

## Development of the Czech forest related policy and institutions in the threshold of the 3<sup>rd</sup> millennium

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**ABSTRACT:** This paper gives an overview of Czech forestry policy and legislation since the beginning of changes in the CEEC plus developments and activities of the main forestry institutions. These activities are referred to in the background material given for the political transition period and also related to the Pan-European and global forestry processes. The philosophy of forestry in the Czech Republic is based on the international framework set out by the first Ministerial Conference on the Protection of Forests in Europe and also in conjunction with the preparation of the Czech Republic for accession to the European Union. National and regional forest programmes are aimed at implementing the principles of sustainable forest management and a broad range of stakeholders from the forestry and environment sectors has been involved in its preparation. The current situation and main problems of forestry are given along with basic principles on how to solve such problems and also on how to fulfil obligations to future generations, and international commitments.

**Keywords:** Czech Republic; forest policy; transformation of forestry; forest institutions

The Czech Republic is a classic example of a Central European country where the principles of sustainable forest management have been applied (naturally under the flag of sustainable yield) since the 18<sup>th</sup> century. Over the long term the Czech Republic has not experienced a loss in forest area, however, forest degradation has occurred. In fact, total forested area has continuously increased since the beginning of the last century, but unfortunately problems resulting from industrial air pollution still persist.

Czech forestry is mostly based on classical forestry, which originated in Central Europe. In recent memory Czech forestry has been profoundly affected by the political system which arose after World War II. This system affected political life, but also forestry-related legislation and regulations, forest management, forestry research, extension and education. This political system had a negative impact on forest health, which in turn seriously weakened the ecological stability of forest ecosystems. As well, isolation and restrictions on foresters and forest scientists to outside knowledge and scientific contacts occurred.

Over the last decade, the economy of the Czech Republic has experienced a profound transformation and transition, going from one of central planning to a market-oriented approach. These changes have not only affected political structures, but also there have been economic and social spectrum effects. Today we face a new situation in which there are 145,000, private-sector forest owners.

Small owners reassumed their proprietary rights to about 750,000 hectares of forests, but nearly 90% of these owners possess on average less than 2 hectares of forest land, which is not favourable for forest management. The small owners, as heirs of original ones, usually: *i*) have no idea on how to manage forest; *ii*) live in the town far away from their holdings; *iii*) are already old and become the victims of dishonest, profit-seeking people who offer them providing of services or a purchase of their forest holdings. Small holdings are not usually managed in proper way because of low skills, knowledge and sometimes also zero interest of the owners.

New forestry legislation has had to be adopted and a new system of maintenance and subsidies for private forest owners had to be put in place to promote sustainable forest management.

Return of forests to churches, still a political issue will mean that proper management practices will have to be carried out on about another 6% of our forests. Also, afforestation of marginal agricultural lands is anticipated.

### Transition in forestry, changes in forest ownership

Transformation of forestry consists not only in restitution of forests to previous owners. Other steps were also required, i.e.:

- creation of the legal entity Forests of the Czech Republic (LCR; see below) to which the management right

in state-owned forests was transferred from former enterprises,

- privatisation of state enterprises through joint-stock companies and about 30 other entities.

Privatisation of a small part of state forests is currently proposed as only a tool for integration of scattered holdings. A significant share of the state forests area is considered to be a stabilising factor, which will influence necessary improvements in air polluted areas, and timber market and social-economic relations in the country. In 2002 ownership of forest lands in the Czech Republic consisted of 61.5% state forests; 14.6% communal forests; 0.9% forests of belonging to co-operatives, and 23% of other private forests.

### Forest policy

Conception of forestry in the Czech Republic proceeds from the so-called Pan-European process initiated by the MCPFE. The idea of sustainable development, as interpreted in Helsinki 1993, includes the principle of sustainable forest management. Another source for the concept analysis is *The Basic Principles of the State Forest Policy*, approved in May 1994. The amendment for “the pre-accession period to the EU” was adopted in 2000. Subsequent implementation of state forest policy targets is contained in the annual, state reports on Czech forestry.

Preservation of our forests for the future has become an ethical commitment of the present generation and the principal aim of current forest policy. The fact that forestry is a business activity and a part of an open, market oriented economy must also be recognised. To fulfil this commitment state forest policy must adhere to the following basic principles:

- completion of the restitution process,
- improvement of forest ecosystems,
- conservation and enhancement of forest biodiversity,
- development of non-timber functions of the forests,
- better utilisation of timber as a natural, renewable raw material,
- promotion of forestry institutions,
- pursuit of the economic aspects of the forestry policy,
- utilisation of the national forest programme as a resource for carrying out forest policy.

