

“Urban Planning and Neighborhood Development As per Sustainability Certification systems: SWOT Analysis”

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Abstract:

Urban Planning and Neighborhood Development (UPND) rating systems provide a crucial role in advancing sustainable urban growth by integrating principles of smart growth, urbanism, and green building into community design. Systems like LEED for Neighborhood Development (LEED-ND), BREEAM Communities, DGNB Urban Districts and Egypt's Green Pyramids Rating System (GPRS) assess sustainability at the neighborhood scale, addressing environmental resilience, social equity, and economic vitality. Unlike building-specific rating systems, UPND systems evaluate entire neighborhoods, incorporating factors such as transportation connectivity, energy efficiency, resource management, and community well-being. The research problem is the limited effectiveness of UPND rating systems in achieving sustainable urban growth at the local level, with a particular focus on Egypt's GPRS. The research aims to adapt and enhance the GPRS framework to align with international standards while addressing Egypt's unique socio-environmental challenges. The methodology involves analyzing the criteria, frameworks, and implementation strategies of global and local UPND systems, complemented by a SWOT analysis to evaluate their strengths, weaknesses, opportunities, and threats in achieving sustainability. The research ultimately contributes to the development of resilient, vibrant, and inclusive neighborhoods in Egypt, aligning local practices with global sustainability goals and offering insights into improving the effectiveness of UPND systems in diverse contexts.

Paper History:

Paper received November 8, 2024, Accepted January 10 2025, Published on line March 1, 2025

Keywords:

Urban Planning; Neighborhood; Sustainability; SWOT Analysis

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CITATION

Hassan Eldib (2025), "Urban Planning and Neighborhood Development as per Sustainability Certification systems: SWOT Analysis", *International Design Journal*, Vol. 15 No. 2, (March 2025) pp 24-252