COMPARATIVE STUDY IN ROMANIA AND EUROPEAN STATES REGARDING THE MANAGEMENT AFFORESTATION LANDS

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Abstract: Reported in the country, the current area of 6.337 million ha of forest in Romania represents only 26.7%, which if added forest vegetation outside the forest, about 430,000 ha to reach 27.7% rate of afforestation under the European average and below the insurance scheme. Contrary to popular belief, we live in a poor country in forests exposed to numerous hazards, including climate accidents. After percentage, the Romanian forest ranks 11th in Europe, after countries like Sweden, Finland, Austria, Czech Republic, Slovakia, Poland, the former Yugoslavia, Bulgaria, Germany, aso. Notes that in this list are included all the neighbours of our country, except two, which topography (plains stretched) is not advantageous: Hungary and Ukraine.

Key words: management, spur, forest, measurements, legislation, desertification

INTRODUCTION

Biogeography area of Romania is considered the western limit of maximum intensity of aridity process - desertification (advancing into Europe from south-east), being in an extremely fragile ecological balance (13) because of its position on several interfere climate (Central European, Eastern Mediterranean and South-Step) and longstanding human intervention with destructive results forests.

Although the magnitude reported in Romania optimal ecological space is provided, each featuring capita average of 2 ha of land in relation to the structure, it is totally insufficient for forests: 0.3 ha/capita in instead of 0.8 ha as would be necessary.

It is a proof that a country once rich in forests, we got a poor country and to ensure the future of geographical space we occupy and we were designed, we must change our land policy: much less degraded forest and agricultural sector, where huge areas they occupy today (by some estimates, more than 2 million ha).

In addition to the sharp decrease in forested areas, past irresponsible deforestation brought us one big disadvantage: unequal distribution heavily imbalanced forest after major forms of relief (in contrast to the almost equal distribution of these forms to the whole country): 60% forest in the mountains, 32% hills, and only 8% in the plains. That lack of forests on climate fund excessive arid easily makes our plains highly vulnerable to drought and other adverse weather phenomena. (2)

We must show that afforestation modest percentage occupied by him is the result of our long forest landscape regressive transformation that began in the plains after the peace of Adrianople (1829) and continued with variable intensity after World War I, expanding gradually to the hills and then mountains. The first forests were slaughtered for building ships and bridges (pavements) Turkish cities were the oak, from the plain (11). The years that followed brought some stability to the area of forest, but the country's forests were not exempt from other impacts, which will be discussed a little further. The fact is that Romanian biogeography area has "forest vocation" and the forest attended part of ethno genesis.
MATERIAL AND METHOD

Our history testifies that forests covered about 79% of the national territory and formed a virtually unbroken continuity from the mountains to the plains, with small pockets of herbaceous vegetation (steppe), cultivated or not (Fig. 1). The current situation does not reflect our natural potential. We have more forest land support, water, grasslands and agricultural crops by the population of the country so desperately needs.

![Figure 1 The forests of Romania in prehistory (According to N. Doniță, 1992)](image)

The most favourable conditions for expansion of forest vegetation (5) are met in the hills high in the bottom and middle of the mountains (altitude 500 - 1400m), which develops optimal oak, beech, fir and spruce. High favourability presents lowland floodplains of major rivers, which are indicated species: poplar (indigenous and euro-american), willow, ash meadow, English oak, a.s.o. (14) Although less favourable interglacial fields can be successfully covered by forests of oak and blunt (mixture of species: oak, ash, lime, hornbeam, a.s.o.), whose role is predominantly but EcoProtect; biomass that comes in second place, it is also so important, but it primarily in the plains totally devoid of forest. (1)

In Romania together two phyto-geographic limits: limit forests of western and northern Europe and limit the steppes of Eastern Europe feature. The ecologically they are manifested in two ways: as a thermal limit, determined by the altitude (up to 1600-1700 m) and the northern boundary by water scarcity and increased perspiration, in the S-E of the country.

In this space eco-climatic were differentiated following areas:

A. Horizontal (latitude):
- Steppe zone;
- Steppe zone (south and north);
- The forest of oaks, with:
  - sub mesophilic oak forests;
  - sub xerothermal oak forests.

B. Vertical (altitude):
- Deciduous forest:
  - sublevel oak forests,
  - sublevel beech forest,
• sublevel mixed beech forests with conifers.
  - Spruce forest floor;
  - Sub-alpine;
  - Alpine.

