THE EARTH SUMMIT AND PRESERVATION OF NATURE IN POLAND

Degradation of natural environment by pollution, increasing use of chemicals in agriculture, introduction of new toxic and slowly decomposing substances which had never before existed on the Earth, as well as immense changes brought about in the lithosphere, left the problems of biosphere protection somewhat neglected. It might even seem, especially taking into account the policy of environment protection in Poland (expressed in numerous publications and in our law concerning environment), that preservation of living resources of nature is treated as something of lesser importance, or as a relic of the XIX century. Degradation of the environment by technology, and technical means of environment protection are treated as the most important issues. On the other hand, little attention is paid to preservation of living resources.

The 2nd United Nations Conference "Environment and Development" held in Rio de Janeiro on 3–14 June 1992, called the Earth Summit, brought about fundamental changes in the approach to those problems, stressing the priority of preservation of living resources of nature. This was expressed in the Convention on Biological Diversity submitted at this conference. For the first time ever such a large gathering, representing almost all countries of the globe, declared that each gene, each species and each ecological system should be preserved — because each of them is unique and irreproducible as it came into being in the course of evolution.

Never so far the basic postulate of nature preservation has been presented in such a straightforward, consequent and powerful way. The old distinction between "useful species", deserving protection, and "harmful" ones, which could be freely exterminated, should be entirely abandoned. The population of not a single species should be reduced to such an extent that this would lead to loss of a part of its genetic pool. No multispecies or multienvironmental ecological system should be treated as unimportant, because they came into being in the course of mutual adjustments within ecological niches and coevolution of species forming those systems. Nature conservation means protection of the resources of evolution, preservation of life which still exists on the Earth. Still — as, alas, much of that life we have already destroyed.

Other documents adopted at the Earth Summit are also of vital importance for preservation of the natural environment of our planet, but they are not as revolutionary, do not alter in such an essential way the hitherto prevailing views on environment protection, as Convention on Biological Diversity. Our approach to preservation of nature after the Rio de Janeiro conference ought to be different

from what it was before, and certainly not that of the XIX but directly that of the XXI century.

Of course, as it is often the case with novel views, many people remain sceptical; they have to get accustomed to new ideas, they must have time for adaptation to this new approach to problems of our civilization. It is true that, so far, the theoretical foundations of biodiversity preservation have not been sufficiently elaborated and that philosophers and ethicists have often more to say than those engaged in natural sciences. For instance, there is much misunderstanding concerning preservation of those species the population of which is overabundant, resulting frequently in disturbances of the ecological equilibrium of the relevant ecosystem or causing economical losses; this, in turn, making necessary control of the number of animals by human intervention. All this is true, and there is still much to be done, both in the theoretical and practical aspects, for biodiversity protection, and it is indispensable to identify areas of action and find ways of tackling specific problems. The principle, however, that all other spheres of activity should be subordinated to life protection has been formulated, and it can not be erased from the history of civilization.

We offer to the readers of KOSMOS the issue relating the Rio de Janeiro conference in a series of articles based on lectures delivered at an open meeting of the Scientific Committee Man and Environment (affiliated to the Presidium of the Polish Academy of Sciences) on 5th November 1992. Too little time has passed to attempt at present a broader reflection. The opening article (The Rio Declaration - beginning of an ecological era) by STEFAN KOZŁOWSKI describes the contents of the Earth Chart, i.e. Rio Declaration, adopted at the conference, formulating 27 basic principles of rights and obligations, introduction of which should help to establish a new ecological order on the Earth. In subsequent articles the remaining documents accepted at the conference are presented. ANDRZEJ CZYŻ (Agenda 21 — the global programme of action on ecological development adopted at the Rio de Janeiro conference) outlines main objectives of that programme to be enforced in the years 1993–2000. About the convention on biological diversity writes Joanna Gliwicz (The convention on biological diversity — its aims, characteristics and consequences for Poland), while PIOTR PASCHA-LIS in his article Attempts to solve some problems of the World's forestry presents "the principles of forest management" concerning management, protection and proper development of forests on the global scale. The adoption of these principles by the conference was preceded by numerous preparatory meetings and conferences with participation of both experts and high level politicians. JAN Kostrzewski (Save the deteriorating forests), an active participant of a series of such meetings as the delegate of the Polish Academy of Sciences, reports on formation of the European Forum for Forest Protection as well as on the outcome of meetings organized by this Forum. The Rio de Janeiro conference adopted also "the convention on changes of climate". This convention was presented previously in our Journal by Maciej Sadowski in the article entitled Political and International aspects of the climate change issue (KOSMOS 1993, 42, 181–185, no.1 (218) devoted to Global Changes in Natural Environment).

