

Evaluation of Land Value Capture for Financing Transportation Infrastructure Development in Sri Lankan Cities

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Transportation-based infrastructure development has become a crucial element in urban milieu. In developing nations, financing transportation infrastructure development has been under pressure due to high cost of compensation, construction and maintenance. However, efforts to improve transportation facilities often focus on ill-suited sources of financing, often involving massive debt, with limited attention to the potential contribution of alternative financial models in financing infrastructure development. This paper seeks to bridge this gap by tracing linkages between financing, transportation and land use systems and how these connections can inform policy development. This will assist governments to achieve positive outcomes for financing transportation infrastructure development in particular projects. This study is bult around the theory of land-based value capture in order to explore whether there is any alternative opportunities for infrastructure financing in Sri Lankan cities. By applying this theory, a four-step framework was introduced and validated through the case of Kottawa - Makubura Multi Model Transport Centre Development (MMC) and highway development projects. This framework mainly considered the existing regulatory framework to identify suitable alternative financing opportunities. In addition, it conducted an infrastructure beneficiary analysis to identify beneficiary groups in new developments. As the next stage it analysed the property value impacts through the hedonic pricing method. Findings indicated significant value increments (of around 20%) taking place within a 500m radius of new transportation developments, with lower impacts at distances of 1km and 2km from a given development. It verified that locational factors are the most influential factors in increasing residential property values pursuant to development of new infrastructure. Finally, it was proposed to adopt an active funding policy. The framework was validated by selected practitioners in the field. Accordingly, the conceptual framework developed will accommodate future studies related to land-based value capture.

Keywords: Land Value Capturing, Transportation Infrastructure Development, Hedonic Pricing Model, Residential Properties