

INSELBERGS IN VIJAYAN COMPLEX OF SRI LANKA

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The distribution of inselbergs and their relationship to geomorphology, structure, and lithology controls in Southeastern Sri Lanka is a significant characteristic of regional geology. Inselbergs are isolated hills that stand above well-developed plains and appear as islands rising from the sea. Inselbergs and associated there caves are considered animal kingdoms, monasteries, and geo-heritage sites that can be developed for geo-tourism. Geo-tourism is defined as tourism that sustains or enhances the distinctive geographical character of a place and its environment, heritage, aesthetics, culture, and the well-being of its residents. The preset study analyzed the inselbergs of the Vijayan Complex (VC) of Sri Lanka concerning their rock types using GIS Pro interpolations as the preliminary stage of a detailed field project. Geological maps (1:100 000) covering the whole VC were carefully interpolated with the contour map of the VC and all inselbergs with more than 100 m height for the background were considered. A total of 474 inselbergs were notified and 34% of them are rest on granite gneiss whereas 17% are rest on hornblend biotite migmatites. About 15% of inselbergs are on alkali feldspar granitic gneiss/migmatites and 11% are on biotite hornblend garnet gneiss. The geological composition itself suggested the high weathering resistance of the rocks might be the reason for the formation of such inselbergs. Particularly, these specific morphologies have stood out against the leveling process of nature largely because they are made of resistant granitic rocks containing large proportions of quartz, one of the indestructible rock-forming minerals. In addition, structural control is observed which developed the striking dome shape and piedmont. The castellated and Bernhardt appearance is significant in the VC inselbergs, which were recognized as rock monasteries such as Dimbulagala, Danigala, Rajagala, Buddangala, Piyangala, Westminster Abbey (Govinda Hela) etc. Though high scenic value and geo-heritage are prominent in some high elevated inselbergs, the deficit of proper management and route guide for geo-touristic purposes is identified which can be recommended for income development projects.

Keywords: Inselbergs, Vijayan Complex, Geo-tourism, Geology