Czech Republic National Report on the Watershed Management
(- an Integrated Approach to Environment Protection)

The 25th Session of the EFC Working Party on the Management of Mountain Watersheds

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General information

The Czech Republic is country located in the Temperate Zone of the Northern Hemisphere in the central part of Europe. Its climate is characterised by a western circulation with a prevailing occurrence of a western wind. An intensive cyclonal activity is caused by a frequent change of air mass with a relatively frequent precipitation. Nevertheless, this territory is experienced with significant change in the last years re. to the occurrence of weather extremes as tornado, downpour rains with following floods and landslides.

The area of the Czech Republic is 78,866 km^2, of which 52,817 km^2 (67 %) is located at the altitude up to 500 m. Together 25,222 km^2 (32 %) is located at the altitude from 500 m to 1,000 m and only 827 km^2 (1%) at the altitude above 1,000 m. The highest-located point of the country territory is Snezka (1,602 m above the sea) in the Krkonose Mountains and the lowest-located point represents the outflow of the Labe River at Hrensko in the Northern Bohemia. The forest land area is 26,370 km^2 which represents 33.4 %.

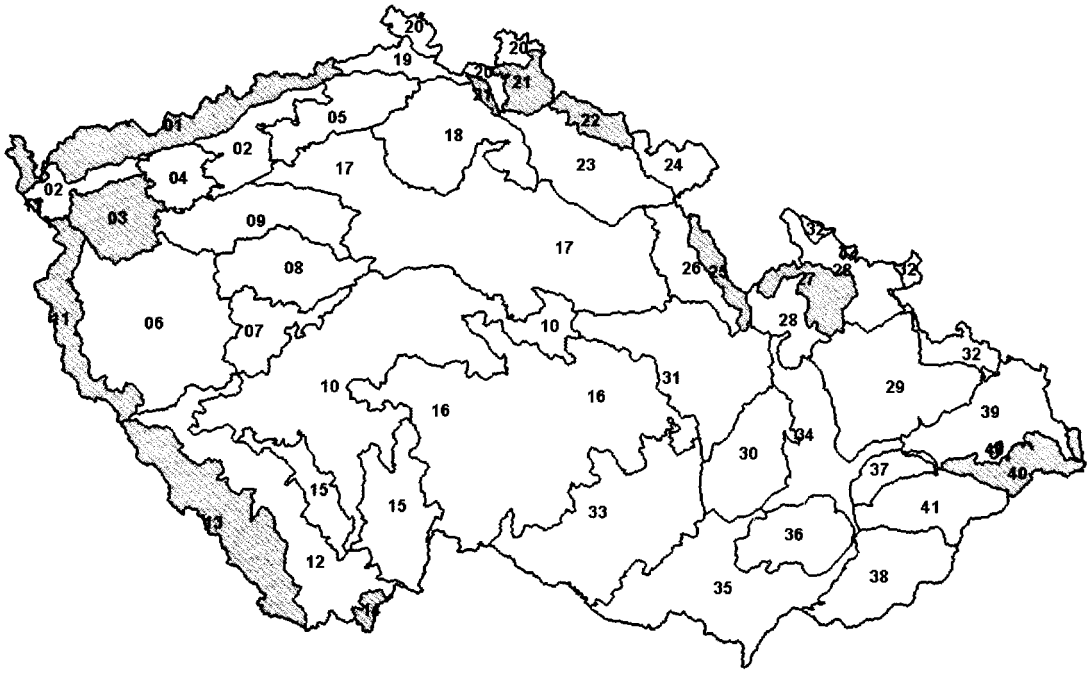
Mountain forests are an important landscape component of this country. Speaking about watersheds management we have to take into account above all mountain forests. These forests represent an object of specific importance from the aspect of natural environment conservation, and stabilisation of natural processes. In addition, they fulfil a number of production and non-production functions. They involve not only the production of wood, game, forest fruit, etc. but also socially important functions in the sphere of hydrology, soil conservation, climate protection, recreation, nature conservation, biodiversity, etc. The objective of sustainable management of these forests is to create a forest characterised by ecological stability, high quality, and species, genetic, spatial and age differentiation.

