

THE ROLE OF ARCHITECTURAL EDUCATION IN PROMOTING GREEN BUILDING PRACTICES IN DEVELOPING COUNTRIES

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Environmental sciences and technologies have been integral parts of architectural education for decades. However, environmental concerns seem to be of secondary importance in the practice of architecture in general and construction practices in particular. Building sector accounts for one-sixth of global fresh water consumption, one-quarter of global timber consumption and two-fifth of global energy consumption on one side and almost one quarter of green house gas emissions on the other. The building industry also generates waste on a scale that dwarf the industrial sector. Recognizing the environmental impacts of the building sector there are calls for greener buildings and construction practices. Several rating mechanisms and certification authorities have emerged in developed countries (e.g., Green Star, BREEM, LEED, CASBEE) to recognize, award and promote green buildings. Regulatory and incentives mechanism are also promoted by the state sector to gradually transform the building stocks from ordinary buildings to green buildings. Although such mechanisms are emerging in some developing countries like Sri Lanka and Thailand, the very limited number of certified green buildings existing in these countries indicates that green building practices are not the norms in the contemporary practice of architecture in these countries. Studies show that lack of awareness of consumers (users), lack of influence by the authorities (state), lack of understanding of costs and benefits by the clients, lack of knowledge of building professionals, are prominent among the barriers to mainstream sustainable construction practices. All these barriers have some connotations to architectural education. Therefore, the aim of this paper is to discuss the paradigm shift needed in architectural education to serve the state, society, business and profession in future. The paper is based on an empirical research conducted at 50+ architecture firms in Bangkok with the aim of identifying drivers and barriers of sustainable construction practices and knowledge management needs.

Key words: *green building practices, sustainable construction, architectural education, voluntary measures, incentive measures*