

Evaluation of Indonesian Land Base Map for Cadastral Application

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SUMMARY

Land Base Map (LBM) is fundamental as a spatial basis for parcel-based cadastral application such as land registration, land use management, and land valuation. In Indonesia, LBM is produced and maintained by National Land Agency Republic of Indonesia (BPNRI) via Directorate of Base Mapping. The institution produces the maps in certain scales, ranging from semi detail 10K to very detail 1K map. In order to make the production more precise, i.e., can fulfill the need and effectively support what actually needed by BPNRI's local offices (Kantah) and regional offices (Kanwil BPN) in their public service as cadastral mapping, parcel boundary reconstruction, and land valuation, the directorate conducted an evaluation on its products. It aimed to understand 1) how effective the usage of land base map, 2) among the scales, which more effective, 3) what are the deficiencies of the maps, and 4) what are the obstacles when use the maps. Using purposive sampling approach, the evaluation was chosen to be located in 13 Kanwil BPN and 26 Kantah as sample areas. Then, by analyzing the distributed questionnaires, some statistical analysis was conducted by deploying descriptive statistical analysis, categorization, difference test Kruskal Wallis, importance-performance matrix, and cluster analysis. As results, there was a SWOT analysis of the produced land base maps. This research ended with final conclusion that 1) the larger scale of the maps the more effective they will be used for parcel-based cadastral application, 2) there were classic problems of human resources and capacity building (lack of employees, wrong men in wrong places, lack of professional education and training) that caused inappropriate understanding of how to use the maps effectively according to scale and its operability. Finally, the study provides recommendation containing suggestions how to tackle these problems systematically in order to make BPNRI's public service more effective.