Characteristics of FOREST VEGETATION (altitudinal) ZONES in mountain forests

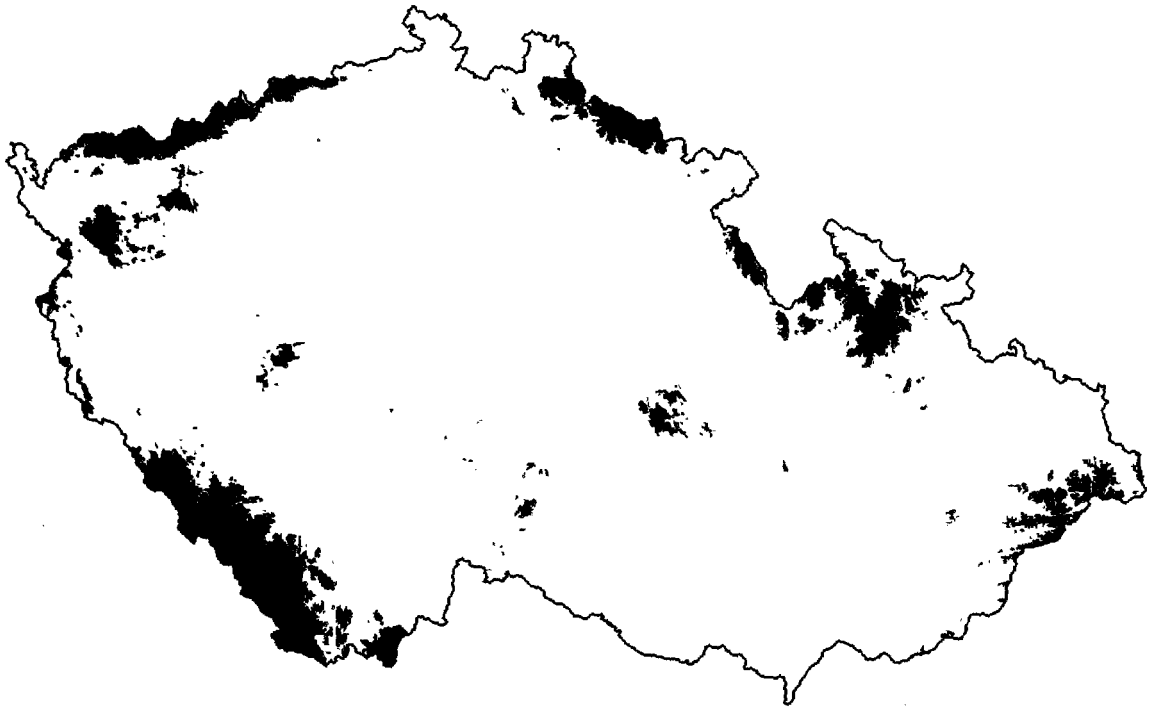
Forest altitudinal zone		Forest land area	Proportion of		Altitude	Average temperature	Annual precipitation	Vegetation period	Forest percentage
			FAZ 6-9	FAZ 0-9					
		ha	%		m	°C	mm	Days	%
6	Beech with spruce	309 367	67.32	11.75	700 - 900	4.5 – 5.5	900 – 1 050	115 - 130	49.1
7	Spruce with beech	99 824	21.72	3.79	900 - 1 050	4.0 - 4.5	1 050 - 1 200	100 - 115	51.6
8	Spruce	44 522	9.69	1.69	1 050 - 1 350	2.5 - 4.0	1 200 - 1 500	60 - 100	91.6
9	Dwarf pine	5 857	1.27	0.22	>1 350	<2.5	>1500	< 60	99.3

Total forest area in the CR is 2 632 000 ha, of it the area of mountain forests (6th – 9th FAZ) amounts to 459 570 ha, i.e. 17.45% (data of Forest Management Institute at Brandys n. L.).

