

## **Does Urban Decline lead to Urban Shrinkage in India?**

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**Background:** Urban shrinkage referring to decline of population in a city as well as economic decline or change in economic structure. It has been experienced by developed countries as, many large cities are shrinking. This phenomena also become evident in developing countries in past few decades, especially in China and India. Now there is a paradoxical situation where the level of urbanization is low (31.16 percent) and city starts to decline. So cities starts with growing stage and shift to declining stage without reaching to the mature stage. According to UN Habitat report (2008) India and China accounts 60 percent of shrinking in developing country. For understanding population losses or urban shrinkage, there is few theories. First one is, Stage of urban development, or life-cycle theories urban development. It explains that shrinking is a part of urban development process and city has to go through the process. Second, suburbanization or shifting of population away from the city core. Third is capital accumulation and its spatial-temporal circulation movement by capital, so capital controls the growth and attractiveness of city. Fourth, theory of territorial divisions of labour. It tells that urbanization depends upon enterprises, industries, and labour. But in post-industrial period large labour-intensive and space intensive industries are replaced by smaller technologies and that may abolish the economic base of the city. The last one is demographic transition. Basically lower fertility and increasing life expectancy causes a long term population decrease. Any of these five can cause urban decline and urban shrinkage in any country (Haase et al., 2014). While reasons for urban shrinkage in developed countries are well known but for developing countries is still debatable.

So it becomes very important that what is actually happening in countries like India. Are cities really shrinking, if yes then what factor playing key role in this, is it because of sub-urbanization or lack of investment of capital? Firstly, this study aims to understand which cities are mainly declining and shrinking, whether it is large city, medium city or small medium towns. Secondly, out of those five explanations which is best suited for in India, whether it is one factor or multiple factors working together. To examine this in a better way, we took case study of Mumbai Metropolitan region and understand whether core is declining and suburb is growing or vice versa.

**Objectives:** The main purpose of this study is to understand the urban growth urban shrinkage process in India. It also tries to identify the declining cities in spatio-temporal bases. The underlying factors behind urban decline or shrinkage also covered in this study.

**Methodology:** To fulfil these objectives, the study uses data from Census of India, 1901 to 2011. Annual exponential growth rate (AEGR) have been calculated for identification of shrinking cities. Urban shrinkage has been defined as a process when a city experience of long-term population decline and economic decay.

**Results:** The results show that (Figure 1) in general, population growth of larger towns has been declining since 1961 however, medium and small towns have registers a dramatic surge in population growth rate during 2001-11. At the individual town level, as shown in Figure 2, 29.5 percent of towns and cities are growing (AEGR more than 2 percent/year), 59 percent of them are sliming (AEGR, 0-2 percent) its population and 11.6 percent are shrinking (negative growth), while 3.1 percent of them are harshly shrinking (declining with more than 2 percent AEGR). Figure 3 depict that class I to class IV towns are more of growing and sliming categories but class V and class VI accounts largest number of declining cities. Historically declining cities are common in each censual period but most of these merged into growing cities after independence but recently these cities again started to decline. Another finding comes out that census towns are more frequently shrinking than statutory towns.

The spatial distribution map (figure 5) shows location of tows with declining growth rate in 1941-51, 2001-11. In 1941-51, cluster of declining cities was located in northern part of India there, but in 2001-11, the major concentration was in northern and southern part of the country. States like Kerala, Assam, Jammu and Kashmir, Goa, Himachal Pradesh, Jharkhand, West Bengal etc. has the highest share of declining cities of the country. Figure 6 shows that shrinking cities are mainly located in eastern industrial belt, west coast and central part of India. Rate of population has been accelerated in last decade (2001-11), as in 2001 around 20 percent of towns declined by more than two percent but in 2011 almost 40 percent of these decline at same rate. In last two decade 23 shrinking towns experienced population decline by more than 40 percent and 32 of them by 20-40percent.

