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Volcanoscape Space Configuration Zoning Based on Disaster Mitigation by Utilizing GIS Platform in Mt. Krakatau Indonesia

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Abstract: Particularly, space configuration zoning is the very first juncture of a complete space configuration and region planning. Zoning is aimed to define discrete knowledge based on a local wisdom. Ancient predecessor scientifically study the sign of natural disaster towards ethnography approach by operating this knowledge. There are three main functions of space zoning, which are control function, guidance function, and additional function. The control function refers to an instrument for development control and as one of the essentials in controlling land use. Hence, the guidance function indicates as guidance for proposing operational planning and technical development or land usage. Any additional function is useful as a supplementary for region or province planning details. This phase likewise accredits to define boundary in an open space based on geographical appearance. Informant who is categorized as an elder lives in earthquake prone area, to be precise the area is the surrounding of Mount Krakatau. The collected data is one of method for analyzed with thematic model. Later on, it will be verified. In space zoning, long-range distance sensor is applied to determine visualization of the area, which will be zoned before the step of survey to validate the data. The data, which is obtained from long-range distance sensor and site survey, will be overlaid using GIS Platform. Comparing the knowledge based on a local wisdom that is well known by elderly in that area, some of it is relevant to the research, while the others are not. Based on the site survey, the interpretation of a long-range distance sensor, and determining space zoning by considering various aspects resulted in the pattern map of space zoning. This map can be integrated with disaster mitigation affected by volcano eruption.

Keywords: elderly, GIS platform, local wisdom, space zoning

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