Natural forest areas (NFA) of the Czech Republic. Areas with a significant proportion of mountain forests (hatched) are as follows: 01 – Krušné hory Mts., 03 – Karlovy Vary Hills, 11 – Bohemian Forest, 13 – Šumava Mts., 14 – Novohradské hory Mts., 21 – Jizerské hory Mts. and Ještěd Mt., 22 – Krkonoše Mts., 25 – Orlické hory Mts., 27 – Hrubý Jeseník Mts., 40 – Moravian Silesian Beskids.



Localisation of mountain regions of the CR from the 6th FAZ (from 700 m above sea level.) to higher altitudes is shown in following figure:



Mountains and forests

Mountainous forests are mostly located in border areas of the country. Since the Middle Ages the usage of these forests has its typical development. Originally it was the game management interests, then pasture and production of grass as a supplementary activities to the developing farming. In the areas bellow the tree line, the originally small clearings started to expand while pasture and production of grass only accelerated this process. And finally the aimed interests started in relation with the production of wood for needs of mining, iron industry, glass industry or as a firewood. The beginnings of the intentional management in these areas could have been seen only since the 19th century.

Fir-beech forests prevailed in the mountainous forests of the 17th century and spruce started spreading in the 18th century. Norway spruce became a prevailing tree species on the turn of 19th and 20th centuries and was continuing to get even larger area on the account of beech and fir in the 20th century. Vast spruce plantations are, however, endangered by wind, snow, insect pests and, after the World War II in a visible manner, also by the air pollution even if this problem began much sooner. Fatefully is known "Black Triangle" - the most damaged Krusne hory (Ore Mts.) forest region, but also Jizerske hory, Krkonose, Orlicke hory etc. Norway spruce stands disrupted by the calamities were, beginning 70th and 80th, replaced by the so-called substitute tree species. There is assumed a gradual restoration of so called "transitory stands of substitute species", when spruce is the main tree species of the natural species composition of the mountainous forests at its 60 % target share.

A change in the forestry management in the mountainous forests occurred only by publishing of the Forest Act in the year 1852 that regulated the procedures for harvesting and reforestation of forests at the high altitudes and on the steep slopes. Consequently, there appeared also the first determination of forest stands as a forest with a special purpose, by the way of its management and rotation period – a protected forest. These principles had a positive impact on keeping the upper tree line of forests. Together with the increasing of artificial afforestation this line was going up. The afforestation was successful on the majority of areas, although there were occurred damages in some plantations, caused by the plants getting dry, particularly from the reason of a non-suitable genetic origin of seedlings.

Afforestation was performed also from the reason of erosion-control protection of soil on the turn of 19th and 20th centuries. The flooding-control protection represents another reason after a disaster precipitation at the end of 19th century in the central part of Bohemia where, however, it does not mean mountainous forests, and in the Krkonose Mts. and in the Beskydy Mts. This afforestation was performed in the public interest and was significantly supported by the state.

Importance of mountain forests

Mountain forests are definitely very important part of forest ecosystems as such. They serve as an important moderator of climate, regulator of landscape hydrology, resource of timber, refuge of biological diversity, friendly area of human recreation and source of spiritual values. Within the forest-depleted Central Europe, the mountain forests create much appreciated landscape scenery - they are one of the most important landscape components of the country. They have specific importance from the aspect of natural environment conservation, stabilisation of natural processes and general landscape formation. In addition, they fulfil a number of production and non-production functions. They involve not only the production of wood, game, forest fruit, etc. but also socially important functions in the sphere of hydrology, soil conservation, climate protection, recreation, nature conservation, biodiversity, etc. The objective

of sustainable management of these forests is to create a forest characterised by ecological stability, high quality, and species, genetic, spatial and age differentiation. Mountain forests usually represent an important natural boundary and barrier, possibly a source of cultural and spiritual traditions and populations from lowlands enjoy considerable benefits from them.