### Legal framework

The Forest Act, in force since January 1, 1996, is the essential law of new legislation that addresses both the political changes after 1989 and the newly established social-economic relationships. Sustainable, sound forestry is mentioned in many documents including the Forest Act, which was prepared as a compromise between property rights versus public goods interests.

The purpose of the new Act is to determine conditions for the preservation, tending and regeneration of forests as part of the national wealth forming an essential part of the environment. All forest functions and support of for-

est management are taken into account. This act respects the elementary rights of forest landowners, concern of the state for the fulfilment of all forest functions and preservation of forests for future generations. It regulates conservation of forests and forestland, forest practices, general use of forests, forest management planning, sustainable forest management, forestry licensing, and subsidies for forest management and state administration.

The Act on Nature and Landscape Protection characterises forests as a significant element of the landscape. It regulates, i.a. forest management in national parks, protected landscape areas, and nature reserves resulting from specific plans for relevant areas care. The plans and projects of *Regional Systems of Ecological Stability* are presented. They serve as the underlying documents for forest management plans and forest management programmes.

National laws are gradually being harmonised with EU legislation and forestry sector representatives repeatedly negotiate with the EC on relevant technical issues.

### Institutional framework

The central body that controls state administration in forestry is the Ministry of Agriculture. It revises the decisions made by the District Authorities and inspects their state administration in forestry. Currently Regional Authorities are created as the first level of state administrative organisation.

The Ministry of Environment is the central body of state forest administration, game management and fisheries in the area of four National Parks covering a total area of approximately 120,000 hectares, which accounts for 1.5% of the total surface of the Czech Republic. In addition to its responsibilities concerning National Parks, the Ministry of Environment has been enjoined by Forest Act (Act No. 289/1995) with supreme state supervision of forest management in entire Czech Republic. The Ministry supervises how bodies of state administration, jurist and natural persons observe provisions of the Forest Act and related regulations. Carrying out of the duties of state supervision in forests, the Ministry co-operates with the Czech Environmental Inspection authority, which has a separate forest protection department, whose mission is to prevent and examine offences concerning the functioning of forests as an environmental component.

### Forest Management Institute

Forest management planning began approximately 260 years ago and since that time offices of individual forest owners developed various management methods. The Forest Management Institute (FMI) was established in 1935. This institute refined forest management plans, executed real estates evaluation and land measuring and cartographic activities. Forest sites mapping started in 1941. Forest sites were characterised by forest communities, background for forest typology was established, and target species composition was defined for them.

Forest management plans have been prepared and the systematic usage of computers was initiated in 1971. Thus, began the establishment of the information database. The institute was entrusted with creating a summary of forest management plans in five-year cycles. At the end of 1980s, employees of the institute developed a Czech forestry GIS software – TOPOL and software for forest management plans in conjunction with additional programmes.

After 1989 the FMI has been involved in the forest restitution process. In 1997, these duties and preparation of Forest Management Plans were transferred to private entities created mostly by former institute experts.

Nowadays the institute is responsible for executing forest inventory in the country, and elaboration and administration of Regional Plans of Forest Development (RPF). Based on principles of sustainable forest management RPF tries to minimise potential conflicts between the public and private owners' interests. These include the administration of information and data centres of forest management, execution of forest typological system, providing information services for forest certification. The National Certification Centre also provides support to organisations dealing with forest certification, e.g. the national governing body: PEFC (Pan-European Forest Certification) Czech Republic. The FMI elaborates analyses, methodologies, layouts and prognosis and also is involved in domestic and international research projects as well as working in consultation activities.

#### **Forestry and Game Management Research Institute**

Previous to the political transition, research institutions were an integral part of the central planning system. Today state funding for forestry has steadily declined, and has not been supplemented from other sources. Numbers of personnel in forestry institutions have diminished due to decreased funding and lack of an appreciation for their results. Thus forest research has suffered and ongoing research tends to largely focus on classical scientific and technical topics that were in vogue during the previous era. As a result, research is not evolving to meet new social and economic needs emerging from ongoing privatisation. Forestry institutions, not only those doing research, are now facing competition from national and international sources and new forest owners, having many other problems, are not interested in funding research. Dwindling numbers of researchers are faced with increasing workloads. It seems that the worst problem is a lack of young people willing to do research under the current conditions.

