of this legislation provides funding opportunities for afforestation, protection of forests, the harmonisation of procedures for data collection and related activities.

Financing of forestry activities is made available either as a "structural measure" or by specific legislation supporting forestry measures in agriculture. An example of the latter was

Council Regulation (EEC) No 1096/88, which established a Community scheme to encourage the cessation of farming, compensating farmers who set aside for a minimum of five years at least 20% of land allocated to excess agricultural production. An additional grant was allowed if the concerned land was devoted to forestry production.

Council Regulation (EEC) No 2080/92 establishes a Community aid scheme for forestry measures in agriculture, covering both production and protection-oriented projects. The scheme may comprise aid for afforestation costs, an annual premium to cover maintenance costs in the first five years, another annual premium to cover losses due to afforestation of agricultural land, and investment aid for improvement of woodlands (art. 2). Member States must implement the scheme by means of national or regional multiannual programmes, which are to set out more specific conditions and to be submitted to the Community for approval (art. 4). Member States may also devise zonal afforestation plans, reflecting the diversity of environmental situations and agricultural structures (art. 4)¹.

Among the Regulations recently adopted for the operation of the Community's "Structural Funds" for the period 2000-2006, Council Regulation (EC) No 1257/1999² includes specific provisions on silviculture. The Regulation considers forestry as an integral part of rural development. It envisages support to forestry for the "maintenance and development of the economic, ecological and social functions of forests" owned by private persons or municipalities in rural areas (art. 29). Measures which may be eligible for funding include environmentally compatible afforestation, investment to improve the value of forests or the harvesting and processing of forest products, and the "establishment of associations of forest holders that are set up in order to help their members to improve the sustainable and efficient management of their forests" (art. 30). In addition to planting costs, support may include annual premiums to cover maintenance costs for a period of up to five years, and to cover loss of income resulting from afforestation for a maximum period of twenty years.

A significant contribution to the protection of European forests' **biodiversity** is Council Directive (EEC) 92/43 on the conservation of natural and semi-natural habitats and wild flora and fauna (the "Habitat Directive"). The Directive envisages the creation of a European network of protected areas ("Natura 2000"), currently being set up by the member countries.

Another important contribution of the Community towards adequate forest management is the legislation concerning the uniform collection of **forestry data**. Some Regulations require the establishment of a common Forestry Information and Communication System, covering the existing situation of woodlands, developments in afforestation, exploitation, processing and marketing of forest products. Member States may be required, after obtaining the opinion of the Standing Forestry Committee, to adjust or supplement their data collection procedures.

Community legislation concerning **forestry statistics** includes:

¹ This regulation, as well as the previous Regulation No. 1096/88, have been criticised because the only direct beneficiaries are farmers, while no attention is given to other forest enterprises which tend to be in a weaker position, as harvesting and management services enterprises or associations of forest land-owners. Market distortions have been determined by the new forest enterprises, which, unlike existing ones, could cover most investment costs with the new incentives (Pettenella).

² Council Regulation (EC) No 1257/19 of 17 May 1999 on support from the European Agricultural Guidance and Guarantee Fund (EAGGF) and amending and repealing certain Regulations. The Regulation was adopted within the renewed framework of the Structural Funds as defined in Council Regulation (EC) No 1260/1999 of 21 June 1999 laying down general provisions on the Structural Funds.

- *Council Regulation (EEC) No 1615/89 of 29 May 1989 establishing a European Forestry Information and Communication System (Efics);*
- *Council Regulation (EC) No. 400/94 of 21 February 1994 extending Regulation (EEC) No. 1615/89 establishing a European Forestry Information and Communication System (Efics);*
- *Council Regulation (EC) No 1100/98 of 25 May 1998 amending Regulation (EEC) No 1615/89 establishing a European Forestry Information and Communication System (Efics).*

A number of other regulations concern the protection of the Community's forests against **atmospheric pollution**. Council Regulation (EEC) No 3528/86 on the protection of the Community's forests against atmospheric pollution, as amended, establishes a Community scheme to protect the forests (and "thereby contribute to safeguarding the productive potential of agriculture") (art. 1). Member States must draw up a periodic forest health report on the basis of a uniform inventory (art. 3), and may obtain financial support for this purpose in the amounts specified (art. 12). The scheme also supports experiments in the field, pilot projects, etc (art. 4). A Committee on Forest Protection, with not more than two representatives for each member State and a representative of the Commission, examines the proposed measures, which may be adopted if approved with a qualified majority, or must otherwise be referred to the Council (art. 7). The Committee also acts as an advisory committee (art. 8).