Forests share units and formations are as follows:
  - Alpine floors and old spruce: 0.6%;
  - The spruce floor creations themselves (pure): 10.7%;
  - Mixtures floor spruce, fir, and beech: 25.8%;
  - Floor and mountain beech forests premontan: 14.6% pure;
  - Floor and beech forests hill gorunte: 24.6%;
  - Hilly sky, flasks and beech forests: 12.6% lower limit;
  - Lowland oak forest with mesophilic and mezoxerofili: 6.3%;
  - Steppe oaks and other deciduous xerophylics: 4.8%.

RESULTS AND DISCUSSIONS

The general composition species shown that 2/3 of the country is forest consisting of hardwood (69.7%) and 1/3 of softwood (30.3%), as follows:
  - 22.5% spruce, fir 5.1%, other conifers (pines, duglas, larch) 2.7% (15);
  - Oaks, 19.3%: 11.6% oak, English oak 2.4%, 2.9% heaven, flasks 2.0% , 0.4% and fluffy grey oak;
  - Beech: 30.4%;
  - Various Hardwoods, 14.3%: 6.6% hornbeam, acacia 3.2%, 0.6% maple, sycamore and ash 1.7%, other 2.2%;
    - Various deciduous soft, 5.7%: 1.2% indigenous poplars, poplar 1.1%, 0.8% willow, wicker 0.1% other, including 2.5% lime.

In total, in Romania there are 41 species of indigenous trees, such as the role assigned biocenotic: main species, basic (enlightening), the main species mix (used in forming the ceiling stands in the upper and middle) and secondary species mixing (participating in the ceiling below). (10) Shrubs are another category, which forms the ground floor stands. Romanian forests are not exempt from imbalances and impacts, caused either by humans (anthropogenic) or inauspicious developments, far beyond the limit of tolerance, of natural causes. (16)

Among these are:
  - Cutting irrational and abusive practiced in the not too distant past (in the immediate post-war period) that led to the current dismantling of stands with high age restriction classes (old) and the predominance of younger classes (Fig. 2). This negatively affected the share of annual cuts, involving the introduction and enforcement of long waiting periods (in forest management planning and practice).
  - Offences forest that has grown as retrocession unusual and resulted in clearing of over 300 000 ha forest.
- Atmospheric droughts accompanied excessive heat. Lately, the frequency and duration increased alarmingly. Paradoxically, they are locally associated with catastrophic floods. (4)

- Gale force winds (100 km/h), which are rampant mainly in spruce forests (species ridiculer system less developed, shallow), but in other forests, other species (beech and oak right). Based on observations of time (since 1885), we can say that they have become endemic and present in our country, but especially in Bucovina, regular frequency (repeat after every 5-6 years). It seems that this is the price paid for the last century forced with resin (3).

- Snows soft due to the increasing frequency of late, have become a factor of instability in pure stands of conifers, causing extensive damage and heavy remediable - are broken limbs and crowns (tops) on a mass scale.

- Hunting supernumerary herbivore that winter, shelter and safety, gather in large herds in certain places and peel fruit trees, exposing them to fungal rot (6).

- Defoliating insects that multiply in the mass (steps). These graduations are becoming more and more powerful, because too mild winters lately, which promotes uncontrolled.

- Changing the geography of the main species, begun by 1955 and continued for 2-3 decades. Preferably, it has been replaced by large spruce stands of beech which were in the complex natural vegetation and were well adapted to the environmental conditions. Taken outside the area, spruce (sometimes terminal) did not deliver the expected result, so the time to give up this “fashion”, came from Central Europe. (9)

**CONCLUSIONS**

We can not conclude this paper, without mentioning the famous and controversial phenomenon of premature drying, the mass of forests (forest ecological decline). It first appeared in Central Europe from the tree (“Tannensterben”) and gradually extended to the east and southeast, including other species such as spruce, oak and beech. The causes are multiple, often mentioned are about six (7), but most likely one comes to the fore, taking first place as the most important: the ill-fated combination of pollution as its most acute - acid rain and drought. That is the period of prolonged drought of the years 1984-1993, when pollution was meant to bring the forests of Europe, including those of Romania in a major ecological crisis, mass drying, virtually all species, and in most of the area, causing
heavy forestry issues. But there was a chance of the following years under good climatic rainfall report, otherwise many of the country's forests could be gone permanently or temporarily ecological drift. (12)

We consider this a warning of what can happen and we can bring the not too distant future, because of the current global warming and climate pedohidric generating stress permanently. Forest can not fight alone with changes so fast and such intensity, being a delayed reaction. Help ranger, meaning of appropriate changes specific composition is so absolute and imperative.

REFERENCES


