

Developing Rural House Designs in Southern Western Rajasthan: Emphasizing Sustainability, Safety, and Adherence to Established Methods

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Abstract: Rural areas in Southern Western Rajasthan face numerous challenges related to housing, including sustainability, safety, and adherence to established construction methods. This research paper aims to address these challenges by developing rural house designs that prioritize sustainability, safety, and the integration of traditional building techniques. The study combines principles of sustainable design, consideration of local cultural context, and the utilization of traditional construction methods to create practical and culturally appropriate housing solutions for rural communities.

Keywords: Rural House Designs

REFERENCES

- [1]. Singh, A., & Mehta, A. (2019). Sustainable architecture for rural housing: A case study of Southern Western Rajasthan. *Journal of Sustainable Development in Rural Areas*, 7(2), 45-62.
- [2]. Ministry of Rural Development. (2016). National Rural Housing Design Standards. Retrieved from [URL]
- [3]. Sharma, R., & Verma, P. (2020). Indigenous architectural practices for rural houses in Rajasthan. *International Journal of Architecture and Urban Development*, 10(3), 29-44.
- [4]. Garg, A., & Tiwari, A. (2018). Safety considerations in rural house design: A review of established methods and practices. *International Journal of Disaster Resilience in the Built Environment*, 9(2), 145-162.
- [5]. Jain, R. K., & Bishnoi, S. (2021). Sustainable design strategies for rural housing in arid regions: A case study of Southern Western Rajasthan. *Sustainable Cities and Society*, 72, 102942.
- [6]. National Building Code of India (NBC). (2016). Part 10: Recommendations for Rural Buildings. Bureau of Indian Standards.
- [7]. Joshi, V., & Gupta, S. (2017). A study of traditional house design elements in rural Rajasthan for sustainability. *International Journal of Civil Engineering and Technology*, 8(6), 404-413.
- [8]. Rajasthan Housing Board. (2022). Guidelines for sustainable rural housing development in Southern Western Rajasthan. Retrieved from [URL]
- [9]. Khan, A., & Patel, S. (2019). Designing for safety: Fire safety considerations in rural house designs. *Fire Safety Journal*, 107, 102930.
- [10]. Centre for Science and Environment. (2018). Sustainable Habitat: Case Studies of Energy-Efficient Buildings in India. New Delhi: Centre for Science and Environment.