Regulations on **atmospheric pollution** are the following:

- *Council Regulation (EEC) No 3528/86 of 17 November, 1986, on the protection of the Community's forests against atmospheric pollution;*
- *Commission Regulation (EC) No 2278/1999 of 21 October 1999 laying down certain detailed rules for the application of Council Regulation (EEC) No 3528/86 on the protection of the Community's forests against atmospheric pollution;*
- *Commission regulation (EEC) No 1696/87 of 10 June 1987 laying down certain detailed rules for the implementation of Council Regulation (EEC) No 3528/86 on the protection of the Community's forests against atmospheric pollution (inventories, network, reports) (and amendments);*
- *Council Regulation (EEC) No 2157/92 of 23 July 1992 amending Regulation (EEC) No 3528/86 of 17 November, 1986, on the protection of the Community's forests against atmospheric pollution;*
- *Commission Regulation (EC) No 1091/94 of 29 April 1994 laying down certain rules for the implementation of Council Regulation (EEC) No 3528/86 on the protection of the Community's forests against atmospheric pollution (and amendments);*
- *Council regulation (EC) No 307/97 of 17 February 1997 amending Regulation (EEC) No 3528/86 on the protection of the Community's forests against atmospheric pollution;*
- *Commission Regulation (EC) No 1390/97 of 18 July 1997 amending Regulation (EC) No 1091/94 laying down certain detailed rules for the implementation of Council Regulation (EEC) 3528/86 on the protection of the Community's forests against atmospheric pollution*

There are also several Regulations on the **protection of forests against fires**. Council Regulation (EEC) No 2158/92 on protection of the Community's forests against fires establishes a scheme for the purposes of reducing the number of fire outbreaks and their extent (art. 1.2). Relevant studies and information campaigns may obtain funding under the scheme, and member States must submit yearly programmes in this regard to the Commission (art. 1.3/4). States must classify their territory according to the degree of forest-fire risk, and

some parameters are given in order for areas to be classified as areas of high risk (art. 2). In relation to high risk and medium risk areas, forest-fire protection plans, with specified contents, must be prepared (art. 3). A uniform system of information on forest fires (including place, time, causes, consequences etc.) is set up. Funding may be obtained also in this regard (arts. 5 and 6).

Regulations on **forest fires** are the following:

- *Council Regulation (EEC) No 2158/92 of 23 July 1992 on protection of Community's forests against fire;*
- *Commission Regulation (EEC) No. 1727/1999 of 28 July 1999 laying down certain detailed rules for the application of Council Regulation (EEC) No 2158/92 of 23 July 1992 on protection of Community's forests against fire;*
- *Commission Regulation (EC) No 804/94 of 11 April 1994 laying down certain detailed rules for the application of Council Regulation (EEC) No 2158/92 as regards forest-fire information systems;*
- *Council Regulation (EC) No 308/97 of 17 February 1997 amending Council Regulation (EEC) No 2158/92 of 23 July 1992 on protection of Community's forests against fire.*

Other Community legislation is in place concerning processing and marketing of forestry products³, classification of roundwoods⁴ and forest reproductive material⁵, as well as the setting up of a Standing Forestry Committee⁶.

The various measures in favour of the forestry sector have been taken and implemented within existing Community policies, while a “common forestry policy”, which has been the subject of a wide debate, has never been adopted. With a Resolution of 15 December 1998, however, the Council of the European Communities has adopted a forestry strategy for the European Union⁷. The document identifies, among the strategic substantial elements of sustainable forest management, the principle of subsidiarity, the participation in international processes, the need to improve co-ordination in all policy areas relevant to the forestry sector within the Commission, between the Commission and member States, and between member States, as well as the need to encourage a participatory approach.

The evolution of Community legislation shows the increasing consideration given to common action in the field of forestry. This legislation does require member States to take action in various ways in relation to the forest sector (for example, by preparing programmes to be funded, adapting data collection procedures, etc). However, this legislation is not meant to constitute a substantive legal framework to be applied to forestry in member States, and therefore its effect on domestic legislation is generally rather limited. The harmonisation of the forest laws of member States in the field of forestry is only required with respect to few issues, such as data collecting procedures, classification of roundwoods, reproductive material, and fire protection procedures. As the recently adopted forestry strategy does not particularly promote

³ Council Regulation (EEC) No 867/90 of 29 March 1990 on improving the processing and marketing conditions for forestry products.

⁴ Council Directive 68/89/EEC of 23 January 1968 on the approximation of the laws of the member States concerning the classification of wood in the rough.

⁵ Council Directive 1999/105/EC of 22 December 1999 on the marketing of forest reproductive material.

