

Combining Health and Well-being: Designing a Modern Medicinal Garden to Meet Tourists' Expectations**Perera P.R.M.^{1*}, Kudavidanage E.P.², Udayakumara E.P.N.², Wijesekara H.², Zoysa A.I.U.D.³,
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Colombo 03, Sri Lanka*⁵*Department of Livestock Production, Sabaragamuwa University of Sri Lanka, Belihuloya, Sri Lanka***rumeshikaperera00@gmail.com***Abstract**

The tourism sector, a fast-growing, competitive, and diversified industry is a significant contributor to the global economy. Modern-day tourism embraces characteristics associated with history, nature, and leisure, thereby linking them with new destinations in a continual expansion. The main objective of this study was to develop a perception-based conceptual model for a sustainable medicinal garden (MG) that could benefit the tourism industry while supporting biodiversity conservation. The proposed MG aims to fulfill six intentions, such as, relaxing the mind from a busy day while treating illnesses and improving mental healthiness; incorporating leisure activities that are closely related to medical treatments; disseminating knowledge on Sri Lankan traditional medicine; promoting sustainable eco-friendly practices; increasing economic benefits for the country; and improving the community livelihood of the people in the region. The research focused on developing an MG using the perception intended for 144 local and foreign participants representing four tourist hubs (Galle, Kandy, Dambulla, and Udawalawe) in Sri Lanka. The study examined the expectations of MGs and their preference for the experience. The questionnaire was used to evaluate the visitors' perceptions of the proposed 40 components for the proposed MG, which enabled their ranking based on preferences. The mean preference value for the MG experience was recorded as 72.1%. 97.0% of tourists who participated in the survey preferred to experience the MG, exceeding the 50% acceptance level for all 40 components. Therefore, all 40 components were applied to the MG. However, 18 components exceeded the 75% acceptance level; therefore, they could be incorporated into the MG without changes. The other 22 were considered the accepted components with some minor modifications. Considering the selected region (Dambulla) and the architectural view, 124 medicinal plants were accepted for application to the MG, including terrestrial, water, fruit, and poisonous plants. The model MG consists of 3545 medicinal plants. Creating an MG with the concepts of traditional, cultural, sustainable, and eco-friendly was a different angle to addressing the Sri Lankan tourism sector. This research presents an overturned vision that considers tourism demand on novel concepts of traditional herbal tourism. A model MG was developed with modern architectural and environmental knowledge. Within a five-acre arbitrary land, three-dimensional structures were designed around the proposed model MG. The actual structure of the MG was visualized with a virtual walk-through using architectural software (i.e., AutoCAD 19.0, Sketch-Up Pro 2015, and Lumion 5.0). This model can promote minimal environmental impact through the processes, conserve the environment and gain economic benefits from all these eco-services to the tourism sector and Sri Lankan economy to the advantage of the community or country.

Keywords: Eco-tourism, Architectural software, Medicinal plants, Traditional medicine, Sri Lankan economy