Besides the wood-producing function, mountain forests fulfil important ecological and environmental functions. These mountain regions are very important for the conservation of biological diversity of thousands of species of the plant and animal kingdom, their communities and relations between the ecosystems. It is the conservation of not only genetic resources of tree species but also of herbs, bryophytes, lichens, fungi, animals, microorganisms, etc. (many gene pools of autochthonous ecotypes of tree species occur in these areas).

Mountain forests have positive soil-conservation and hydrological functions. Forests in mountain locations do not influence only the environment of the site where they grow; they also produce remote effects. They fulfil erosion and partly also flood control functions and ensure water supplies in the production landscape at lower altitudes. Mountain forests are specific areas with increased interest in the soil-protection function of forests and they are classified as hydrologically important forests. The hydrological importance of mountains is documented by declaration of so called Natural Water Accumulation Protected Areas (CHOPAV / NWAPA) and also by their participation in protective zones of water resources, mainly in the perimeters of water-supply reservoirs and streams.

Currently there is about 76,000 km of water-courses in the country, of which app. 15,300 km are important from the water management point of view and about 60,700 km of other small water courses. All those watercourses have, defined by the Water Act, a professional administration with the defined obligations. "Lesy Ceské republiky" (LCR s. p. - Forests of the Czech Republic, State Enterprise) is one of the three important administrators. It manages approximately 20,000 km of small watercourses – torrents, catchment of that are located mostly in the mountainous areas and predominantly forested. Thus forestry activities are considered as very important.

Sustainable forest management is considered a key to water resources management in particular and to upland resources development in general. It is tightly linked to watershed development. Forested catchments supply water for domestic, agricultural, industrial and other needs in downstream areas. Forests and forested watersheds play essential roles in sustaining and protecting of supplies fresh water, which is increasingly in demand.

A growing numbers of factors influence forest and water resources, including:
Climatic variability, local- or larger-scale pollution and fires, deforestation and changes in land use, lack of water, too much water, demographic trends, conflicts, market and short-term economic factors, the development of infrastructure and tourism, insufficient participation of local actors, lack of political vision, and shifts in societal expectations. It seems that "forest and water" deserve to be an issue of the next MCPFE.

Problems and threats

Economic situation - It is connected a lot with problem of nature conservation and with allot regime of management. Also with an objective necessity to prevent a displacement of men from these regions because of lack of jobs. Conservation is a public interest (or state policy), and that is why the state would actively assist to the resident inhabitants (e.g. at the development of tourism etc.), to the development of services, processing of local products (e.g. wooden made ones). Also in the specially forest protected areas must exist a life, by analogy like in parts of the ancient monument towns.

High costs for forest management and timber production - Personal subsidies on management measurements in forests is useful to restrict to specific cases, when demanding management is not possible to cover from forestry income and at the most efficient and economic approach. It is important to complete tools implementing the sustainable forest management in cases when the forest estate cannot demonstrable create a sufficient amount of resources needed.

Ownership structure - The crushing prevalence of state ownership exists in mountain regions of the Czech Republic. State Enterprise Forests of the Czech Republic (LCR, s. p.) is often only one employer for local inhabitants in these regions - particularly it is due to the inhibition of agriculture in marginal agricultural lots or in the case of bankruptcy of some major industrial company in the region. It is a question, whether the major variety forms of ownership would contribute to resurgence of mountain region, namely not only from managed forest point of view, but also from the view of recreation and other suited activities.

There is a need of the improvement of detail quantification for the economic consequences of optimizing the network of small-area specially protected areas, national parks and protected landscape areas and the creation of the NATURA 2000 system. For the NATURA 2000 system, including proposal for dealing with any compensation of harm to owners.