⁶ Council Decision 89/367/EEC of 29 May 1989 setting up a Standing Forestry Committee.

⁷ Council Resolution of 15 December 1998 on a forestry strategy for the European Union.

an approximation of the member States' forestry laws, it is unlikely that significant developments in this regard will take place in the near future.

IV. CONCLUSIONS

The above review describes a number of important trends in the ongoing evolution of forest law in Western Europe. Overall, forest laws in the region are increasingly being reshaped to meet a variety of economic, social and environmental objectives, reflecting a growing appreciation of the multiple functions of forests and the importance of sustainable management.

The process of management planning is given greater prominence in current laws, with new emphasis placed on multiple-use management strategies, biodiversity conservation and close-to-nature silvicultural techniques. Important new opportunities have been created for the involvement of civil society in forestry decision-making, from required public participation in the development of policy to greater emphasis on collaboration among individual forest owners.

With respect to private forestry, there is evidence of a trend toward reduced direct government intervention, with new emphasis on the development of broad criteria and guidelines for the management of private lands. At the same time, countries are experimenting with new forms of incentives to private forestry, including more explicit recognition of the *private* costs that forest owners bear as a result of the *public* environmental benefits their forests provide. New financing mechanisms are found in a number of laws, and provisions for protection against forest fires are prominent in many of the texts. On the international front, although there is no comprehensive common forest policy to which domestic legislation needs to conform, there is a growing body of EU legislation addressing various aspects of forest management, from financing to forest fires.

It should be noted, of course, that the trends highlighted in this paper do not appear universally in all the forest laws of the region, nor are they always clearly and unambiguously expressed where they do appear. The prevailing vision of the role of forests in society is increasingly complex, and this in turn puts increasingly complex demands on forest laws and their drafters. The crafting of coherent legal frameworks capable of accommodating and balancing multiple interests is an ongoing process in all countries, and one that is more advanced in some countries than others.

The above review, however, alerts us to some general tendencies, opportunities and challenges that are likely to be the focus of legal and institutional developments in the years to come. There are, for example, important ongoing changes in the role of national, regional and local authorities as they affect forestry, in the direction of shifting greater authority over forestry matters to regional governments or to newly created autonomous state entities. Relationships between governmental entities and local communities and associations are similarly being reshaped, with local competencies in forest management and land-use planning being expanded. Altogether, these developments provide more opportunities for the negotiation of locally adapted solutions, for more participation of people in democratic decision-making processes, and for more appropriate allocation of authority between multiple tiers of government.

On the whole, the approach of forest legislation is becoming more proactive in the sense that it relies more systematically on incentive and monitoring measures. Regulatory measures that generally aimed at restricting forest management decisions, are gradually being replaced or complemented by joint management systems which engage forest owners and public authorities on a negotiated and, increasingly, on a contractual basis. This, along with the growing emphasis on public participation, underscores the increasing importance of *process steering*. It also presages an important shift from individual decisions and projects to

comprehensive forestry programmes. Increasingly, the role of legislation is to provide a framework for developing co-operative forms of decision-making and contractual arrangements. Guidelines for best management practices, procedures for mediation and the exchange of information constitute a substantial part of this framework. It also requires a more precise determination of targets, the design of evaluation systems in order to assess the impacts of public policies, and the need for public entities with more operational flexibility in managing human and financial resources.

Finding a proper balance between the rights and obligations of landowners, forest users and various overlapping communities (local, national, international) will continue to be a major challenge for the foreseeable future. The public has contrasting views on forests as a means of production and as a particularly valued element of the physical and spiritual environment. Large proportion of the population considers forests as space for leisure and outdoor activities. Even if forested areas in Europe have been intensively used during the past, they are perceived today by many people as manifestations of nature which are supposed to be largely free from human intervention, as places of recollection, of contemplative reflection and of personal freedom. But such expectations need to be weighed carefully against constitutional rights of ownership, and the rights and responsibilities of landowners to define the objectives of forest uses and to choose the management options which fits them best. Many forest owners are implicitly confronted with an expectation that they will provide goods and services for which markets do not yet exist. On the other hand, it is increasingly recognised that forest owners are frequently not in a position to carry the incremental costs of such external benefits without compensation.

The evolving legal framework of forest resources management –both in its multisectoral dimensions as well as with respect to different political levels– requires new strategies on the part of landowners, a commitment to effective, efficient and transparent process-steering on the part of public agencies, and collaborative decision-making involving both the principal users and environmental groups. The linkages and interplay between an increasing number of policy areas, the superposition of international and national political actors, and the increasing importance of sub-national and local entities are all likely to play a powerful role in shaping the development of forest legislation in the years ahead.

