

IMPLEMENTING RAINWATER HARVESTING IN HOTEL ACTIVITIES: A STRATEGIC APPROACH FOR WATER CONSERVATION AND COST SAVINGS

ABSTRACT

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This study investigated a sustainable strategy within the hospitality industry, emphasizing rainwater harvesting as a practical solution for conserving natural resources and improving cost efficiency. By capturing and storing rainwater for later use, hotels can lessen their dependence on municipal water sources, reduce utility expenses, and address environmental sustainability goals. This study used a quantitative descriptive research design to examine the implementation of rainwater harvesting and its impact on water conservation and cost efficiency. A validated questionnaire was administered to 20 hotel employees to gather data on the system's influence across hotel operations, perceived benefits, and implementation challenges. The collected data were analyzed using frequency distributions and weighted means to assess the overall effectiveness and potential adoption of rainwater harvesting as a sustainable water management strategy in the hospitality sector. A study examining hotel staff perceptions of rainwater harvesting revealed a predominantly young, single, and female sample (70% female, 80% aged 21–25, 90% single), which may limit the broader applicability of the results. Staff showed moderate support for using rainwater in toilet flushing and general cleaning, largely due to its environmental benefits and potential for reducing water costs. However, there was limited acceptance for its use in laundry and significant hesitation regarding swimming pools, mainly due to water quality concerns. The study underscores a strong staff commitment to water conservation as a hotel priority, while also identifying key implementation challenges, including limited awareness, quality concerns, and the need for ongoing training and public education to enhance trust and adoption. The findings indicated that hotel staff are generally supportive of using rainwater for toilet flushing and cleaning, recognizing its benefits in reducing costs and supporting environmental sustainability. However, concerns about water quality limit its acceptance for laundry and swimming pool use. Effective implementation will require staff training, assurance of water safety, and clear communication to promote confidence and public acceptance of the system.

RECOMMENDED CITATION

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