Motives of Agro-Biodiversity Protection in the International and the European Legal Systems

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Abstract

Existence of life on the Earth depends on biological diversity. It determines evolutionary processes, formation of species including the ones, which particularly have interested human being. It has been used to varying extent, unto this day. Usable biodiversity, which is usually associated with agricultural biodiversity, is only recently regarded as the most important natural resources. Used for economic purposes, it influences the development of agriculture, but also industry and medicine. Therefore, it constitutes a huge potential, which abilities are not known yet. The greater problem is the real threat of losing resources caused by too quick fading away of races and species, which were created and preserved by a human being. Many plants and animals adapted to the local climatic conditions become extinct and together with them the coded in genes predispositions to fertility and resistance, developing antibodies, resistance to pathogens and others. There appears the problem of the necessity of making international societies aware of it and taking appropriate actions of protection, starting with legal regulations and creating institutions, which are able to administer and act in business of modern and future generations.

Key words: *biological diversity, protection of the species used agriculturally, right to health and safe environment, international law, European Union law.*

In colloquial language, speaking of biodiversity, we usually think about scientific and naturalistic meaning of this term, i.e. diversity of animal and plant life, which guarantees the variety of signs of life and the continuity of life on earth. Biodiversity consists in existence of genetic variability and multiplicity of ecosystems, as well as dynamics of changes inside of them. Therefore, the aim of biodiversity preserving and protection is providing it with the continuity of mutual interactions between genotype and phenotype determined by internal and external environmental factors. The peculiar and unique dialectics of organisms and their environment is a basis of adaptive mechanisms and preserving ecological balance, which is very important for life and survival of human being.

From all the problems of present world, it is the mostly disregarded by modern societies, which are not fully aware of threatening danger. Though, biological existence of human species totally depends on existence and preservation of wild and agriculturally used biological diversity. Fortunately, we can notice, that international, regional and local legal systems try to do something in this issue. Now it is not so important whether they do it to protect the right to health and safe environment or for other reasons – usually economic ones. It is significant, that we seriously start to think about it and act.

Sometimes we can find in literature a classification into agricultural and wild biodiversity. The first one is understood as a set of species, varieties and races serving to satisfy the essential human needs, i.e. food production. It is the result of ten thousand years of many generations of breeders and farmers heading to domesticate, adapt, sustain in time and maximum use of revealing advantageous features of plants and animals. However, the diversity of wild nature preserves the character of natural resources and "goes by its own rules".

This distinction sometimes corresponds with other distinction, which above all takes into account the possibility of access to these resources and the distribution of profits that may be generated. Moreover, the characteristic of biodiversity is that when it is generally collected and preserved *ex situ*, i.e. outside its natural environment, biodiversity of wild animals basically maintains *in situ*, i.e. in natural environment[1].

Furthermore, agrodiversity is the embodiment of centuries-old cultural evolution, because plants and animals to some extent co-evolved with a human being settling in various ecosystems nearly in all the parts of the world contributing different cultures. These changes in the last two centuries happen exceptionally fast. However, not until few decades we can observe extremely quick decease of quantity of wild and agriculturally used species[2]. For instance, since 1990 we have lost over 75 percent of varieties of plants, previously used in agriculture in the whole world. In Italy almost all local varieties of wheat, onion, tomato, lettuce or pea have become extinct within

[1] Art. 2 of the International Treaty on Plant Genetic Resources, (ITPgrfa).
[2] Ss. 2 of the preamble of the ITPgrfa.

40 years. In the Republic of Korea 75 percent of cultivated varieties have become extinct within eight years (1985-1993). In China in 1949, there were 8000 varieties of rise; today there are nearly 50. In Mexico since 1930 there have been lost 80 percent of varieties of corn. From 1900 to 1983 in USA there were expunged more than 7300 varieties of crops which had been existed there earlier.

