

**Formulation of Sustainable Design Methodology Through Analyses
on the Interaction between Dwellings and Community
~ A Case-Study on Hanoi's Suburban Development ~**

Summary

Architectural design and urban design processes have naturally overlapping principles and considerations, but traditionally these designs are done through separate disciplines. During a design process, architects and urban planners often times collaborate to develop spatial design that accommodate the complex social and environmental conditions of the site.

Meanwhile, sustainable design have been gaining social recognition in recent years, and defined in various field of study. With 40% of the CO₂ emissions caused by buildings, designing mitigations for low-impact society has become a crucial part of the discipline.

These efforts, having overlapping considerations, are studied throughout this research by analyzing sustainable strategy design elements from both the individual (dwelling) and collective (community) level efforts. In order to achieve comprehensiveness, three goals of "low impact", "high contact", and "well-being" are studied utilizing seven sustainable design strategies - local materials, passive design, symbiosis, desirable place to live, walkability, entrepreneurship, and flexibility. These efforts are analyzed via prototype designing process of a shophouse in Eco Park Township in Hanoi, Vietnam.

By having common goal of sustainability, dwelling-community interactions can create a more comprehensive design that fit the social and the environmental conditions of suburban Hanoi. Using the same interactive process, the dwelling-community interactive analysis becomes the prototype of sustainable design methodology, taking cultural and social background into account.

Keywords : 1. sustainable design methodology 2. dwelling 3. community
4. interaction 5. suburban Hanoi