Paleogeographical Evolution of the Wonosobo Volcanic Area and Its Impacts on Ancient Life in the Cradle of the Javanese Civilization

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ABSTRACT

The Javanese civilization was born in the volcanic landscape. Human life has been greatly influenced by the evolution of this volcanic landscape for thousands of years. This study aims to examine the influence of the volcanic landscape evolution in the Wonosobo Volcanic Area on human life during Ancient Mataram. The specific purposes of this study are: (1) to analyze the paleogeographical evolution that occurred and (2) to investigate the influence of paleogeographical evolution on ancient life. Data collection techniques in this study included observation, remote sensing image interpretation, literature study, and documentation. Data analysis was carried out with analytical descriptive analysis by paying attention to the causality aspects. To reveal the landform evolution that has occurred, descriptive analysis was performed with a geomorphological approach. Meanwhile, historical analysis methods were employed to examine the past life. The results of the study show that the natural processes that occur in the volcanic environment have an essential role in determining the emergence, progress, decline, and even disappearance of civilization. Landscape evolution occurs through volcanic eruptions and the denudation of volcanic morphology triggered by climate. In the Sundoro Stratovolcano area, which was active in Ancient Mataram, volcanic eruptions caused disasters for the ancient people life proven by various archaeological findings that were buried by volcanic material. Meanwhile, in long-time-inactive volcanic areas, such as the Sumbing Stratovolcano and the Dieng Volcano Complex, the landscape evolution that affects human life comes from the denudation process of volcanic morphology carried out by climate. The anthropogenic traces in the form of the land function changes that have been carried out since ancient times also contribute to determining the speed of the denudation process. In short, this study provides new insight into the influence of paleogeographic evolution on human civilization over the centuries.

Kata Kunci: *Paleogeography, landscape evolution, volcanoes, Ancient Mataram*