Ecological situation - Mostly mountain regions on northern borders are affected by air pollution in the country. It must be underlined a legal responsibility and liability of all subjects e.g. in connection with damages of forest stands by air pollution, of waters and soil, particularly in harmony with existing or prepared legislative of the EC. There is not solved the system of damages compensations to forest owners caused by pollution, which stayed quite without response at past period. To this item is only possible to mention that energy production "power" lobby is a very special interest group in the Czech Republic and it is definitely much stronger than forest owners...

Game damage - Damages by hoofed high deer (mostly of the red deer *Cervus*) are not solved on principle all the time. Mr. Deer made enormous problems particularly in the high mountains (Ore Mts., Giant Mts.). But it is sure that also hunting lobby is more powerful than foresters are. A success of forest regeneration, including the achievement of higher biodiverzity without spending not necessary over expenses, is directly linked with the game stock that forest owner having not the personal hunting district (at least 500 ha according the law) can influence only hardly.

Climate change - Impacts of global climate changes on the stability of forest ecosystems and sustainable management in mountain forests is an open question. The knowledge of responses of different ecosystems to progressive civilisation pressures is currently poor. Changes in air-pollution ecological conditions will likely bring about changes in the structure of these ecosystems, in their function and production. Bio-climatic conditions of forest altitudinal zones will certainly change to some extent, but no greater shift is likely to be expected. It is to note that forest ecosystems are relatively conservative objects. Particularly changes in the soil are very slow, especially in comparison with climate changes. Climate change is already long time considered in connection with biodiversity, but not only species level has to be kept in mind but also forest genetic diversity.

Important elements of research

Research of climatic elements, particularly of precipitation is being performed with the aim to get a deeper knowledge of the hydrologic function of forests. In particular its relation to the runoffs in the small mountainous catchment areas with the forest stands restoration and influenced by the air pollution is of interest as well as the water ampleness and the quality of

water sources and flood-control protection. A forestry-hydrologic monitoring of forest environment has been taking place since 1928 on two localities in the Northern Moravia aimed at the precipitation-runoff course.

The importance of forests for water conservation, water regimen and environment of cultural landscape has been understand by the forestry sciences in the territory of what is known as the Czech Republic already in the first third of 20th century. (Long-term - several decades - measurements of forest-hydrological research on mountain catchments in the Javorniky Mts. since 1928, further research on experimental watersheds in Beskydy Mts. running already a half of the century etc.). There was created a base for practical silvicultural "non-productive" activities having the character of services in relation of forests and water with utilisation of results and records gained on the experimental plots of join research projects of bioclimatologic, hydropedologic and silvicultural character.

Groundwork for real silvicultural activities, which have a character of silvicultural services in the water (water sources) and landscape conservation against the water was since the 70s of the last century intensely studying in a big projects (state research projects) by forest research in uplands and hilly regions. After the 15 years of systematic work there were obtained the following principle findings:

- Characteristics of the fundamental types of forest functions in conservation of water regimen and cultural landscape: Hydric functions (spontaneous forest effects) and water management functions (aimed effects, called by introduction of work and capital) as different policy-economic components of forestry sector activities - joint effect of forest production and silvicultural services;
- Characteristics of the fundamental types of water management functions (qualitative, quantitative and complex functions),
- Characteristics of the fundamental types of forest stand important from the water management point of view and their dislocation in the Czech Republic. Particularly of forests in the protective zones of water sources (surface basins) for water supply with complex water function (10 %) and important mountain forests (16 % of total forest area);
- Technologies of multipurpose forest management in protective zones of water sources (screening of quality and quantity of dispensable water), according to several functional groups of forest stands (water protection function, antierosive, infiltration, or related to creation of precipitations);
- Item for important mountain forests (protection of cultural landscape against water);
- Expenses on covering of the forest functions mentioned in forests important from the standpoint of water management of the country, it means a sufficient protection of water sources and adequate protection of cultural landscape in foothills against the erosion and floods.

