World Academy of Science, Engineering and Technology
International Journal of Architectural and Environmental Engineering
Vol:18, No:10, 2024

Rethinking The Residential Paradigm: Regenerative Design and the Contemporary Housing Industry

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Abstract : The contemporary housing industry is dominated by tract houses, which prioritize uniformity and cost-efficiency over environmental and ecological considerations. However, as the world faces the growing challenges of climate change and resource depletion, there is an urgent need to rethink the residential paradigm. This essay explores how regenerative practices can be integrated into standard residential designs to create a shift that reduces the environmental impact of housing and actively contributes to ecological health. Passive sustainable practices, such as passive solar design, natural ventilation, and the use of energy-efficient materials, aim to maximize resource use efficiency, minimize waste, and create healthy living environments. Regenerative practices, on the other hand, go beyond sustainability to work in harmony with natural systems, actively restoring and enriching the environment. Integrating these two approaches can redefine the residential paradigm, creating homes that reduce harm and positively impact the local ecosystem. The essay begins by exploring the principles and benefits of passive sustainable practices, discussing how they can reduce energy consumption and improve indoor environmental quality in standardized housing. Passive sustainability minimizes energy consumption through strategic design choices, such as optimizing building orientation, utilizing natural ventilation, and incorporating high-performance insulation and glazing. However, while sustainability efforts have been important steps in the right direction, a more holistic, regenerative approach is needed to address the root causes of environmental degradation. Regenerative development and design seek to go beyond simply reducing negative impacts, instead aiming to create built environments that actively contribute to restoring and enhancing natural systems. This shift in perspective is critical, as it recognizes the interdependence between human settlements and the natural world and the potential for buildings to serve as catalysts for positive change.

Keywords : passive sustainability, regenerative architecture, residential architecture, community
Conference Title : ICSAED 2024 : International Conference on Sustainable Architecture and Environmental Design
Conference Location : Kathmandu, Nepal
Conference Dates : October 17-18, 2024