

THE MESSAGE OF JÁNOS BALOGH THE ECOLOGIST AND THE SCIENCE POLITICIAN

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It is the personal experience of many of us that his concern about our domestic natural environment as well as the world's ecological condition, which imbued his entire scientific and educational activity, actually, made JÁNOS BALOGH, the ecologist, put together numerous important development plans that are worth our consideration. His concepts had equal relevance to the global and national, scientific and practical aspects of ecology.

Our short presentation attempts to focus on JÁNOS BALOGH's views on Hungarian ecological research and related science policy as well as to convey his prophetic concepts. He departed, so his plans became sublimed into a message for the Hungarian researchers, educators and practitioners of ecology.

By now it has already become a historical fact of Hungarian science that JÁNOS BALOGH, in the last decades of his life, fervently criticised the science policy of the 1960s and 1970s that relegated ecology to the backburner on nearly every level of research and education. While welcoming and appreciating the creation of an extensive and ambitious research base of Hungarian molecular biology, he found that the failure of allocating resources of similar magnitude to the development of domestic ecological research and education implied a fatal mistake. Needless to say that we have not managed to eliminate the negative consequences of the said period's constraint-driven lack of development as of yet. This is the reason why both the staff level and institutional system of domestic ecological research are lagging far behind those of European countries of comparable size and faculties.

Nearly down to the very last day of his life, JÁNOS BALOGH was actively engaged in these problems, especially in the issue of the insufficiencies of domestic ecological research and development. The conversations we had after his unforeseen death made us realise that every word and argument he uttered correlative the planned institutional development of Hungarian ecology were still true, and that we could outline a well thought-over, coherent concept simply by recalling his plans. It is the most important details of his institutional plans that we are trying to elaborate on here and now, in the hope that our science policy officials will sooner or later listen to JÁNOS BALOGH's, the ecologist's, last message.

His plans kept changing and transforming during all those long-long years, and being amongst his standard conversation partners we were witnesses to this process all along. In fact, he formulated the better part of the plan we are about to describe no sooner than the very last years of his life.

Thus the first point to be explained here is why the original concept of the Hungarian Institute of Ecology took the shape of a concept of the Institute of Applied Ecology in his mind later on (we intentionally avoided using the notion “centre”, which term as a Hungarian word he abhorred).

So his major reasons were, as follows:

- no resources of acceptable extent can be obtained for an Institute of a size comparable to that of the Biological Research Centre of the Hungarian Academy of Sciences, Szeged;
- tasks of national magnitude are awaiting their solution;
- not even the previous achievements of ecology have been utilised properly;
- we have not enough specialists yet.

His major argument implies that ecology has an infinite number of research orientations and it is impossible to anticipate that particular direction of development that can be successful. Multi-oriented basic research should remain the competence of academic institutions, research teams, university departments, and in a broader sense, of individual initiatives, as he put it.

According to him the most important and urgent action correlative the institutional development of existing Hungarian ecology lay in the establishment of an Institution of Applied Ecology, which would serve the end of implementing the scientific achievements of ecology in practice. The Institution, in line with the highly diverse application areas, was to comprise the following departments:

Department of Environmental Ecology

This department would be tasked with laying the foundations of domestic environmental protection, and would involve an ecological research-centre creating a basis for environmental protection.

As a sub-department or group *the database of the national living world* (in other places: *living beings*) would be integrated with this department. Although it is a commitment accounting for several 100 million HUF, it is of vital importance for the country as a whole.

Unlike a whole array of European countries do, Hungary at present does not have a database enabling her to identify valuable, rare, protected, etc. plants and animal species facing risks in one or another point of the country as a result of an ecological disaster, the erection of a new industrial facility or housing estate, road construction, etc. Although, at present, a great number of our institutions keep records on the occurrence of species, these data – owing to the diversity of these inventory systems – are accessible with great difficulties only, or cannot be used at

all. For this reason it would be absolutely necessary to keep the records of species and habitats in Hungary in a single database, which would involve a lot of benefits. A database of this kind would enable us to map Hungarian regions of which our knowledge is insufficient as well as detect biological organisms of which there are no data available yet. Thus, the database could also serve as an excellent guideline for the researchers of flora and fauna in selecting biological groups and habitats to study.

