TROPICAL URBAN SLUM AREA MAPPING USING HIGH RESOLUTION SATELLITE IMAGERY: TECHNICAL ASPECTS OF LAND READJUSTMENT FOR URBAN AND REGIONAL PLANNING IN INDONESIA

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A comprehensive regional design and planning need the informative and exact databases to develop a sustainable city. Due to 20,5 millions Indonesia poor people live in urban areas with low prosperity, the need for urban slums area mapping is very important due to the urgency for providing facilities for the poor with Land Readjustment mechanism. High Resolution Satellite Imagery (HRSI) now becomes solution to map many slums rapidly. In this paper, we propose the scheme to use Quickbird Imagery and Map Info GIS. There are the combination among image processing, visual interpretation technique therewith accuracy assessment, field survey, data processing and spatial analysis GIS-based, and qualitative analysis. Interpretation was conducted to acquire urban land use and settlement quality parameters while field survey for environment parameter. Data processing and analysis were aimed for procuring settlement environment quality, for determining slum areas. Analogue GIS-model become the result which reflect the spread of slums and the proper Land Readjustment handling model.