

## **Assessment suitable Ecotourism place by Geography Information System Technical (Deylaman zone :Case study)**

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### **Extended Abstract**

#### **Introduction**

Today, tourism is known to be one of the big industries in the world that imposes direct and indirect effect on economy and social sections of human life. Some scholars argue that tourism is an independent section and emphasize the industrial being of it. In the world of today, tourism has a comprehensive approach toward ecotourism because people are travelling to natural settings and try to enjoy the natural views, wild animals, plants, etc. In addition to making money for government and the natives, this section has a significant role in preserving plant and animal environment.

#### **Research Methodology**

To work out data on the map of plant coverage, Land sat 7 satellite data estimating ETM was utilized. Similarly, to work out digital layers of slope, and its direction, intensity of sunlight, co-height elevations, spatial data collection such as co-temperature, co-precipitation, and soil tissue for analysis and locating purposes, DEM latitude model with a high spatial resolution of 80 was used.

Tourism ecologic model is divided to two recreationally focused and extended ecological models. Each model can be split into three talented, semi-talented, and untalented classes. Based on the tourism ecologic model, the present study tries to recognize talented class in the region under the study. According to the given criteria, needed layers for co-coverage analysis in Geographical information system with raster format and in conditional method were produced. After the layers were

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transformed to format taking, talented regions were identified and calculated through cooperation method.

## Results

In order to recognize suitable ecotourism places, the most desirable temperature conditions, that is the average co-temperature level of between 13 and 17 centigrade in six warm months and co-precipitation level of between 20 and 50 milliliter were used. The slopes having less sunlight were considered as talented classes because the shadowy regions are more desirable to tourists due to intensity of sunlight in mountainous areas. On the other hands, the presence of resistant geological rocks (volcanic rocks) has been considered as a one of the factors of locating. Meanwhile, since condensed plant coverage acts as an obstacle in moving and watching abilities of tourists, the best possible plant coverage of suitable places was considered as semi-condensed area. Accordingly, since tourists choose leveled lands as their deployment factors, the slope parameter of between 0 and 5 percent was considered. Here, the eastern slope is considered as 67.5 to 11.25 degree compared to northern slope since these slopes enjoy more desirable condition of shadow taking (figure 8).

## Conclusion

Using Geographical information system and factors involved for locating places in the region, the researchers recognized that all talented regions for conducting tourism projects are located in the country region of Deylaman. It is obvious that the mentioned regions enjoy more desirably climatic conditions in warm seasons of the year than other regions. Based on the final model resulted from the common layers that are used in locating places, it was possible to have easy access to all sites and all are located in a rather close distance from roads. As the final model indicates, it is clear that all sites are located in bottom line of rivers with a slope of 5 percent, which makes accessibility to water resources easier. These sites provide temporary deployment of tourists, and if more welfare facilities are provided, tourists may stay in these sites for longer time. Finally, it can be said that based on ecologic criteria, suitable sites of tourism can be identified and matched with natural condition of the region through satellite system of GIS.

**Key Words:** tourism, Ecotourism, ecologic model of tourism, co-coverage model of GIS, Deylaman.

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