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Sustainable construction practices: “a lazy view” of construction professionals in the South Africa construction industry

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Abstract

The construction industry has been found to cause damaging effects to the environment by means of waste generation, energy and water depletion and several other forms of damage to the environment. This damage has led to experts and environmentalist calling for a sustainable way of carrying out construction activities. Thus, this study addresses the challenges hindering the adoption of sustainable construction practices in the South Africa construction industry. The data used in this research were sourced from both primary and secondary sources. The primary data was collected through a questionnaire aimed at practicing construction professional in the South African construction industry. Indicative Findings from the questionnaire survey revealed that the foremost challenges faced by South African construction industry towards the adoption of sustainable construction practices is the assumption (a lazy view) of additional cost to building projects, followed by limited understanding of the benefits of sustainable construction amongst others. The study contributes to sustainability thinking in the South African construction industry; and it is recommended that strategies and actions should be pursued actively to speed up the process in creating a sustainable-oriented construction industry, which is paramount towards building a sustainable future.

Keywords: Climate change, sustainable thinking, sustainable construction practices, South Africa

1. Introduction

Sustainability has become a general term which is attributed to activities that occur with the idea of achieving eco-friendliness [1]. Sachs [2] explained that the concept of sustainability is to find solutions to
the human actions which are negative to the environment. These negative activities which have a huge impact can be attributed to the population growth and economic activities. The construction industry is known to be a major consumer of non-renewable resources and sizeable source of waste, a polluter of water and air and a major contributor to landfill. These issues and impacts emanating from construction activities can only be corrected by developing sustainable ways in carrying out construction projects.

Sustainable Construction (SC) has been found to be important for management and protection of the environment [3]. The issues of SC deals with a wide range of factors within the local and global level making SC a common issue to different business sector [4], which in turn poses differences in practices of work often seen in many cases [5]. Hence, Blair [6] informs that the SC challenge is the long-term challenge which need to be faced by the human race [6]. Also, Liddle [7] stated that construction industries that will take a SC, practices those who take a SD tactic to design and construction will be compensated with reduced liability on the ecosystem, development of new markets (products and systems), and an eco-friendlier construction process, which will help sustain future and current generations to attain a better quality of life. In a nut-shell, SC can be considered as an investment in the future. The South Africa construction industry can help to meet the needs of the present and that of the future generations through the conservation of energy, water and natural resources by re-use, recycling, innovative design and the minimization of waste and pollution.

The term sustainability gained widespread prominence after 1987, when the Brundtland Report from the United Nations World Commission on Environment and Development defined sustainable development as development that meets the needs of the present generation without compromising the ability of future generations to meet their own needs. Sustainability development is also described as a potential pathway for any country looking to achieving environmental conservation and stimulating socio-economic development [8] thereby securing economic development, social equity sand justice and environmental protection of the ecosystem.

Due to exponential growth in population; for instance the population from 1950’s – 2009 has seen the world population grow from 2.5billion- 6.7billion [2]. This growth has further put a strain on the environment. This strain on the environment has resulted in massive pollution of air, water and soil worldwide, also the incidence of scarcity of water and droughts worldwide [9] is a reality in the present world. It will take proactive measures through the adoption of sustainable construction practices to reverse or to a larger extent minimize the detrimental impacts of construction activities to the environment. In order to achieve this, Construction Industry Development Board’s Agenda 21-Sustainable construction in developing countries, expanded that mere survival is not the goal, but the balancing of the needs of human and continuity to provide the needs of future generations is what is needed. Hence, this paper addresses the challenges hindering the adoption of sustainable construction practices in the South African construction industry through a questionnaire survey aimed at practicing construction professional in the South African construction industry. Indicative findings from the questionnaire survey revealed that the South African construction industry professional holds a “a lazy view” of additional cost to building projects, followed by a limited understanding of the benefits of sustainable construction amongst others as some hindrance to the adoption of sustainability thinking that will ensure the industry minimizes the current danger of resource depletion and environment impact from construction related activities.
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