

## SPATIAL PATTERNING OF STREET LIGHTING IN URBAN AND SUB-URBAN AREAS OF VAVUNIYA DISTRICT

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Lighting plays an inevitable role in wellbeing of habitants of all nations and community groups. In modern era, Urbanization has experienced as one of the emerging scenario worldwide as the outcome of globalization, characterized by much dense built landscapes infrastructure and sophisticated technologies accompanied with the tremendously increasing needs of human beings. This study aims to patterning the lightscape of urban and sub urban areas of Vavuniya district in the context of sufficiency of street lighting for the wealthy transportation and health safety of habitants belongs to study area. The street lighting intensities were measured using Digital Lux Meter at selected sampling points/locations of the study area. Further attributes such as types of light sources, light trespass effects, placement height and the distances in between the adjacent light sources taken into the consideration for the interpretations. The results of this study showed characteristic difference in between urban and sub urban areas as for urban area ranging from the average light intensity of 16 – 20 Lux, whereas for sub- urban areas 8-12 Lux. Further there was an appropriateness in the selection of light types at both urban and sub urban areas. The changing intensities of street lighting showed a traffic dependent variation, on an average for urban area ranging from 18- 42 Lux and 16-22 Lux for sub urban area. This study revealed the necessity of improved light intensities in sub urban areas to facilitate the transportation of cyclist and pedestrians. Therefore, for the betterment in the wealth of community in both areas it would be better to accommodate the findings of this research for the responsible of future urban and sub urban planning and development of urban and Sub-Urban areas of Vavuniya District and to combat against global energy crisis.

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