The reasons for the urban shrinkage are diverse. In case of Mumbai Metropolitan Region population in core city is declining while suburbs are not only growing rapidly but also expanding outwards. It is also notable that shifting of industries from core city of Mumbai to suburb area like Navi Mumbai, Thane, and Kalyan also drive population to shift the location from core to suburb. While, a large volume of migrants from the country now hitting in suburb, rather coming to the core. So suburbanization is the main reasons for population decline in the core.

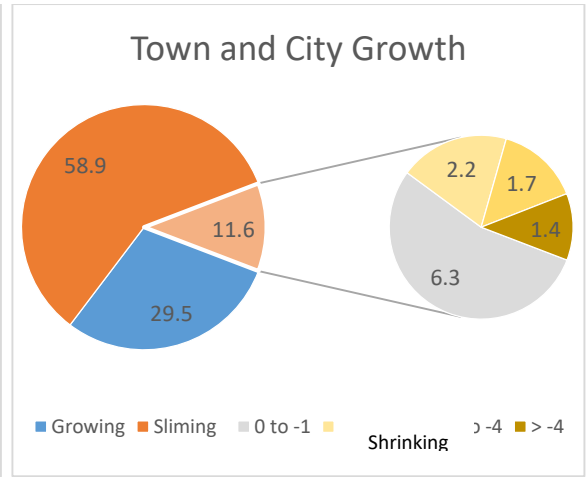
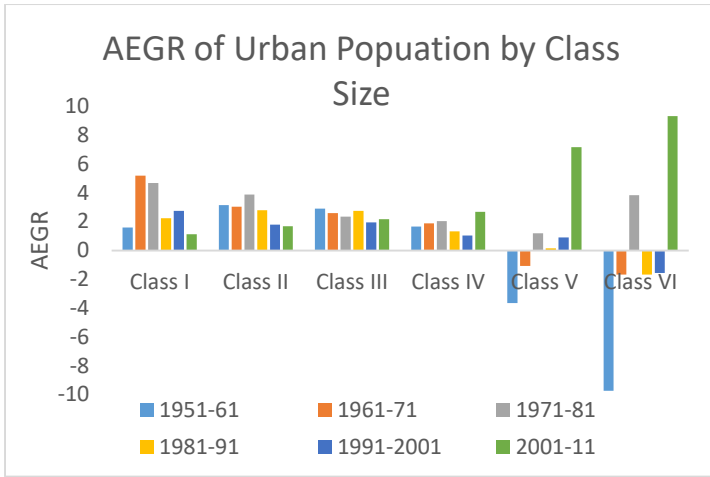


Fig 1: Population growth of size-class towns, 1951-2011.

Fig 2: Town and cities AEGR, 2001-11

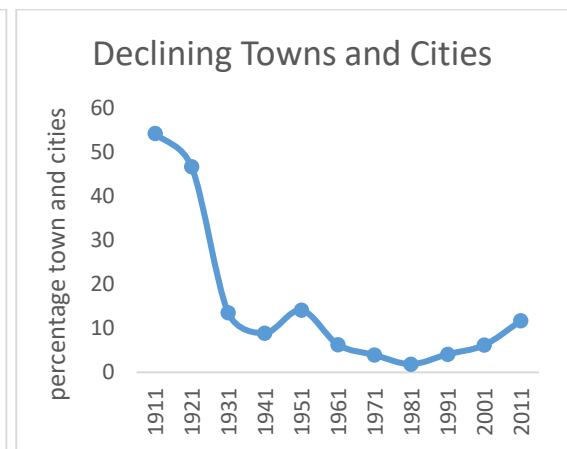
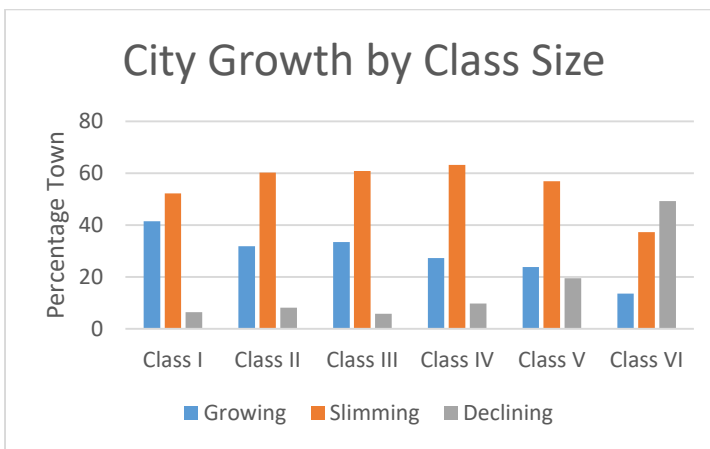