In spite of problems FGMRI fulfils its main task of doing long term scientific research to improve forest management and ensuring that the results are put into forestry practice. Eighty years of forestry research was commemorated in 2001.

Conversely, the political changes have brought major benefits for forest research such as new possibilities for

international contacts, participation in joint programs, exchange of information through personal contacts and access to the latest results and new technologies. Consequently, forestry researchers now have a better understanding of concepts and provide better tools for making sustainable forest management more profitable and acceptable.

As well, new opportunities have arisen such as the possibility to participate in the 6<sup>th</sup> Framework Program prepared by the EU.

Employees of the institutes mentioned above also fulfil follow-ups of the Ministerial Conferences on Protection of European Forests and other obligations resulted from international commitments.

#### **Forests of the Czech Republic, State Enterprise**

More than 1.4 million ha of the forest area are managed by the Forests of the Czech Republic, State Enterprise (LCR), established in 1992. These forests contain a significant part of the former state forest property and include roughly 20,000 kilometres of streams. LCR is not bounded to the state budget and it fulfils the tax liabilities in the same way as any private subject. The new organisation consists of 17 Regional Forest Districts, 87 Forest Districts (basic management unit), 6 Regional Administration of Streams, plus running a tree Seed Plant. Subcontractors (companies) carry out work on most of maintained forests. As a state company responsible for a significant share of activities in the public interest the LCR places major emphasis on the development of areas serving the public. The so called *Programme 2000* focuses on specific forestry-related functions activities and their completion.

Joint-stock companies, as private firms, are expected to offer the most recent skills when providing their services. Such companies are paid for their services, but they do not rent or own forest stands. They, together with other small business entities and companies, give a competitive environment to the forestry sector. Their work activities are done through contracts made with the LCR and the work must be done according to forest management plans for the corresponding area. A business contract is concluded for a specific period of time, usually two years and always for a specific area – so called contract area unit. The conditions for concluding this type of contract, which is confined to a specific ground unit and includes activities such as logging or silvicultural projects, is done via competitive bidding. The projects are processed and the Forest District pays for the finished work. The business contract includes the sale of lumber to companies on the “stump” site as well.

Besides the organisations mentioned above, many others are involved in forestry issues, both in the field of forestry and the environment. These include National Parks, Protected Landscape Areas Administrations, Nature and Landscape Protection Agency, Czech Ecological Institute, universities and schools with relevant orientation and professional associations (Association of Municipal

and Private Forest Owners [SVOL], Czech Forestry Society, Forestry Union, Czech Academy of Agricultural Sciences, and the Forest Nursery Association). NGOs, involved in forestry related issues, which should be mentioned, include the National Forest Committee, PRO SILVA Bohemica, and the Rainbow Movement. Most of them have been consulted during the preparation of the National Forest Programme.

From a forester's viewpoint the main, general concerns and areas where improvements are needed include:

- restitution and privatisation,
- fragmentation of forest land tenure with many small forest owners,
- the role of the state, particularly in connection with sustainable forest management and the states supervising role during the transition period,
- improvement of forest legislation in accordance with the new types of ownership as well as with a new forest policy following the international commitments and expected accession to the EU,
- improvement of forest conditions (old problems with air pollution, inappropriate tree species composition, forest protection including and over abundance of ungulate deer),
- improvement in education and public relations,
- lack of general public involvement in forestry issues and awareness on forestry as such,
- institutional building and capacity strengthening in spite of existing budget cuts,
- gaps in collaboration between and among those involved with forestry science, research and practice and insufficient communication at various levels.

The topics mentioned above often require contributions from forestry research. Research should play an important role in assisting in the selection and monitoring processes concerning criteria and indicators of sustainable forest management. Considering the diversity of conditions, interests and situations forestry research plans have to cover the broad scale of forest and forestry related sciences. Besides the traditional disciplines, economic research reflecting the new political and social situation is especially needed. Of course, participation in ongoing and new European programs and networks is important.

Participation in all those activities is necessary, as is improvement in communication at the national level so that the underlying importance of forests and forestry for all of society is recognised and as is the need for cross-sectoral responsibility for forests and forestry issues.