Forest represents a natural environment with the impact on the creation of runoff from the mountainous catchment areas, however, the precipitations, that are the most important factor of the runoff regime, are influenced by the forest stands minimally concerning the volume of water. Spring areas of the mountains are sloppy terrains that support a faster runoff. Here, forest is a factor that helps to prolong the length of time of water flow into the network of concentrated runoff. Forestry-hydrologic research has, up to date, provided background materials, that there is not taking place any provable change in the runoff despite the situation when reforestation is speeded-up. It means when felled mature stands are replaced by the cultures and young stands of the first age class in comparison with catchments where a high share of the higher age classes stands is maintained and only a sanitary cutting is performed.

In general, forest soils of the mountainous catchment areas delay runoffs in a limited scope only, their retention capacity ranges from 50 to 100 mm of precipitation depending on concrete site conditions. It is in accordance with the saturation of forest ecosystem with water and in accordance with the thickness of such soil layer. From the point of view of the accessibility of forest stands, it is important to perform a correct marking of forest transportation network and safe drainage of the concentrated precipitation water from its objects and facilities.

Forestry-hydrologic research gradually documents that a favourable flood-control performance of forest is limited. If there is created a critically intensive rain, in addition, covering a large area, then the consequences are a result of nature. However, this must not be a reason for not taking care of flood-control measures in the mountainous-forested areas, rich for precipitation. Erosion-control measures and importance of forest for the protection of soil on the mountainous slopes are historically verified and justified.

Legislation related to forest, water and silvicultural services

A protection of citizens and territory endangered by the torrents has, in the Czech Lands, more than 120 years tradition. As a historical remainder of silvicultural services from previous times so called Forestry Amelioration Service with the Torrent Control Service (LTM-HB) survives in the Czech Republic. It was originally assumed from France in the time of Austrian-Hungarian Empire in eighties of 19th century (Austro-Hungarian Imperial Code No. 117/1884). This service was considered as a public beneficial service of state administration to protect the cultural landscape against the water. As a care of torrent catchment areas it has since 1960 the exact, rationally formed tasks mentioned in the legislation (Forest Act No. 166/1960 Coll.). Unfortunately, the policy-economical idea of forestry (forestry only as a production sector) led to the fact, that the Forest Act No. 61/1977 Coll. did not include the torrent service tasks and thereby this service lost a legal rule. Since that time its gradual inhibition occurred in terms of lack of interest to cover activities of such services in forestry practice. The generally binding legal rule (the "Instruction to the management of forested land in protective zones of water sources" No. 13/1982) was processed in 1979 and then published as a publication of the Ministry of Forest and Water Management in 1982.

After the changes in 1989, with shifting to market economy system and also with changes of legislative system the above mentioned instruction No. 13/1982 lost its liability as an assignment standard. The conception of forestry as production sector goes on also in so called liberal democratic system. National Forestry Programme (NFP) as intended basis to the new amendment of policy and legislation in the Czech Republic has been proposed already in the beginning of the 90s (Sept. 1993). Originally prepared by NGO (National Forestry Committee - this organisation has been merged with the Czech Forestry Association in the end of August 2005) and then passed by Departments of Agriculture and Environment. However in the concurrence of ecological ideas and real economic calculations the former results of research was not taken into account and current NFP does not include the idea of transformation of forestry as the integral sector of forest production and forest environmental services.

Currently two acts regulate flood-control protection of the mountainous catchment areas of the torrents: A new Water Act took effect in the year 2002, while the Forest Act is valid since 1996.

Forest legislation of the Czech Republic is covering the services only marginally. Valid Forest Act No. 289/1995 Coll. knows "non-productive functions" (§ 2b), knows also forests of special categories, however in § 38 on purpose-made forests it considers a duty to "suffer

limitation at management of such forest stands". It covers only title of financial burden rising to proprietors from "limitation of forests management".