Fig 3: Growth pattern in different class town and city.

Fig 4: Declining towns and cities, 1911-2011

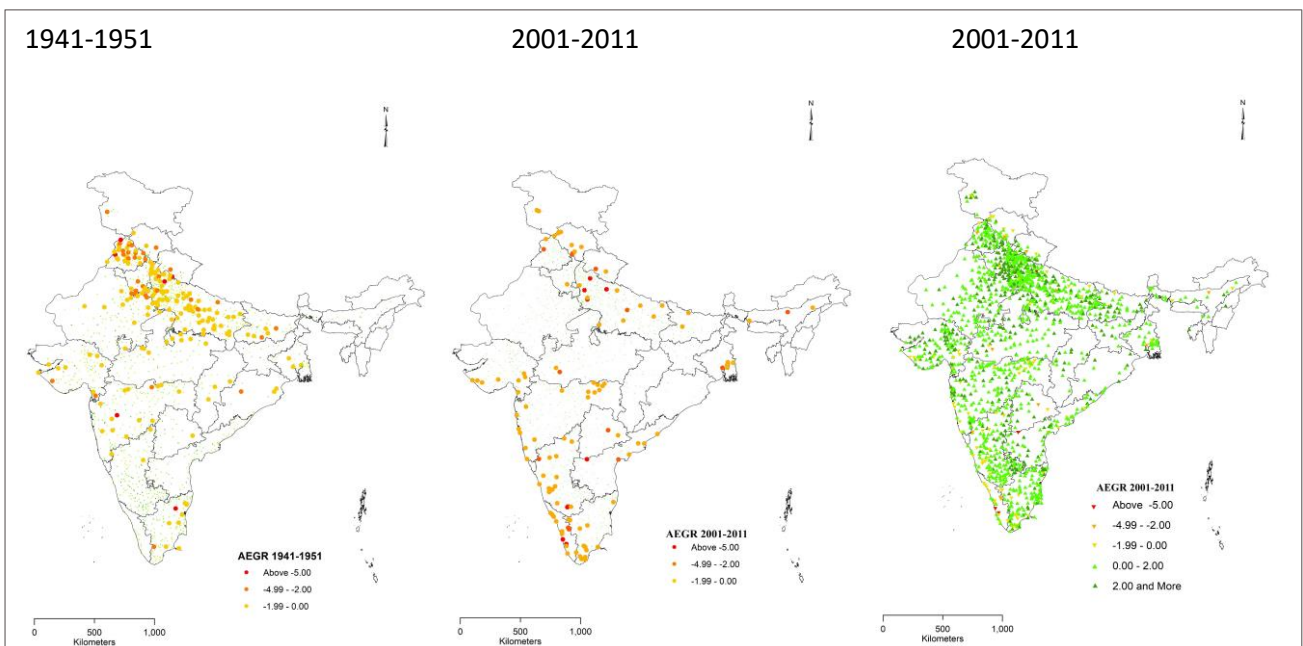
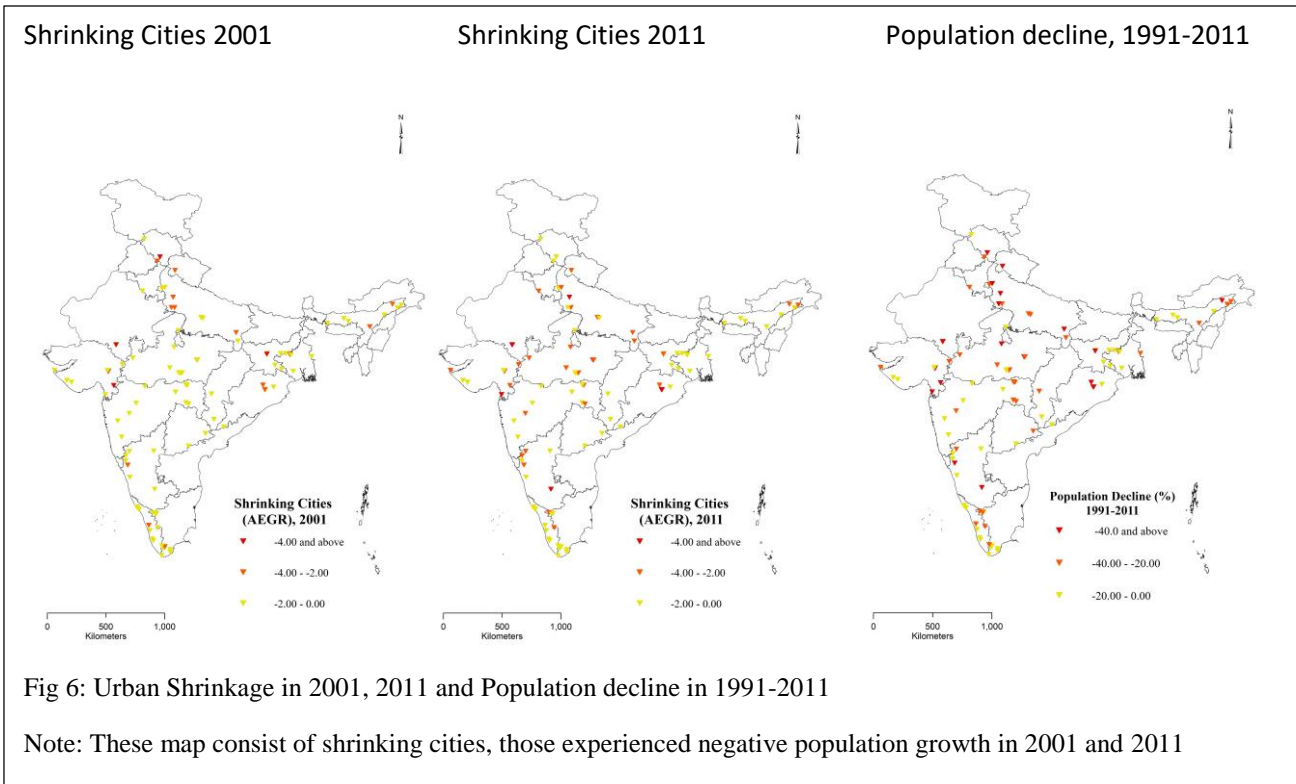


Fig 5: Urban decline during 1941-51, 2001-2011 and growing cities in 2011.

Note: These map consist of those cities which were existed in 1901 to 2011 and their population growth has been presented. Final map will be produced with all existing cities in the meantime.



**Conclusion:** Urban Shrinkage is an emerging phenomena for developing countries, especially in India. A large number of towns and cities are declining and some of them are shrinking at higher rate. India has structure of top heavy population concentration, most of the policy are oriented towards urban growth problems of the larger cities. Still many larger cities like Kolkata, Mumbai, and Delhi have experienced population losses in core area. Especially core of these cities are declining because of deindustrialization and shifting of population from core to suburb, while unemployment, old infrastructure, poor management, lower fertility can also be the possible reason for it. In India it is more driven by suburbanization process, like the case of Mumbai. As developed countries are suffering to revive the shrinking cities as especially European and American cities, developing countries should be prepared advance so that they can manage to understand this phenomena and prevent it before it affect the economy of the country.