



Valuation of Agricultural Land in the Czech Republic in history and at present

Valuation of agricultural land in the Czech Republic pursues through the use of some special systematised units. The units express main soil and climatic conditions of the concrete sites on plots of agricultural land and are called Valuated Soil-Ecological Units (in Czech BPEJ).

Valuation of agricultural land in the CR already has its history. It appears from the General Agricultural Land Survey from the sixties of the last century. That was the unique action in worldwide basis. During the survey was valuated all the agricultural land (7.2 mil ha), classified by progressive Genetic-agronomic soil classification system. In that time many significant maps, books and other background papers have arisen, that are used for computer processing and updated to these days.

Bonitation Soil Ecological Survey connected with mapping of the Valuated Soil Ecological Units in the maps of scale 1:5 000 implemented on the base of the Czech Republic Government resolution No. 101 from May 11th, 1971, was finished on the Czech Republic territory in 1982. The classification bonnity system is flexible complex enabling complete assessment of basic agro-ecological factors of agricultural soils. The changes of ownership relationships to soil and changes due to various degradation processes have been provoked an implementation of current actualization and detailed delimitation of Valuated Soil Ecological Units, primarily in relationship to the individual plots. Actualization of Valuated Soil Ecological Units and their delimitation and mapping have been systematically implemented since 1999 according to obligatory national methodology. Today an actualization is running on area 500 000 ha of farmland. The changes are registered in cooperation with cadastral and stakeholders offices in the Immoveable Cadastre of Czech Republic.

The system of Valuated Soil-Ecological Units is necessary for many purposes. Some of them are record in the state legislation, especially various purposes crucial for:

- pricing of agricultural land (figure 3)
- setting of protection classes of agricultural land (figure 9)
- loading of information from Valuated Soil-Ecological Units to the cadastre databases of the Czech Land Fund and their scientific content adding (figure 2)
- realizing of politics of subsidies in agriculture sector, e.g. LFA (figure 8)

Above mentioned system enables proper existence and improvement of complex digital database and huge amount of numeric and graphic interpretations, including maps. These interpretations are related to:

- soil protection against very different threats, as are erosion and flood flows (figure 4, 6, 7)
 - average annual loss of soil and erodibility factor, hydrologic groups of soil and CN-curves
- delimiting of protection zones and territorial systems of ecological stability
- soil vulnerability assessment (figure 1)
- assessing of urgency for land consolidation
- special reasons for subsidies in consequence of some soil properties and delimiting of worse agriculturally usable soils (figure 5)
 - shallow soils, soils with high content of skeleton and distinctively sloping soils

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Figure 6: Soil Protection against different Threats

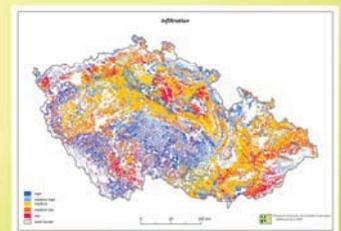


Figure 3: Pricing of Agricultural Land

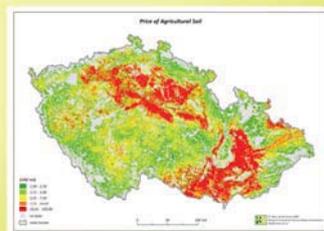


Figure 7: Soil Protection against different Threats

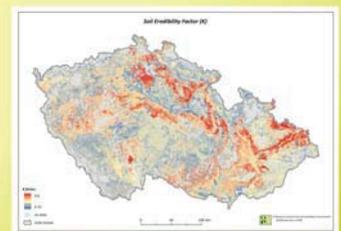


Figure 1: Soil Vulnerability Assessment

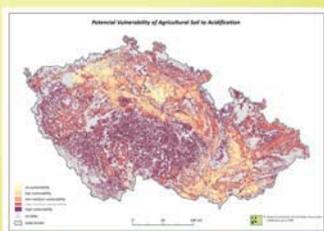


Figure 4: Soil Protection against different Threats



Figure 8: Realizing of Politics of subsidies in agriculture sector

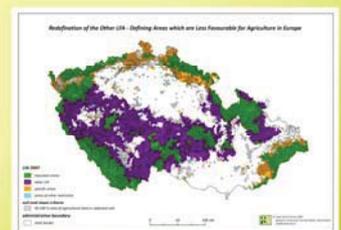


Figure 2: Valuated Soil Ecological Units and Cadastral Database

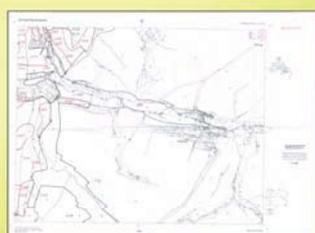


Figure 5: Delimiting of worse agriculturally usable soils



Figure 9: Setting of protection classes of Agricultural Land

