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Identifying Visual Quality of Rural Road Landscape Character by Using Public Preference and Heatmap Analysis in Sabak Bernam, Malaysia

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Abstract
The rural road landscape is crucial in forming rural areas' landscape character (LC). As a platform for portraying the rural landscape, the rural roads demonstrate the area's unique natural and cultural characteristics to visitors. However, with the continuous development of rural areas, the rural LC has been severely impacted, thus impacting visitors' visual experience. In order to preserve and protect the rural landscape, this study aims to assess the visual quality of rural road landscapes based on public preference and heatmap analysis. The results indicated that most of the participants had a higher level of preference for rural landscapes with open horizontal views represented by agricultural areas, such as paddy fields. It was also found that different paddy field characters based on their planting stages can also positively affect the visual quality of rural road landscapes. The study also revealed that rural LCs with roadside settlements, commercial structures, mixed agricultural crops, and vegetation received low preference ratings. These characters negatively impact the visual quality of the rural road landscape. These findings provide significant insight for planners and decision-makers regarding protecting and preserving the essential rural road landscapes for the rural tourism experience. © 2023 by the authors.

Author Keywords
landscape character; landscape visual quality; rural road landscape; rural tourism experience

Index Keywords
paddy field, rural development, rural planning, tourism development, tourism market, visual analysis, visualization; Malaysia

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