URBAN EXPANSION MONITORING IN SELANGOR USING GIS APPROACH

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DECLARATION

I declare that the work on this project/dissertation was carried out in accordance with the regulations of Universiti Teknologi MARA (UiTM). This project/dissertation is original and it is the result of my work, unless otherwise indicated or acknowledged as referenced work.

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ABSTRACT

Rapid urbanization in Malaysia has led to increased demand for services and infrastructure, often resulting in unmanaged data and inefficiencies and services that underpin the urban population's way of life and its commercial endeavors. In order to serve the demands of its metropolitan population, Malaysia, like many other nations, has a well-established network of urban expansion. However, due to high demand but unmanaged data, there are often issues with the inability to provide efficient and quality services. This study aims to monitor urban expansions development using the GIS approach. The objectives of this study are to visualize the GIS spatial data for urban expansions and to analyze the management and performance of urban expansions. In this study several data are used such as population data, land use and landsat image data. To accomplish the objectives, the software will be used are ERDAS IMAGINE and QGIS. The results shows that Shah Alam has the most increases population and had urban expansion changes in the gap year 2018 and 2020. Population really give impact to the urbanization happen. It can show better data for management practices and addressing the issue of unmanaged data. This can lead to more organized and reliable data for decision-making.

Keywords: Urban, GIS, Land Use and Land Cover (LULC) classification, population, ERDAS IMAGINE

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