Therefore, it would be appropriate to recognize the reasons of this phenomenon which is alarming with its intensity and range. What occurs more significant at the moment is probably awareness of motives for which it is worth preserving existing biological resources, which determine the level of food security of present and future generations[3].

Modern agriculture, with regard to demands, has been oriented toward mass production of cereal and livestock. Monocultures have been disturbing the ecological balance, artificially have shown the direction of production and paradoxically, in perspective for the future, they have created doubtful protection of food needs. Through implementing usually unfamiliar varieties we depart and eliminate traditional knowledge and skills of farming. In the meantime local municipal communities, as opposed to the modern technologies, take agriculture as a diversified multidisciplinary production, realized because of gained experience and knowledge transmitted from generation to generation, which means practically without support, research and technical facilities.

Responsibility of losing used agricultural diversity therefore belongs to generalized in XX century methods based on standardisation of cultivation, mechanization of processes and wide use of agricultural chemicals. Some influence has been exerted by widespread partly wrong belief, that every resource exploited by human being has its substitute. Consequently future generations have been and will be deprived of many (potentially and actually) valuable varieties and races.

In the meantime, we increasingly talk about agricultural cultures, not culture (in plural) in economic and legal analyses, which is intended to pay attention to possibility and necessity of functioning of various models of farming. For many small producers cultivating various plants is the guarantee of their own food security. This method does not have economic justification in multiple goods economy.

Only recently, it has been officially and formally admitted in the International Treaty on Plant Genetic Resources (ITPgrfa), that small farmers are fundamental, as well as multiplicity of their ways of farming in the process of preserving biodiversity in the world[4].

We should emphasize the significance of international regulations in such important, delicate and actual cases as the protection of future living conditions

[3] Ss. 13 of the preamble of the ITPgrfa.
[4] Ss. 7 of the preamble of the ITPgrfa.

of people[5] and also the issues of intellectual property rights protection including existing biological resources. The necessity of paying closer attention to these problems was inspired by the suggestions of underdeveloped countries and caused by "predatory" behavior of big biotechnological companies, which without resistance led out the country "genetic gold" in order to take out a patent of obtained products and put into market turnover without any compensation for primary owners and inventors.

Together with the development and dissemination of biotechnological research, there has been increase of knowledge of genetic inheritance economical value of particularly wealthy states, as well as the awareness of injustice resulted from continually existing in the whole world ruthless defrauding this fundamental resource for scientific progress. This phenomenon is often directly called biocolonialism, bioimperialism or biopiracy. The merit of this Treaty is taking into consideration such important problems, but still not fully realized by everyone, which consider next to substantial meaning of biodiversity, also intellectual input and the importance of the experience acquired by generations and knowledge which may widely support innovation and research initiatives.

Therefore, after the long time of formatting legislative ecological initiatives, focused nearly exclusively on species animal and plant protection, also European Union has decided to change its previous attitude towards issues concerning environment protection. There have been noticed actual, both ecological and economical benefits resulting from complex protection of natural and agriculturally used ecosystems and local diversity of species still preserved in some places. Consequently, there have appeared numerous documents indirectly or directly concerning biodiversity[6], especially the one related to agricultural production; particularly with food, fibre, drug production and many industrial processes. European Union fulfils accepted in this way obligation of integration of protection problems and supporting agriculture with other sectoral policies according to the article 130 R § 2 of the Treaty on European Union. Biodiversity becomes more important in social, economical, scientific, educational, cultural, recreational and aesthetic context. The main task of the initiative of the European Union, at least on the level of declaration, is to prevent causes of overgrowth of species erosion. Through legislative initiatives we try to reverse or at least slow down the actual tendency to decline varieties and degradation of the whole ecosystems, both inside and outside the territory of the European Union.

[5] Ss. 6 of the preamble of the ITPgrfa.
[6] E.g. Directive 79/409/EEC of 2 April 1979 on the conservation of wild birds (Official Journal L 103 , 25/04/1979), Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora (OJ L 206, 22/07/1992).