

Exploration of Effective Factors in Enhancing Sustainable Construction in the Building Industry with a Green Project Management Approach through PRISM Methodology

Mohammad Milad Heydari Khalaf Badam¹, Behnod Barmayehvar²

Abstract

With the spread of awareness about sustainable construction and increasing environmental concerns, a new area of project management has emerged called “green project management”. Green Project Management (GPM), as a global organization, through sustainable project management methodologies and standards, seeks to adapt projects to the environment to promote sustainability and regeneration of planets, especially the Earth. One of these methodologies is PRISM, which with a project management approach and focuses on sustainable development, allows companies to integrate sustainability in their processes, manage their projects and thus reduces the negative environmental impact. The main purpose of this study is to identify and prioritize the factors affecting the promotion of sustainable construction in the construction industry with a green project management approach through PRISM methodology in order to achieve sustainable development. Therefore, in this applied research, research data were collected and analyzed through library and field methods and descriptive-survey strategy as well as the use of interview and questionnaire tools. Based on the research findings, six main factors influencing the promotion of sustainable construction in the building industry (commitment and responsibility, ethics and decision-making power, integrity and transparency (project processes), resource development (natural), social and environmental equality and economic prosperity) and for each of them, five important factors were identified and prioritized. In this regard, the most important effective factors, among the six main factors, the development of resources (natural) and among the thirty sub-factors, the employer as the sponsor was identified.

Keywords: Sustainable construction, Building industry, Green project management, PRISM methodology.

1. **MSc. of Project and Construction Management**, Faculty of Architecture and Urban Planning, University of Art, Tehran, Iran. (E-mail: mohammadmilad.heydari@gmail.com)

2. **Assistant Professor of Technology of Architecture** (Project and Construction Management), Faculty of Architecture and Urban Planning, University of Art, Tehran, Iran (Corresponding Author).
(E-mail: b.barmayehvar@art.ac.ir)