Presentation of the results of the Rio de Janeiro conference offers good opportunity to inform the readers of KOSMOS also about selected problems of nature protection in Poland. These problems can be now considered in relation to conservation of biological diversity. These problems are but seldom discussed in journals other than specialized ones, closely concerned with preservation of natural resources. This part of the issue begins with a paper National Parks in Poland by Andrzej Lubczyński, describing the activity of Polish National Parks, both the number and area of which were recently increased. Specific problems of nature protection in some selected National Parks are then presented in a number of separate papers. Aleksander W. Sokołowski writes on our oldest National Park (The Białowieża Forest and its protection) that is the Białowieża Forest, not only because this is the 70th anniversary since a fragment of this forest came under protection of the law but also because we are still engaged in the struggle to extend the status of the National Park over the whole territory of the Polish part of the Białowieża Forest, similarly as did our Belorus neighbours with their part. Stefan Michalik presents the problems of the Bieszczady National Park (International Biosphere Reserve "Eastern Carpathians"), recently extended in its part belonging to Poland by over 27 000 ha. This park is going to be united with the corresponding National Parks of Ukraine and Slovakia to form a single great International Biosphere Reserve under the auspices of UNESCO. The problems of the Karkonosze National Park, that which suffers the greatest degradation, are discussed by JERZY FABISZEWSKI and JAN JENÍK (Natural values of and threats to the Karkonosze National Park). One might even ask whether that area in which forests are perishing, does still deserve to be recognized as a National Park? The answer is: YES! Even more: the Karkonosze Park might become soon one of the most important parks on the Earth as on those mountains man has caused disastrous devastation of the environment. and now nature itself, without human interference, is recovering. Where to look for a similar research object in which it would be possible, both now and in the future, to observe spontaneous processes of ecological succession?

According to the new Act on Nature Protection issued in 1991, both national and landscape parks are obliged to elaborate so-called "preservation plans". Those plans should serve as basic documents defining the main nature protection, social and economic tasks which should be undertaken by the management of each park within the next 20 years, within that park and in cooperation with the communities surrounding its territory. The first, experimental plan of nature protection will concern the Kampinos National Park. The group of experts who are to elaborate it, has established the guidelines of the document as well as some conclusions and suggestions, which are presented by Tadeusz J. Chmielewski (Ecological, social and economic aspects of functioning of the Kampinos National Park).

The part of the issue concerning nature protection closes with a paper by ZBIGNIEW PUCEK on *Progress in and threats to the European bison restitution*. He presents a short history of extinction of European bison from the wild, reviews present standing of this species, and discusses problems connected with its further protection and re-introduction to the wild, the field of research to which Polish zoologists and breeders have greatly contributed.

Finally, we touch also upon one more essential subject concerning the struggle for the environmental culture of our society, *i.e.* education in natural sciences (may be we should rather say: ecological education) of our youth. Between the academic circles concerned with nature preservation on the one hand, and the Ministry of National Education on the other, there is now a serious dissent related to the place of ecological sciences in school curricula. It is proposed to introduce in schools a new subject "preservation of nature and/or environment", along with a more ecological approach in teaching of all other subjects. The Ministry does not accept the notion of a separate subject; according to its suggestion, the ecological subject matter could be taught within the curricula of other subjects (but no explicitly formulated programme has been presented). Jacek Kolbuszewski joins this discussion in his article entitled A conception of ecological education. Prologomena.

We realize that the problems involved in implementation of the recommendations of the Earth Summit in Rio de Janeiro are enormous, most probably we have not even realized how great they are. Many problems have to be carefully thought over before they can be explicitly stated, many others should be discussed in near future. The columns of *KOSMOS* are open to such a discussion.

La strogethe.