

Application of Remotely Sensed Satellite Imagery for Village Boundary Mapping in Indonesia

: Case study in Hulu Sungai Tengah Regency, South Kalimantan, Indonesia

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SUMMARY

Indonesia is a large country with 250 million people and spread over 34 provinces, 416 districts, 98 cities, 7160 districts and 83,184 villages. The administrative boundaries of a village are very important to affirm and stipulate for ensuring legal order in the management of resources. The setting and affirmation of the village boundary is the embryo for the determination and affirmation of limits on the upper levels. It is important to establish and confirm the official village area and efforts to prevent village boundary conflicts. Currently in Indonesia, many villages already have village boundary maps but are not yet compatible with mapping rules. Only a small percentage of villages have village boundaries in accordance with the Minister of Home Affairs Regulation No. 45 of 2016 is about guidelines for determining and affirming village boundaries. Since the regulation, the determination and affirmation of village boundaries can be implemented more quickly so that by 2017 it has mapped about 12,159 villages. The purpose of this paper is to discuss village boundary mapping using high resolution upright satellite images by cartometry method in Hulu Sungai Tengah, South Kalimantan Indonesia. The results of this study indicate that the confirmation and determination of village boundaries from high resolution upright satellite images and with this method has accelerated the process of setting village boundaries. In this activity, the village border has been successfully mapped in 11 districts consisting of 127 villages. The results of this activity will be a complementary document to get the village boundary determination by the regent or mayor. The problems faced in this research are human resources and the availability of high resolution upright satellite images. Differences of perception and lack of understanding of the community regarding the importance of determination and affirmation of boundaries and the lack of authentic evidence of village boundaries becomes an obstacle factor in the implementation of determining and affirming village boundaries.

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