**India Tourism Geospatial Data for year 2003 -12**

Introduction

GIS will be used in Tourism Dataset with three modes- operational, tactical and strategic to represent the movement of growth and prediction.

Data

This assessment represents analysis of larger dataset from India generating a huge quantity of Tourism for 35 states of the country tabulated from year 2003 to year 2012. The attributes here refers to number of foreign tourist arrivals to the country’s states and union territories.

FlowChart: Process flow of GIS tools

The simplest type of attribute was ID number – ordinal, which identified each state entity in Shp file and the csv file later joined together to get the cartography study.

Data Processing

The GISboundary data for India obtained from Baseline Reference Database in DIVA-GIS data sources from the [Eden project](http://ergodd.zoo.ox.ac.uk/eden/index.php?p=57)(2012).It is worthy of note that the choice of variables for this study is highly limited by the availability of nine years statistics. A major challenge for using data from net was to evaluate fitness for purpose and range of properties.

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| --- | --- | --- | --- |
| State type | Characteristics | Year2003 | Year2012 |
| Maharashtra | Financial centre, it's largest city | Highest (0.98) | Highest (5.12) |
| Arunachal Pradesh | North-eastern state of the country | Lowest (0.0001) | Increased by Eight number(0.0051) |
| Lakshadeep | Sea, coast of Kerala | Lowest Fourth (0.0006) | Lowest (0.0005) |

Data Visualisation

In a vector representation, the states were identified by a polygon which describe their specifications for analysis. Map design was interesting with patterns and processes based on their color code it was explanatory. Various categories are available in GUI allocating map symbols, icons, building categories, road system, gradation of colors to make it look simple and elegant along with statistical tool for normalisation for data which is much easier with common characteristics for map templates. However in R, the tmap and other mapping packages were quick to provide the standard map as per the specified dimensions and inputs for creation of map. Map composition layout in Arc GIS was well composed good for presentation and user-friendly to amend inserting the overview map as compared to Code based software.

Data Analysis

The multiple datatypes in a single geodatabase is huge benefit as compared to shape file which may even slow down the process. The selections of Attributes with different layer type of each state was useful to identify the independent calculation of Tourism most visited place.

The output map was fairly self-explanatory based on the data workflow on Tourism.

The major drawback during the map creation were the larger scale GIS error (uncertainty) and while saving file high version .mxd file was not accessible in lower version ArcGIS. The unsystematic data collected from net need to be evaluated for scale, aggregation and representation before we plot it on Arc map as compared to Code based which is good in organising data before creating map.

In R program, the speed and ease of method for generating country maps was best and only drawback was installation of Library package which was slowing the process flow.

Discussion and Conclusion

This study examines the use of data for measuring the effectiveness of Geospatial for analysing the maximum use of foreign visitor in country. We then proposed creating Maps in Arc GIS which was selecting the statewise tabulation and symbology with their categories in the attributes, and their performance are observed as variation according to the spatial concentration of different datatypes. R was used to provide more interpretable assessment of year wise compactness which is found to be very clear in scales of spatial units of analysis. In addition, a baseline of comparison in GIS gives a sense of growth in tourism for India.