CADAstral Information System on the Agricultural Fields Foreseen with Underground Drainage Pipes

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Abstract

Based on the primary data of the unitary cadastral and land registry system the information subsystems are organized; they include the technical, economic and legal situation of the real properties for various specialty fields. As far as the agricultural fields are concerned, information subsystems on usage categories are made on regular basis, the delimitation and the representation of irrigation, draining – drawing off and anti-soil erosion systems being included in the cadastral plans. The cadastral information system for the agricultural fields foreseen with underground drainage pipes is formed from the univocal relations from the graphic entities: cadastral plan, hydro technical scheme and the descriptive attributes: climatological chart of the area, terrain relief, soil units, quality and suitability class for certain cultures. The totality of natural factors from the geographical unit of the administrative – territorial units of Bilca commune situated in the north of Suceava county has favoured, in time, the appearance of humidity excess with stagnant features and/or from the soil’s profile, which was associated with soil acidity and compaction. In the structure of the cadastral information system analysed in the present case study, it was used the textual and graphic data base resulted after the implementation of the cadastral works from the experimental field foreseen with underground draining pipes from the territory of Bilca commune which was set up in 1988 on a surface of 10 ha.

Key words: underground pipe drainage system, cadastral information system, technical database.