

## Geospatial analysis of urban landscape patterns in four hill stations of Southeast Asia

ESTOQUE, Ronald C.<sup>1\*</sup> ; MURAYAMA, Yuji<sup>1</sup>

<sup>1</sup>Faculty of Life and Environmental Sciences, University of Tsukuba, Japan

Hill stations are commonly used to refer to a town or city in the tropics founded by a Western colonial power during the nineteenth and early twentieth centuries. Most hill stations are located in mountain regions at an altitude between 1000 and 2500 m above sea level, and thus enjoy relatively moderate temperatures than those recorded in the surrounding lowlands. Hill stations are known for their relatively good natural environments, which generate valuable ecosystem services that benefit the local population. In recent years, there has been a resurgence of interest in hill stations for 'quality environment' and other socioeconomic development-related activities, resulting in the rapid urbanization of some. However, rapid urbanization affects the fragile natural environment and threatens the sustainability of these areas. That said, not much is known about the landscape patterns of these areas. Hence, this study aims to contribute to our understanding of some of these areas by examining the urban landscape patterns of four notable hill stations in Southeast Asia, namely Baguio City (Philippines), Bogor (Indonesia), Dalat (Vietnam) and Pyin Oo Lwin (Myanmar). Geospatial tools and techniques, including remote sensing and GIS, will be used to facilitate the analysis.

Keywords: hill station, geospatial analysis, land use, land cover, GIS, remote sensing