

Smart Cities and the Challenges of Urbanization in India

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The urbanisation rate, as defined by the last census of India (2011), remains one of the lowest in the world (29%) with 377 million urban dwellers. As the natural growth rate of the country remains relatively high (+1.6% / year), it is generally agreed that India (population 1.4 billion) is the country which presents the highest potential for urban growth among the world economies. According to our database (e-geopolis.org), we can demonstrate that India is actually much more urbanised (40%) than is generally thought, if we consider the built-up area instead of the official administrative definition.

It is estimated that Indian cities presently contribute over 65% to the national economy and that will increase to 75% in the next 15 years. In spite of their significant contributions to the national income, Indian cities remain under invested. While India's annual per capita investment on urban infrastructure was around USD 17, China spent around USD 116 and UK spent around USD 400. It is for this reason that cities since the "Jawaharlal Nehru National Urban Renewal mission" in 2005, are referred to as the 'engines of economic growth'.

With rapid urbanization comes the increased demand for resources such as energy, water and sanitation along with services such as transport, education and health care. This emphasizes the necessity to use resources and services efficiently or in a 'smart' way and the need to develop "smart cities" to meet the need of city residents. Responding to these needs, the government of India in 2014 applies "smart cities mission" and selected 100 smart cities initially.

Globally, smart cities are facing the challenges of urbanization and are also facing digitalization such as privacy risks, regulatory challenges and widening inequalities. To illustrate our study, we will focus on smart mobilities in a big city (Hyderabad) and a medium-sized city (Puducherry).

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Her research activity has a strong international and multidisciplinary dimension, due to her involvement as a researcher at the research center of the Institute of Political Sciences of Bordeaux (Les Afriques dans le Monde) and as an associate researcher at the French Institute of Pondicherry (India) for over 30 years and recently at D2IA. After obtaining her PhD (1991), she explored several thematic fields around the issue of spatial mobilities and social recompositions in rural areas, in small and medium-sized cities, and in megacities in India. She has also been able to test theories of urban economic resilience in a leather industrial cluster in Tamil Nadu (India). Her work was the subject of a 300-page book (gender inequalities in India, glimpses through the lens of postcolonial feminist studies) in French, published by Karthala in 2016. Her integration at LAM/ Sciences Po Bordeaux (2015) has allowed her to broaden her research perspectives on urban issues, particularly on the role of digital technology in the urban fabric (comparison Bordeaux/Hyderabad). Her numerous teachings and seminars on contemporary India in various institutions have been the subject of a recent book published by Bréal (L'Inde, une puissance vulnérable, 2018 and 2021).