Chapter 7
Sustainable Practices for Built Environment

Joseph Varghese Thanikal
Amity University, India

Anurita Bhatnagar
Amity University, India

Anupam Jain
Amity University, India

Susan George
Amity University, India

ABSTRACT

This chapter is aimed at appraising the reader with the course delivery methodology/ teaching pedagogy practiced at School of Construction at RICS School of Built Environment, Amity University. The chapter highlights the innovative tools and techniques devised by the school for enhancing a students' learning process and ingraining the thoughts for sustainability in construction at nascent stages of construction management. The course is designed to provide the student with an understanding of sustainable construction principles and communicating current sustainability practice to various stakeholder groups.

INTRODUCTION

The term "sustainability" has an important history in development literature. In 1983, the United Nations convened the World Commission on Environment and

Development (WCED), known informally by the name of its chair, Gro Harlem Brundtland. The Brundtland Commission's report, Our Common Future (1987), contains one of the most often cited definitions of sustainability: "Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (World Commission on Environment and Development, 1987). This definition is sector agnostic and an all-encompassing one from which it is necessary to develop contextual definitions for different sectors. The genesis of sustainability as a theme is a result of global awareness that "initiatives on economic development in the enhancement of production must include the protection of the environment besides social justice and the eradication of human challenges" (Alshuwaikhat Habib M, 2016).

The scope of sustainability is frequently described as including three spheres – social, environmental, and economic. To use an accounting metaphor, sustainability in any project must be evaluated according to a "triple bottom line" of social, environmental, and economic responsibility. Sustainability is at once an integrative discipline and a multidisciplinary school of thought; it has statistical, scientific, and humanistic dimensions. With its focus on specific problems and solutions, sustainability suggests place-based and project-based approaches to student learning. Teaching towards sustainability also reminds us that pedagogy is a civic project; there are important ties between classroom and community. (Vanderbilt University, 2018)

For the built environment sector, Tinker and Burt have derived a more appropriate definition for Built Environment stating "those materials and methods used to construct and maintain a structure that meets the needs of the present without compromising the ability of future generations to meet their own needs" (Tinker, 2003). The built environment sector in general and the construction industry is one of the largest consumers of natural resources. With the world population expected to grow by 1.1 billion over the next 15 years, it is expected that some 600 billion square feet of floor space would be added to accommodate this growth (ClimateworksFoundation). The locus of this estimated growth is expected to be in China, India, and North America due the concentration of population growth in these regions. Needless to say construction professionals in these regions are responsible to ensure judicious use of scarce resources so that the carrying capacity of the land is not disrupted. The process of urbanisation is inevitable across the development that is happening and people migrating to developed area looking for more opportunities. It is the rural area which is getting converted to semi urban and then to urban. The rural population has much disciplined way of life with optimum use resources available and the model still exist as sustainable. The word "Exploitation" is to be seriously considered while we talk about urbanisation or sustainable development.

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