## MATTERS AND PRIORITIES OF ROMANIAN FORESTRY

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## ABSATRACT

The knowledge on the environment with everything it can offer at present time, and in the future, on one hand, and on the reaction of the forest species to various requirements of the environment, on the other hand, is of a great importance. For this purpose I shall, in the following paragraphs, give a summary of some problems that I consider myself, of great importance and highly present in the Romanian forests.

Keywords: forest sites, forest types, afforestation, stands

At the present time, when the lack of balance in the environment has become worse, the people lay their hope in the forest, which is considered as a very special governing factor for the environment.

Although a lot has been written and even more said about the quality of the forest, still, there is the temptation of forgetting that the forest is also under the influence of some powerful external pressures; beyond certain limits, the forest is restricted, too. It is not an infallible component of the environment, a supreme defender that is acting in any conditions, irrespective of people's position about it.

The forest is offering a lot. However it should be known, understood, taken care off, in order to be able to fulfill its invaluable functions.

The present major disturbances of the environment (pollution, climatic changes, aridity) are really pointed out as serious phenomena (still inadequately summed up), with consequences on the forest, on forestry species and associations of species, on for-

est ecosystems. This knowledge becomes more and more a necessity, because the forest is setting up in a certain place for several decades, even for centuries, if we take into consideration that it can regenerate naturally.

The improvement of knowledge on forest sites and forest types, briefly, on forestry typicality, and forest ecosystems. Generally speaking, it is a real problem and an important priority because, on one hand, the typicality represents the ground for various silvo-technical interventions and activities, and, on the other, there is a real delay of theoretical and mainly practical nature.

After 1958, the moment of coming into being of the first synthesis on forest types in Romania, and after 1970, the year of systematically setting up the first forest site, and then, the achievement of complex naturalistic studies (1970-1985) and the latest concern of ICAS (Forest Research and Management Institute) on transformed sites have not been materialized into an unitary site system and specific regional stress that would allow a better substantiation of silvo-technical measures. When I have referred to the unitary system, I was thinking about a better insertion of normal territorial sites with those depreciated, a better cooperation with high educational system. With reference to regional speci-fic, I must say that things are difficult, too.

The first steps here were made in 1977. Then the site types were decided, with peculiar site character, in Dobrogea, Banat and Satu-Mare.

Strengthening of forest site mapping activity, which is absolutely necessary, especially now, when the changes (latent and brutal) have been exten-ded and emphasized on the environment, with the most ill fated effects on fo-rest vegetation. It presumes not only dynamic monitoring of forestry sites, but new evaluations and solutions to new situations, as well.

Obviously, this can be done only by a large group of real experts and not by amateurs in this field. It cannot be confused with the activity of characterization, classification and systematization of the sites; it has a practical character. This is more necessary at the present time when thousands and thousands of factors have an impact on forest resources related to forestation. Their potential and capabilities need to be established, at least in cases where there are limitative factors of growing (there where even agricultural crops and grasslands did not have results).

The need of improvement of the compositions and schemes for afforestation, both in relation with thickness and of more judicious proportion of the species in the formula, of saving the basic species and increasing the degree of contribution of corresponding mixture and supporting species. They should respect to a greater extent, both the biodiversity principle and the way of association of species on normal and degraded lands.

In order to achieve this, it supposes more precise knowledge on the ecologic requirements of forestry species and, obviously, the offer of the sites and taking into consideration the economic aspects, as well. Some attempts to optimize the composition of 276

stands have been made, although there is room for better.

Very much connected with this problem there are the following aspects:

- a) Giving up the "rectangular" schemes in afforestation, in practice this proved silviculturally unfavorable, with large risks of eliminating some species by others (a classical example for this is the mixture in alternative strips of oak trees with ash trees (that always lead to eliminating the oak).
- b) The improvement of afforestation technology, the adaptation to the real site conditions (especially the climatic ones) involving changes (we refer to the preparing technology of the land and soil, to the quality and diffusion of afforestation materials, to its diversification). To this end, since Romania does not have many forest species, especially in critical cases, it should reconsider some species, less represented in the territory- but that can bring us great ser-vices- such as: native poplar (and grey poplar), P.marilandica, regenerated for water meadows, European aspen and Japanese sophora.

Operations for stand tending and management, should have as a steady goal, besides the selection and promotion of valuable specimens, the building up of the tree crown, or better to say, harmonious development of the stem and crown according to the biology of the respective species. If some parts of our Quercus stands become today, too easy victims of destabilizing factors, that is due to the fact that they were build too dense, the tree crowns being unable to develop accordingly. This happened because one could not step in, more powerful, for the fear of grassing the respective stands, which, as a rule, have few supporting and mixture species (except mixed foliage forest). In this way we come to number 2 problem, to the necessity of improvement (in practice) of afforestation composition and diagrams that represents the starting point to develop stable stands.

The resinous stands have also been held too close from outside natural area (spruce, fir and pine), which, due to their too big density, were broken by wind and rain. The same problem is valid for cultivation (stands) with a protection role. That is why it is necessary to step in a more supporting manner to be able to assure their stability and permanence.

In connection with the problems mentioned before, it is necessary to ask ourselves how many first class old stands represent the forest of the future, taking into account their present structure.

**Long-term experimental cultivations**, the way they have been thought about by our precursors, represent an exceptional scientific treasure, but paradoxically, they were too little employed.

Coming into being 60-70 years ago, in various parts of the country (in site conditions), they have been destined to be information holder and real "in situ" laboratories.

It is absolutely necessary that they should be brought together with natural "witness" young stands, again, on the first place of forest research.

## Naturalistic studies for substantion of the forest management planning.

The most important and complex work in silviculture - the forest planning- is being done, at the present time, by a lot of forest engineers. This does not belong to the present transitional period. Here, in this field, young personnel have always been attracted due also to the physical effort that works imply. In the past, this personnel has enjoyed the support of an exceptional personnel of advisers. One can not dispute that such advisers still exist in our days, but they are not represented so well in leading and decision bodies, as it used to be in the past.

On the other hand, having in view the changes that are taking place in the fo-rest LANDSHAFT, the naturalistic studies should be revised in each ranger district, to help the forest planners (and not only) in decoding and diagnosing, in a better way, the natural (and site) frame.

Revision of the forest management plans implies closely fixing and recording the changes that took place in the site environment (generally less visible). Is the forest planner able to deal with these difficult aspects, as well? No, we think not, especially if we take into consideration the present standards and tasks and some shortcomings of the system being in force.

It is quite evident that, in order to be nearer to such problems and able to tac-kle them properly for solving, besides some organizational and institutional steps, there is a real need of experts, very well prepared, both in research and planning in the territory, as well. To this end, efforts must be done in the high education institutions, too. They should structure more adequate special schooling programmes, including practical work for the students, very much diminished when compared with real necessities.