

## Chapter 5

# How Can Sustainable Development Redefine Project Management Processes?

**Mohamed Eid**

*The British University in Egypt, Egypt*

### ABSTRACT

*The relationship between Project Management (PM) and Sustainable Development (SD) is tested in this chapter through its application on the construction industry. When PM is embedded in construction projects, it has the capacity to be a significant leverage point of great influence, and it becomes one of the cornerstones for rethinking the relationships between PM, SD, and the Construction Industry. The work presented discusses the need for integrating sustainable development into project management processes to ensure a better outcome for the construction industry, which is directly related to the degradation of our quality of life on the economic, social, and environmental levels. The author explores the origins and philosophies behind sustainability, the core of project management processes, the strategic implications of the construction industry practices, and puts forward the “systems thinking and points of leverage” approach to facilitate an efficient environment of integration. Thinking and acting sustainably requires not only incremental change but also a revolution in approach, a shift of perspective; sustainable project management processes are possible to achieve.*

### INTRODUCTION

The major issues facing the world are mostly from the effect of human development activities. Economic instability, widespread social exclusion and inequalities and global environmental

degradation mean the world is fighting for a better quality of life for all present and future generations. In order to start facing up to these challenges, the global community has to realize that these problems are no longer specific to certain countries at a national level, but in fact, they

DOI: 10.4018/978-1-4666-4177-8.ch005

have now risen to a global scale. When tackling such huge issues, everyone has a significant role to play. Enhancing our quality of life will not be achieved unless the world's communities rise to the challenge and contribute individually as well as collectively to a better quality of life, each within their field of expertise. Acknowledging that there are always better ways of practice, and that the wheel of development never stops, this thesis embarks on researching and studying the construction industry's practices and indeed challenging the impacts of global development on our quality of life. The research tackles the need for changing the strategies, policies, and standards which normally control the practices and guide the projects from inception to completion (Eid, 2009, pp.1-2).

Sustainable development is emerging as an important agenda for better practice in the construction industry; an industry that in conjunction with the built environment—which constitutes more than one half of the real capital—they are the main consumers of resources in energy and materials (CIB, 1999). The relationship between construction and sustainability has created new performance agendas driven by sustainable construction guidelines.

With projects increasing in complexity, needs and standards to be fulfilled, project management has grown to be an essential and vital tool for managing and delivering those projects, meeting if not exceeding expectations. This underpins the major contributions of project management to our quality of life which justifies its increasing recognition as a profession and practice. The work presented herein describes a suggested relationship between sustainability, project management, and construction. The author puts forward a rich environment encircling this relationship based on fundamental criteria that embrace the opportunities for introducing “change”; this milieu is the systems thinking approach. This is implemented by identifying the places within this system (leverage points) where the earlier the change is

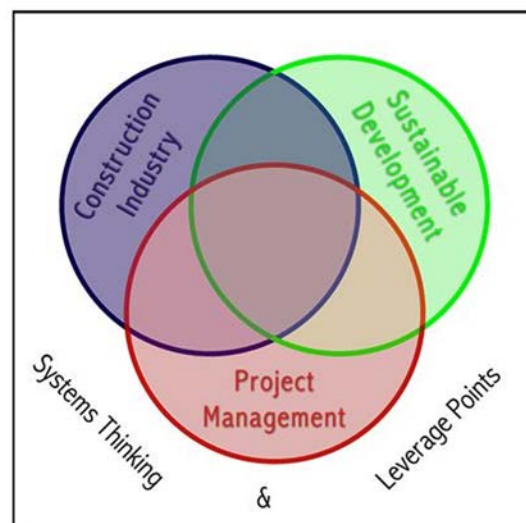
introduced to its early fundamental stages, the better and more efficient is the impact expected to derive in terms of the overall performance of the system (Eid, 2009)<sup>1</sup>.

The research reported in this chapter examines the potential of a tri-dimensional integration to explore the way forward for construction, project management, and sustainable development to contribute effectively to a better quality of life. This is investigated to unveil whether or not it would have fundamental impact on the three professions in general and in turn, enhance their contributions to people's quality of life.

## **BACKGROUND: DEFINING THE THREE DIMENSIONS OF THE RELATIONSHIP AND THE ENCIRCLING MILIEU**

Figure 1 represents the first part of the methodology, the research uses a Venn diagram on three-sets to exhibit the existing and proposed relationships between the three dimensions of the relationship in question; the construction industry, sustainable

*Figure 1. Establishing the relationships between the four pillars of the research*



17 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

[www.igi-global.com/chapter/can-sustainable-development-redefine-project/76814](http://www.igi-global.com/chapter/can-sustainable-development-redefine-project/76814)

## Related Content

---

### A Fuzzy-Based Sustainable Solution for Smart Farming

Kavita Pandey and Shikha Jain (2022). *Research Anthology on Strategies for Achieving Agricultural Sustainability* (pp. 151-171).

[www.irma-international.org/chapter/a-fuzzy-based-sustainable-solution-for-smart-farming/299251](http://www.irma-international.org/chapter/a-fuzzy-based-sustainable-solution-for-smart-farming/299251)

### Decision Support System of Performance Assessment for Sustainable Supply Chain Management

Rika Ampuh Hadiguna (2013). *International Journal of Green Computing* (pp. 24-37).

[www.irma-international.org/article/decision-support-system-of-performance-assessment-for-sustainable-supply-chain-management/93596](http://www.irma-international.org/article/decision-support-system-of-performance-assessment-for-sustainable-supply-chain-management/93596)

### Teaching How to Work With People (In Person and Remotely) and Technology (Artificial Intelligence and Robots) Using Creativity and Innovation

Ayansola Olatunji Ayandibu (2022). *Achieving Sustainability Using Creativity, Innovation, and Education: A Multidisciplinary Approach* (pp. 134-146).

[www.irma-international.org/chapter/teaching-how-to-work-with-people-in-person-and-remotely-and-technology-artificial-intelligence-and-robots-using-creativity-and-innovation/292263](http://www.irma-international.org/chapter/teaching-how-to-work-with-people-in-person-and-remotely-and-technology-artificial-intelligence-and-robots-using-creativity-and-innovation/292263)

### Relook at University Planning-Development for Sustainability in Higher Education

Neeta Baporikar (2021). *International Journal of Environmental Sustainability and Green Technologies* (pp. 13-28).

[www.irma-international.org/article/relook-at-university-planning-development-for-sustainability-in-higher-education/279121](http://www.irma-international.org/article/relook-at-university-planning-development-for-sustainability-in-higher-education/279121)

### Does the Implementation of Green Human Resource Management Practices Help Boost Working Mother Performance?

Nur Aqilah Adilah Hj Abd Rahman and Heru Susanto (2022). *Sustainable Development of Human Resources in a Globalization Period* (pp. 17-35).

[www.irma-international.org/chapter/does-the-implementation-of-green-human-resource-management-practices-help-boost-working-mother-performance/312537](http://www.irma-international.org/chapter/does-the-implementation-of-green-human-resource-management-practices-help-boost-working-mother-performance/312537)