Evaluation of trails in Sri Pada mountain area: Influence on flow of people

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Introduction

Each year 2.5–3 millions of people climb Sri Pada Mountain. The trail system around Sri Pada in the Peak Wilderness has been used over centuries in good harmony. According to local people, there used to be 18 trails to reach the top of Sri Pada Mountain. Some of those trails were rarely used and thus getting vanished over time. The optimal utilization of the trail system is considered in this study.

Purpose

The purpose of this study is to evaluate spatial characteristics of five existing trails and trail heads around Sacred Sri Pada Mountain in Sri Lanka to find their influence on the flow of people climbing up and down the mountain.

Results & Discussions

The Nallatanni trail has the highest trail head elevation, low elevation range and the shortest distance. The Rathnapura and Maliboda trails have moderate elevation shift, and the Dehenakanda trail has the highest path diversity. The Kuruvita trail is the longest. The road density is higher for the Nallatanni trail head while the other trail heads are more or less similar. The connection of elevation and road density must be explored since the Nallatanni trail has the highest elevation and highest road density. The Kuruvita trail head has the highest level of building density; room for future expansion can be examined in this area. The land use varies from tea plantation in the Nallatanni trail head, home garden and rubber in the Kuruvita, chena in the Dehenakanda and tea and scrub in the Maliboda. Since the 4-km buffer ring lies within the protected area, forest expansion is also observed.

Methodology

DIGITAL DATA 1:50000

DEM
Road Density
Building Density
Land Use
Slope
ZONAL STATISTICS

Conclusion

It can be seen that the Nallatanni trail head and trail envisages more viable selection by many users because of the high start elevation, the low elevation range and the high road density. The Rathnapura trail may also be attractive because of the gentle elevation shift and the moderate distance. The other three trails are more diverse and could be attractive to someone who would like to make a long challenging climb to the top of the mountain.

Prospect

Policymakers and relevant authorities can use the outcome of this research to reallocate the flow of people along the trails to deliver more ecologically and economically balanced sustainable development.