

Covering the streets of Valletta. Curbing UV and urban heat.

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Introduction | Urban spaces in tourist destinations face increasing challenges due to rising temperatures and heightened UV radiation, particularly during summer months. The urban heat island effect (Akbari et al., 2015) intensifies these issues, impacting human comfort and health, especially during peak summer seasons.

Although trees play a vital role in enhancing urban microclimates by offering cooling benefits through shading, evapotranspiration, and acting as wind barriers (Shaamala et al., 2024), in a space-constrained city like Valletta, covering entire streets with shading structures could be an effective alternative solution to planting trees. The pressing issue of global warming has a key focal point in urban thermal comfort, which is heavily affected by the urban heat island phenomenon. Addressing this challenge requires innovative approaches to create comfortable, healthy, and sustainable microclimates. This effort involves not only urban planners and designers but also researchers and software developers, all working together to identify viable solutions, tools, and opportunities (Galán-Marín, C. et al., 2022).

Theoretical Background | This article explores the potential of shaded streets as a sustainable solution for enhancing urban thermal comfort and promoting eco-friendly tourism practices in Valletta, Malta. In order to maintain tourism and local commerce during the hottest month in Malta, July and August, it is here suggested to cover the most important streets of Valletta.

Methodology | Fieldwork, literature

Findings | The streets of Valletta are too hot for comfort in summer, both for local residents and visitors. In order to remain relevant in tourism and to protect commercial and cultural life in the city of Valletta, adding shade is suggested

Contributions and implications | Urban planners can harness the dual benefits of aesthetic enhancement and functional protection, as coverings prevent UV degradation of infrastructure and extend the life of urban surfaces. Socially, shaded streets create more inclusive spaces, particularly benefiting vulnerable groups such as children and the elderly, while promoting outdoor activity and social interaction.

Linking UV street coverings with fundraising efforts for the restoration of neglected upper floors, particularly iconic wooden balconies in Merchant Street, could be a creative and impactful initiative.

Conclusion | Street coverings provide multiple benefits, such as public health protection in reducing UV radiation exposure and mitigating heat-related illnesses while enhancing safety for visitors. Then there is the issue of staying relevant to tourism in view of rising temperatures by creating cooler environments that enhance visitor comfort and create a more welcoming atmosphere. Also, the economic benefits cannot be ignored by decreasing energy costs through reduced air conditioning needs, ideally in combination with roof gardens. Implementing shaded streets within the walled city of Valletta is a multi-faceted solution that addresses public health concerns, enhances urban liveability, fosters sustainability, and stimulates cultural vibrancy.

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