LEGISLATION REVIEWED

AUSTRIA

- Forest Act, 3 July 1975

BELGIUM

- Forestry Code, 19 December 1854
- Flemish Forest Decree, 1990

CYPRUS

- The Forest Law, 1967
- The Forest Regulations, 1967

DENMARK

- Forest Act, No. 383 of 7 June 1989
- Protection of Nature Act, No. 9 of 3 January 1992

FINLAND

- Forest Act, No. 1093 of 12 December 1996
- Forestry Agency Act, No. 1169 of 17 December 1993
- Act relative to Forest Centres and the Central Forestry Development Institute, No. 1474 of 17 December 1993
- Act on Insects and Fungi Damage Prevention, No. 263 of 8 February 1991
- Act on Financing of Sustainable Forestry, No. 1094 of 12 December 1996

FRANCE

- *Décret No. 79-113 portant Code forestier*

GERMANY

- Federal Forest Act, 2 May 1975
- Forestry Marketing Fund Act, 13 December 1990

IRELAND

- Forestry Acts, 1946-1988

ITALY

- Constitution, 1948
- Royal Law-Decree No. 3267 of 30 December 1923 on revision and reform of legislation on forests and mountain areas (*Riordinamento e riforma della legislazione in materia di boschi e di terreni montani*)
- Royal Decree No. 112616 of May 1926 approving the regulations for the implementation of Royal Law Decree No. 3267 of 30 December 1923 on revision and reform of legislation on forests and mountain areas (*Approvazione del regolamento per l'applicazione del R.D. 30.12.1923 n. 3267, concernente il riordinamento e la riforma della legislazione in materia di boschi e di terreni montani*)
- Law No. 991 of 25 July 1952 including provisions in favour of mountain areas (*Provvedimenti in favore dei territori montani*)
- Decree No. 11 of 15 January 1972 on transfer of State administrative functions regarding agriculture, forestry, hunting and fishing in internal waters, and of personnel and offices, to the Regions (*Trasferimento alle regioni a statuto ordinario delle funzioni amministrative statali in materia di agricoltura e foreste, di caccia e pesca nelle acque interne e dei relativi personali ed uffici*)

- Law No. 471 of March 1975 including additional rules for the protection of forests against fires (*Norme integrative per la difesa dei boschi dagli incendi*)
- Decree No. 616 of 24 July 1977 on delegation of powers under Law No. 382 of 22 July 1975 (*Attuazione della delega di cui all'art. 1 della L. 22 luglio 1975, n. 382*)
- Law No. 4318 of August 1985 concerning protection of environmentally significant areas (*Conversione in legge, con modificazioni, del D.L. 27 giugno 1985, No. 312, recante disposizioni urgenti per la tutela delle zone di particolare interesse ambientale*)
- Presidential Decree of 18 July 1995 concerning the formulation of hydrographic basin plans (*Approvazione dell'atto di indirizzo e coordinamento concernente i criteri per la redazione dei piani di bacino*)
- Presidential Decree No. 357 of 8 September 1997 implementing Community Directive 92/43/EEC concerning conservation of natural and semi-natural habitats and wild flora and fauna (*Regolamento recante attuazione della direttiva 92/43/CEE relativa alla conservazione degli habitat naturali e seminaturali, nonché della flora e della fauna selvatiche*)

NETHERLANDS

- Law of 20 July 1961, including New Provisions for the Conservation of Forests

NORWAY

- Forest and Forest Protection Act, 21 May 1965

PORTUGAL

- *Lei de Bases da Política Florestal*, No. 33/96 of 17 August 1996

SPAIN

- Constitution, 1978
- *Ley de Montes*, 8 June 1957
- *Ley de Conservación de los Espacios Naturales y de la Flora y Fauna Silvestres*, 27 March 1989

SWEDEN

- The Forestry Act, 1 January 1994

SWITZERLAND

- *Loi fédérale sur les forêts*, 4 October 1991
- *Ordonnance sur les forêts*, 30 November 1992

TURKEY

- Constitution, 7 November 1982
- Law No. 3868 of 1956 on Forests, as amended by Law No. 2896 of 23.9.1983, Law No. 3302 of 5.6.1986, and Law No. 3373 of 22.5.1987
- Forest Management Planning Regulations, 1991
- Law No. 4122 of 23.7.1995 on National Afforestation and Erosion Control Mobilization
- Afforestation Fund Regulations, 20 February 1989
- Law No. 2924 of 28.8.1991 Supporting the Development of Forest Villagers

UNITED KINGDOM

- Forestry Act, 1967
- Forestry Act (Northern Ireland), 1953

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