

# **Geoinformatics in Real World's Regional Million+ Cities: A Geospatial Study of Urbanisation in Emerging and Developing Country, India**

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**Key words:** Geoinformation/GI; GSDI; Informal settlements; Remote sensing; Spatial planning; Urban renewal

## **SUMMARY**

India is geospatially situated in north of equator between geographical extent of 08°04' and 37°06' north latitudes and 68°07' and 97°25' east longitudes in context to Real World. Urbanization commence with an increase in percentage of population living in urban areas as it is accounted for 31.20 per cent in India in 2011. Cities act as fascination for rural population. Cities provides higher standard of living and offer large prospects to rural peoples. There were about 53 metropolitan cities having population more than million plus (+) population in India in 2011. So, in recent past, there have been emerged new forms and patterns of urbanisation in complex economy of developing country, India at regional levels in context to real world.

Main purpose of study is to examine and to comprehend geographical scenario of urbanisation over periods with help of geoinformatic techniques as by way of digitalisation of geospatial urban information for country, India in context to main objectives as firstly, to grasp through geospatial approaches to trace process of historical urbanisation; secondly, to scrutinise geospatial trends, patterns and associations of urbanisation in context to million+ cities; thirdly, to suggest suitable strategies and policy issues for sustainable urbanisation. However, present research has made an attempt to help local, regional and state level urban planners and policy makers to better understand and address issues attributed to urbanisation in context to Real World.

Big Geospatial Database requires a digital compilation and development of indices which are to be computed for country, India. Gini's Co-efficient is a tool to measure extent of concentration. This method measure of inequalities which is commonly used to gain an over-all view of prevailing spatial inequalities. In spite of limitations of this measuring method, it has been used in number of studies to compute spatial concentration of inequalities of various variables. So, in present study, in order to eliminate the bias arises due to changes in number of each states, Gini's coefficient for

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different periods will be computed. Besides this, present research also deals RS, GIS, GPS & DIP geospatial mathematical/statistical methods and models which are empirically used and validated in field of remote sensing and geographical information systems for studying of urbanisation.

Consequently, India's urbanization significant features are growth of large towns and metropolitan cities. Urban population projection point out that by 2030 India's urban population will be about 575 million persons which is constituting over 40 per cent of total population. So, reaction to increasing urbanization and growth and development of cities needs to be viewed positively in economically emerging and developing country, India in this Real World for sustainable development.

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