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Evaluation of Spatial Uncertainties In Modeling of Cadastral Systems

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Cadastre plays an essential role in sustainable development especially in developing countries like Iran. A well-developed Cadastre results in transparency of estates tax system, transparency of data of estate, reduction of action before the courts and effective management of estates and natural sources and environment. Multipurpose Cadastre through gathering of other related data has a vital role in civil, economic and social programs and projects. Iran is being performed Cadastre for many years but success in this program is subject to correct geometric and descriptive data of estates. Since there are various sources of data with different accuracy and precision in Iran, some difficulties and uncertainties are existed in modeling of geometric part of Cadastre such as inconsistency between data in deeds and Cadastral map which cause some troubles in execution of cadastre and result in losing national and natural source, rights of nation. Now there is no uniform and effective technical method for resolving such conflicts. This article describes various aspects of such conflicts in geometric part of cadastre and suggests a solution through some modeling tools of GIS.