It means, that "forest management" is considered only as a production of marketed goods or substances, not as a silvicultural service. Law is then far away from the conception of services like components of forest estates economic exploitation in public interest. Services are, in fact, considered according to the classical approach as a "limitation of management". Similarly, the paragraph § 35can be mentioned ("soil improvement, amelioration and torrent control in forests"), where to question-mark of forest policy character comes up also an uneasy in-expertness in conception of torrents control (they can be carried out exclusively "in forests").
Forestry failed to care for run on services in the area of forest - water relation. There were not created appropriate political and legislative conditions of existence for such services. Unfortunately, nor tragic events - floods of 1997 and 2002 (a critical regional precipitation with consequent floods occurred in Moravia in July 1997 and in South/Central/North Bohemia in August 2002) - were not utilised to improve this situation. On the contrary, forestry got onto the pressure of militant conservationist, arguing by current forest management like causes of big waters and floods. So called ecologists usually being adversely obstruct against restoration of arrangements on torrent streams of mountain areas in spite of the fact that it is an inevitable component of cultural landscape protection in foothills.

Besides the legal changes regarding torrent and ravine control and for the protection of their catchment areas there was issued a Czech Technical Standard CSN 75 2106 "Torrent and ravine control" in 1998, which was completed by recommendation making some of its provisions more detailed (2002). This standard includes biological and technical measures against flooding damages and fast erosion, for taking care of their natural parts or maintenance works for their regulated parts. In the year 2001, there was issued a Decree of the Ministry of Agriculture that defines basic technical requirements for such constructions.

Land use and tasks to be solved

Land uses practices, and forestry practices as well, have a high potential in influencing natural hazards. Forests can influence rockfalls and avalanches, with a stabilising effect of trees on snow cover. There is a difference between the direct influence that trees for example have on slowing down rockfall, while an indirect influence comes from soil properties.

Well-managed forests have a direct impact not only on the quality of water yields from watersheds and on the regulation of flows. They also mitigate the effects of soil mass movements, rockfalls and avalanches and contribute to soil erosion control and consequently to reducing downstream sediment transfers. Even if these hazards are not so frequent in our country they occur in the last years particularly in connection with various meteorological extremes. All above-mentioned forest services related to water may be better identified within a watershed framework, linking upstream and downstream areas. Although forest and water resources are inextricably linked, they are rarely managed in an integrated way.

A body of the state for flood-control protection of the mountainous catchment areas of watercourses has been already for 120 years the Torrent Control Service. In these areas, the state is mostly the owner of forestland. But state influences by the direct relations of the forest management (in accordance with forest management documents – forest management plans), also the other forms of ownership. It is done, in particular, for the maintenance of quality of forests through the sustainable forest management and consequently also for the maintenance of water quality in the Czech Republic.

Prevention and measures in the upper parts of the catchment areas were not performed. In the year 1992, there was made a change and an organisational stabilisation: The activities of torrent control were included into the new Act on Forests in the year 1996, however, financing of these measures stayed completely dependent on the possibilities of the state and budget for this purpose is downsized regularly. Thus prevention from damages and erosion, maintenance works for ensuring performed works functional is insufficient yet.

The problems, i. e. organisation stability and procurement of the torrent control service, a precise definition of its tasks and obligations, shared financing measures, are in the interest of the state when ensuring flood-control protection of citizens and territory. It is necessary to reach again the level that was proved to be efficient in the past in the Czech Lands in the time of Torrent Control Service creation.

Disadvantages regarding land use and rural development are well known. There could be of assistance measures listed in the EAFRD – it concerns problem of support in relation of rural development generally.

The regional plans of forest development should be more enforced to the landscape planning of regions (so called *OPRL* in the Czech Republic - and in our nomenclature it means to the "higher territorial units" – *VUC*). The aim is to minimise conflicts of concerns over the territory touched upon and to think about forests at the regional development, at utilising of their potential. Forests should be mentioned in all important regional plans and programmes of rural development and of course a special regional part related to the mountain forests and their relationship to water has to be included into the National Forest Programme.