## CONCLUSIONS

The present situation in forestry is significantly affected by the transformation and worsening of economic conditions, also because of lower timber prices. Unbalanced economy of the smallest forest owners is quite obvious. Currently, there is a need to have about 100 ha of forest or 500 m<sup>3</sup> of harvested timber per person and year to be in

balance from the economic point of view. The government financially supports the association of small owners and the biggest associations offer expertise, training courses, legal services. Some subsidies in forestry are determined by the law (soil reclamation and torrent control, costs of licensed forest managers, management guidelines). There is also a possibility to receive funds for reconstruction of stands damaged by air pollution, reforestation, safeguarding of non-wood producing functions of forests, aids from the State Environmental Fund or for afforestation of marginal agricultural lands. Aerial liming or fertilisation or airborne fire control service is considered another important support from the government.

The forestry sector economics is characterised by average return and forest landowners are on average profitable. But the level of surplus is successively decreasing, while wages have quite opposite trend and rose by 3.6 times over the last decade. There is a 50% decline in numbers of employees in the forestry sector.

The present process of transformation (not only in forestry) has resulted in a lack of legislation reflecting new ecological approach, while at the same time respecting also social and economic changes in forest management and recognition of the importance of forests as a irreplaceable part of the environment. It is an ongoing task to identify possible gaps between the regulations and practice. A comprehensive analysis should be done through the projects of the National Forestry Programme and these should lead to recommendations for adapting legislation and actual management practices. PRO SILVA Bohemica represents a movement that is capable of joining ideas of silviculture and protection in multi-functional forests. Nature conservation is not only larger area of nature preserves, but also implementation of sound management to all commercial forests. A continuous and well-balanced timber supply and its increased utilisation (e.g. as opposed to use of steel, plastic, concrete, etc.) i.a. will have beneficial effects on global change and can contribute significantly to the preservation of biodiversity and sustainable life.

Awakening or improvement of public interest needs to include all possibilities of public relations and education is also needed to increase interest in forestry, including forestry management. This can help solve the problems of biological diversity. Forest stakeholders need to be educated and offered some type of compensation in a form of subsidies, relevant taxation etc. in order to find the ways to implement practical measures for protecting biodiversity in privately-owned forests (the present Act on Nature Protection does not include such topics).

Unfortunately, an increasing number of unauthorised "logging activities" have been recorded in all types of forests and behaviour of some "entrepreneurs" affecting forest stands must be watched carefully. Based on practical experience it seems that general supervision on forest management, both on private and state forests, is important to manage forests for society's general welfare, not just for the benefit of individuals or groups.

In the international context, we in the Czech Republic must accept the fact that the solutions to many forest-related problems of forests lie outside the forestry sector. Consequently there is the need to stress the cross-sectoral responsibility for our forests and forestry issues. We regard as crucial the necessity of participating in an international convention on forests in the near future. However, such a convention would have the desired effect only if it is based on and respects other related agreements and conventions approved previously such as Convention on Biological Diversity, Climate Change, and Convention to Combat Desertification.

Czech forestry experts can arrange topical courses or seminars for foresters, experts in forest inventory or forest management planning. There is also a possibility to cooperate with developing countries within the framework of the *Programme of Foreign Development Assistance* funded by the Ministry of Foreign Affairs of the Czech Republic. Although the total amount of financial resources

is limited, it could help facilitate the transfer of environmentally sound technologies to participating countries.

The major challenge is presented by the fact that the Czech Republic has signed protocols and resolutions at several international conferences and processes concerning forests. These commitments confirmed at the governmental level, means that society has accepted responsibility that, in spite of present problems, the indisputable needs of forestry will be met.

The National Forestry Programme, which was just finalised, seems to be an effective tool for solving current tasks.

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## Vývoj české lesnické politiky a lesnických institucí na prahu třetího tisíciletí

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**ABSTRAKT:** Článek přináší přehled o české lesnické politice a zákonodárství a o vývoji a zaměření hlavních lesnických institucí. Informace jsou uvedeny jednak na podkladě materiálů pro přechodné politické období, jednak ve vztahu k panevropským a globálním lesnickým procesům. Filozofie lesnictví v České republice je založena na mezinárodním rámci, daném první ministerskou konferencí o ochraně lesů v Evropě a také ve shodě s přípravou republiky na vstup do Evropské unie. Národní a regionální lesnické programy jsou zaměřeny na uskutečňování principů trvale udržitelného lesního hospodářství; na jejich přípravě se podílelo velké množství odborníků ze sektoru lesnictví a životního prostředí. Současná situace a hlavní problémy lesnictví jsou uváděny spolu se základními způsoby, jak tyto problémy řešit, a také jak lze splnit povinnosti vůči budoucím generacím i mezinárodní závazky.

**Klíčová slova:** Česká republika; lesnická politika; transformace lesního hospodářství; lesnické instituce

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