

Overlapping sustainable construction indicators for construction organisations in Zimbabwe

Sustainable
construction
indicators

Tirivavi Moyo

Department of Quantity Surveying, Nelson Mandela University, Gqeberha, South Africa

Mazen Omer

*Department of Construction Management,
Universiti Malaysia Pahang, Kuantan, Malaysia, and*

Benviolent Chigara

*Department of Construction Management,
Nelson Mandela University, Gqeberha, South Africa*

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Abstract

Purpose – Sustainable construction deficits are common in developing economies, and resolutions are constrained by the failure to prioritise the plethora of available indicators. This study aims to report on overlapping indicators for benchmarking sustainable construction for construction organisations.

Design/methodology/approach – Online survey data were collected from construction professionals, academics and senior managers in government bodies. Pearson chi-squared tests and overlapping analysis were used to determine significant indicators. Kruskal–Wallis tests were used to determine statistically significant differences among the dimensions.

Findings – Overlapping analysis determined indicators significant for economic, environmental and social performance. Environmental protection and reporting (pollution and emissions) were significant for all three performance dimensions. The most significant indicators are economic performance (adequate competence of key project staff), environmental performance (environmental protection and reporting – pollution and emissions) and social performance (adequate sustainability expenditure by construction organisations). Significant differences due to dimensions existed for adequate competence of key project staff, sustainable construction and eco-design, adequate governance and organisational excellence of construction projects and satisfactory workers' morale.

Research limitations/implications – Determining overlapping indicators enables prioritised implementation that ensures sustainable construction. Excluding construction workers was a significant limitation for a holistic interrogation.

Originality/value – To the best of the authors' knowledge, this is the first study to determine overlapping indicators for sustainable construction performance in Zimbabwe.

Keywords Sustainable construction indicators, Infrastructure, Zimbabwe, Overlapping analysis

Paper type Research paper



Introduction

Sustainability has been topical. The mounting influence of numerous universal challenges has amplified the need to embrace sustainability (Virakul, 2015; Olawumi and Chan, 2022). There are immense prospects for enhancements in the construction industry's efficiency (Fazli *et al.*, 2014; Isaksson and Buregyeya, 2020), though the realisation of advances originating from