



# Population Dynamics and Land use Pattern in City of Bhubaneswar, India: A Case Study

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**Abstract:** The present study has been carried out in Bhubaneswar which has been declared as a smart city in the recent past by the Indian Government. The objective of the study is to understand the spatio-temporal dynamics of population growth and land use pattern in the perspectives of its future growth and development. The population has grown from 16,000 at the time of its inception to more than 10 lakhs presently with an annual growth of 9.148 percent. The population density has gone up from 4444 in 2001 to 7292 persons /sq.km in 2016 with an annual increase of 110/sq. km. The fast growth of population has led to expansion of the geographical area of the city from 28.7 sq.km to 148 sq.km. Of 13 different land uses recognized, residential area has increased from 6.20 to 23.04% of the total area. With increase in residential and commercial areas, agriculture and forest land areas are shrinking at a rate of 0.717% and 0.449% per annum respectively. Water bodies in the city are declining in area and getting polluted. The number of slums has increased from 50 in 1981 to 436 in 2016 with an average increase of 10.82 slums per year. Promotion of vertical growth of the city, rejuvenation of water bodies, availability of open space, development of sewage network and drainage systems were realized in order to make the city green, resident friendly and sustainable.

**Keywords:** Land use, Population, Water bodies, Slum, Environment, Open space

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