Besides the data of occurrence the database would include data on specific actions targeted at rescuing endangered species.

Department of Ecotoxicology

This department would be tasked with conducting analyses on industrial ecotoxicology, environmental health, and the way of placing genetically modified organisms in the nature (with soil microbiology included, as well).

Emergency Centre (from a general institutional point of view: group). Its properly trained members would perform local advisory or management tasks in the event of bigger or smaller ecological disasters. (The memorable incident of river Tisza's cyanide contamination made us realise that we still lack a staff of qualified experts that – armed with the necessary qualifications and experience – could readily identify the situation by sampling, let alone adopt decisions on immediate actions).

In case of emergency the specialists of this department would work under the control and supervision of the national disaster recovery agency. Although the group would involve members recruited from outside the Institute, as well, the Institute would be the basis of this activity, with movable laboratories. The establishment of such a department would require a one-time capital expenditure, and it would be allocated an annual budget for maintaining readiness.

Department of Recultivation

This department would be responsible for natural re-cultivation and remediation in general but, e.g., the development of flood plain farming would also be a task. Both of us attended when he held a presentation filled with enthusiasm on the initiative of Nagyköri. He was especially interested in plans that covered the re-cultivation of certain regions in his beloved Great Hungarian Plain by re-instating their original or near-original state. He firmly believed that cooperation between the De-

partment of Recultivation and the Ministry of Agriculture and Regional Development is natural rather than theoretical, because the department may become an important background institution in terms of planning the relevant efforts of the Ministry and working out the procedures of implementation.

Department of Ecological Information (elsewhere: Communication)

It is very sad that an average Hungarian citizen's erudition on ecological matters, and ecological awareness, in particular, is usually inferior to that of Western-European citizens. The relevant information currently provided by domestic media is not satisfactory in terms of scope, efficiency or air time (professional quality may seem to be the least problematic). That is the reason why JÁNOS BALOGH suggested the establishment of an information group that would continuously facilitate the soonest possible and efficient utilisation of ecological achievements as well as enhance the role of domestic media in shaping public opinion by collecting and making scientifically established, reliable ecological data available.

In addition to ecologists even teachers and journalists with a biologist's qualifications would work for this Department. They would make translations "from Hungarian into Hungarian", and facilitate the dissemination and utilisation of the results of basic research. There would be much more to it than just education, and obviously they would be responsible for the PR of the Institute, as well.

Funding

JÁNOS BALOGH envisaged the Institution of Applied Ecology as an academic research institute because, in his opinion, this was the only guarantee for it to be independent of, and protected against political influences and trends. The role taken by the Hungarian Academy of Sciences and its Biological Section would involve a key warranty in the establishment of the Institution. He found it absolutely necessary and justified, however, that the government bodies responsible for agriculture, environment and nature conservation should, without exception, assume a great responsibility for allocating funds to the Institute because the latter would in turn render extensive and scientifically established assistance in performing national and local ecological tasks. Taking all this into account, it is just obvious that the evaluation of the Institute's scientific performance should not be the exclusive responsibility of the Academy.

It is rather unfortunate that JÁNOS BALOGH's efforts to establish this Institute were not crowned with success in the past few years. He was realistic enough to realise that nothing but the commitment of the government can create such an institute. Apart from the willingness to render support, our Academy can assume a role in developing and assisting the already created Institution. We, who were standing so close to him, realised that the failure, even if it seemed more or less transitional, dispirited him, and his otherwise optimistic state of mind sometimes gave way to resignation.

As JÁNOS BALOGH underscored it more than once, he did not have any personal interest whatsoever in the establishment of the Institution (nor do the two speakers standing in front of you). The Institute of Applied Ecology, however, could provide tangible benefits for Hungary as a whole.

We have presented the last science policy-related message of our highly esteemed and honoured ex-teacher, colleague and friend in the evident hope that Hungary of the future, already as an EU member, should make sure that JÁNOS BALOGH's dream, the Institute, come true. Undoubtedly, this would mean the fulfilment of his life's work and, at the same time, the greatest post-mortem recognition for him. We suggest that the Institute, provided it is established, should bear JÁNOS BALOGH's name.