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Biodiversity conservation in agriculture: the experience of Poland

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Abstract: Over remarkably large areas, Polish agriculture has still retained many valuable species, ecosystems and landscapes which presently are subject to accelerated destruction or degradation. It has been shown, that the occurrence of rare and endangered species of butterflies is a good indicator of the level of natural features retained by agricultural production areas nationwide. The concentration of these species is positively correlated with several indices which illustrate properly the features of extensive and small-scale farming.

In Poland, biodiversity is perceived as two separate domains. The first, managed by the Ministry of Agriculture, pertains solely to species, varieties and races cultivated or bred. For this group, extended gene banks are set, together with support plantations or breeding centres. The remaining <<wild>> species, their associations, and ecosystems, as well as the issue of diversity of landscape in agrocoenoses should be left to the Ministry of Environment.

The international conventions – e.g. Convention on Biological Diversity- direct Polish agriculture towards environmental sustainability and consequently this approach will have to be adopted by Poland. The whole area used for agricultural production should be divided and placed either under the responsibility of the Ministry of Agriculture (when earmarked for production purposes) or the Ministry of Environment (when devoted to preservation). Those areas whose priority role is preservation should be managed by segregation i.e. in accordance with the adopted management planned by specialised nature protection authorities. For the remaining areas, the principles of management compliant with the postulates of conservation of wild plants and animal species should be drafted.

Key words: agriculture, biological diversity, management for conservation, butterflies, monitoring, extensive farming, Poland.