Geospatial assessment of ecosystem services in Southeast Asian cities

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Ecosystem services refer to the benefits that ecosystems (e.g. cropland, forest, etc.) generate for and provide to people. Such benefits can be tangible (goods, e.g. food from cropland) or intangible (services, e.g. air quality regulation by forest), large or small and direct or indirect. Although cities largely rely from the ecosystems outside of their respective boundaries, they also benefit from their own urban ecosystems. The assessment of the spatial distribution of ecosystem services within cities can help in the understanding of the human-environment interactions. Furthermore, a spatial analysis of landscape pattern and how ecosystem services are distributed along urban-rural gradients might also help in the context of sustainable landscape and urban planning. In this study, we explore the landscape patterns of some major Southeast Asian cities and examine how their various ecosystem services are distributed along their respective urban-rural gradients.

Keywords: ecosystem services, spatial analysis , urban-rural gradient , Southeast Asian cities