Also improvement of awareness on general forestry issues, including forests important role in watershed management, and stressing the cross-sectoral responsibility for forests should be taken into account. Last but not the least, it will be necessary to take notice of the landscape and to respect nature laws and phenomenon, as flooding are a natural part of it.

Forest, water and environmental services

Essential features, that would make easier position of the environmental services in the Czech forestry are known already long time – they in fact lead to the Torrent Control Service creation already 122 years ago.

- Densely populated cultural landscape with very rich infrastructure under the border mountain range with torrent watercourses, currently highly sensitive to the water element;
- Big share of fresh, potable water, coming from surface waters (more than 50 %), from water basins) with extraordinary emphasis on protection of raw-water quality (washing in drainage area; price of potable water as a consequence of processing technologies); also dispensable water quantity plays a role (losses by evapotranspiration in watersheds).
- Relatively high forest coverage of mountainous watersheds important from the water management point of view, often also in areas of lower mountains; and consequent responsibility of forestry in retention and retardation of precipitations runoff;
- Relatively high usage of techniques in managed forest, particularly in cutting and timber transport operations impending harmful influence over the soil, runoff mode of catchments and water quality (tractors in skidding, density and character of transport lines and forest roads of all types).

It is necessary to start generally but in the concrete with ruminating over the internalisation of selected externalities (it means on market applying of some environmental

services). They can include e.g. the sale of fresh water of springs by forest owner, with a target to diversify revenues from forest management on forest possessions. After all, for water management companies it must be all the time more preferable to receive a clean water than water of lower quality, which requires high spending on cleaning and further adjustment.

Last but not the least - mountain forest is important part of an attractive landscape for tourism. It is quite essentially to advertise more so-called forest tourism and everything what is connected with. This point is related also to the education and P.R. Such activities as forest pedagogical education *"School in forest - forest in school"*, known as PAWS (Pedagogische Arbeit im Wald) should be considered as very important. They improve relation between forest and human beings and also assist to improve the image of forestry.

In closing

Solutions of many forest-related problems, and maybe not only in the Czech Republic, lie outside the forestry sector. Consequently there is the need to stress the cross-sectoral, shared responsibility for our forests and forestry issues (Vienna Declaration of the 4th MCPFE). There is a need to participate in international processes dealing with forests (also in relation with mountains even if we have not so high mountains, also in relation with desertification even if we have to count "only" with erosion...).

The mountain ecosystems, under appropriate management, provide a large set of benefits to lowland regions and many socio-economic sectors are both benefiting from, as well as influencing these resources. This is a reason for various alliances, coalitions, partnerships, agreements and contracts on forest conservation and management between local and non-local actors, which could and should help in sharing benefits at all levels.

However, such participation would have the desired effect only if there is a real political will to solve related problems on a conceptual basis and if it is based on and respects all other related agreements it means *i. a.* if there are convenient conditions created for e. g.:

- overcoming of gaps in collaboration between and among those involved with forestry science, research and practice as well as insufficient communication at various levels;
- improvement of general public involvement in forestry issues and awareness on forestry as such including improvement of up to date bad medial presentation of forestry;
- improvement in overall education and public relations, capacity building;
- and responsible and respectable behaviour of all stakeholders including policymakers.

These conclusions should lead *i. a.* to the following suggested actions:

- Actions to improve visibility of forestry as such.
- Actions supporting education.
- Solving such issues as e. g. character of work of respective state administration bodies, which deals with forests; forest categories; public relations; improvement of awareness (particularly also with people responsible for macro-economy, policy-makers and NGOs) also in connection with real introduction of payments for ecosystems services particularly in mountainous regions.

There is a hope that Forest Action Plan just prepared in Community should help to solve some of problems mentioned including better image of forestry. Czech Republic appreciate very much activities done by Austria in preparation of Forest Action Plan of the EU trying to include also mountain forests as a special item into this document.