Utilization of Land Administration Domain Model (LADM) for Smart Village Development in Indonesia

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SUMMARY

Village in Indonesia is the smallest administrative unit that have the authority to carry out activities in the fields of government administration, development implementation, and community development in village scope. Because of its definition, information about land in the village is also easier to obtain and monitor. Therefore, this study aims to build a village information system that is integrated with land information in the village. This is based on the Minister of Home Affairs Regulation No. 3 of 2017 regulates on improving management and information services to establish good governance which is building village information systems so the government systems can work well. Although the village does not have authority in land matters such as land ownership or land taxation, the village can greatly assist the implementation of land information systems in Indonesia.

This study discusses the development of a database model in the village that helps villages in managing their area. The method used in this study is a combination of a hierarchical database model and a relational database model based on the concept of land administration domain model (LADM). The concept of the database model is adjusted to the needs and authority of the village to help the implementation of land information systems in Indonesia. The definition of the entity and its relationships are adjusted to the regulations in Indonesia.

The results of this study are in the form of a database model in the village that is integrated with population data, land ownership, and land and building taxation in the village that is in accordance with the LADM concept.