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THE ROLE OF GEOGRAPHIC INFORMATION SYSTEM (GIS) IN MODERN INDIA

Abstract

The usage of geospatial data for various uses and applications is well recognized in India. There are already many organisations that have been using standard (**Geographical Information System**) GIS software. This development has been helped by the launch of various Indian Remote Sensing Satellites as well as India's own GPS, the **Indian Regional Navigation Satellite System** or **IRNSS**. The Indian Space Research Organisation has its own GIS portal on the web called the **Bhuvan-Geoportal**. Even with these rich resources, India hasn't realised the full potential of using GIS data.

Accurate cartographic data isn't always freely available to all users, mostly because of data restrictions. Digitizing official topographical maps is authorized to only a few organisations which again, is a disadvantage. Another issue is the access of already created GIS data; the Bhuvan-Geoportal although impressive in size and scale doesn't give easily accessible and simple to understand data; nor is it very consistent or up-to-date. There's a need to sort and analyse data and understand to what scale it can be used and exploited. The question is, how can this GIS data be best used, and how can this data be presented so that it can be used productively.

One of the advantages of a developing country like India is that it has a growing population that's progressively being accustomed to advances in technology like the **smartphone**. GPS navigation is a necessary feature in today's world of smart phones. This feature could prove particularly useful in terms of gathering useful data.

Something as simple as an app could be the key to sourcing reliable GIS data; data that's accurate as well as easily sourced. Many authors and publishers of GIS that's interconnected, inter-operable, integrate and dynamically can change the way developing countries like India solves its problems and sees itself. Monitoring socio-economic data could be simplified.

The scope of GIS applications is unlimited when it's more accessible and easier to understand and use, especially for growing economies. A country like India would benefit tremendously from a GIS as the data captured, analysed and stored by such a system could greatly improve decision making in many fields. It's vital that GIS is designed to be simple to use and understand. Good design is something that would be easy to understand, powerful in its capabilities and easy enough for the masses to adapt and make use of.