Method in Madness: Urban Data from 2011 Census

AMITABH KUNDU

The 2011 Census has reported a marginally higher growth in the urban population, yet it also reports a phenomenal increase of 2,774 new “census towns” – greater than the number of such new towns identified in all of the 20th century. Could this be the result of some kind of census activism working under pressure to report a higher pace of urbanisation? Since the Census of India has a reputation for rigour, it is imperative that the methodology for identification of new towns and possible changes from the past are made public.

The provisional urban population figures published in Paper 2 of the Census 2011 by the Registrar General of India (RGI) suggest that urban growth scenario is not as “pessimistic” after all, compared to the predictions made by the same organisation, half a decade ago.

**Projections and Estimate**

The annual exponential growth rate of urban population during 2001-11 works out to be 2.76%, which is about the same as 2.73% recorded in the preceding decade. It is, however, significantly higher than the projected figure of 2.24% put forward by the RGI in 2006. This low projection can partly be attributed to the RGI’s own projection of population growth at 1.48% between 2001 and 2011, much below the actual rate of 1.62%. Interestingly, the RGI had also predicted the urban population in 2011 to be 30%, which if applied to the actual total population in 2011 would give a growth rate of urban population of 2.38%. This still leaves a gap of 0.38 percentage points with the actual figure. This would be considered non-trivial as it makes a difference of 14 million in urban population at national level and over a million in a number of states.

The target of 30% caught the fancy of researchers and research institutions, irrespective of whether they used informed judgment or econometric modelling, although the years by which the target was to be achieved were different. The High Powered Expert Committee (HPEC) on Urban Infrastructure and Services had noted that India had touched this level only in 2010, accepting a “conservative” classification of urban areas. Assuming this to occur on 1 March, the implicit annual growth rate works out as 2.47% which is close to 2.38%, the predicted figure of RGI, based on the actual growth of total population. The HPEC report explicitly noted “a slower growth of urban population in 2001-11 compared with the earlier decade”.

The Mckinsey Global Institute (MGI), which had put forward a development perspective similar to that of HPEC, had thought that the 30% figure would be reached in 2008. That gives an implicit growth rate of 2.71% which still turns out to be slightly on the lower side. Although MGI’s projection was based on the "India Urbanisation Econometric Model", it is unlikely that it was untouched by RGI’s pessimism. Both the reports thus implicitly accepted a decline in the growth of urban population as a fait accompli. Importantly, the RGI’s projections are close to those given in the World Urbanisation Prospects (WUP) brought out by the United Nations Population Division for the periods 2000-05 and 2005-10, which projected a growth rate of only 2.23%. This is certainly not a matter of coincidence as...
RGI has used the WUP model, which is built on the assumption that "urban rural growth differential" follows a logistic path. Now that all the projected figures have turned out to be on a lower side, the question is whether the discrepancy of 14 million can be attributed to a random statistical error. Would it be cantankerous to hold the RGI responsible for excessive conservatism? Are we engaging in "decimal demography" if we pursue this issue for empirical investigation? Or alternately, do we need to understand and explain the discrepancy in terms of changes in structural parameters in the socio-economic system, definitions of the concepts and procedures for data collection, the margin of error notwithstanding? Only an in-depth probing of the methodology adopted by the RGI in the context of recent socio-economic data sets can help in finding an answer to the question.

Declining Urban Growth?
The RGI brought out the report of the technical group, which was set up by the National Commission on Population in 2006, providing three different estimates pertaining to 1 March, 1 July and 1 October for every year from 2001 to 2026. Unfortunately the premise underlying the methodology raises more questions than answers. The growth rate of urban population from 2001 to 2010 has been taken as declining consistently. More importantly, the growth rate is taken to fall in the next decade as well. The annual growth rate goes down from 2.39% in 2001-02 to 1.73% in 2020-21. Although this trend is in line with that observed in the last three decades of the last century, as discussed below it would be considered conservative since the pressure of population in rural areas and the limited opportunities available there are expected to push rural urban (ru) migration and accelerate urban growth, overwhelming all countervailing forces operating in urban areas.

The annual growth rate of the urban population, however, has been let loose after 2021, jumping to 3.23% in 2021-22, almost doubling in one year, as per the report of the technical group. This is difficult to justify under normal sociopolitical circumstances with any historical data for India or anywhere else in the world. The projected rate continues to rise consistently to become 5.73% in 2025-26. The annual exponential growth rate for the five-year period 2021-26 thus works out to be 4.24%, shooting up from 1.81% during 2016-21. The corresponding figures given in WUP-2010 are 2.43% and 2.42%, much below those of the RGI, increasing only by 0.01 percentage points. The growth rate of RGI is further projected to go up from 5.73% for the year ending 1 March to 6.05% for year ending 1 July in 2026. The figure is projected to be as high as 6.29% on 1 October 2026. Indeed, despite the RGI figures being significantly below those of the WUP during the first quarter of the present century, they catch up and achieve the stipulated magical target of 38% of urban to total population in 2026, as set by the WUP, owing to the methodology changing its gear in 2021. There is thus a method in this madness.

Thankfully, the RGI office became aware of this roller coaster growth scenario immediately after releasing the projections. It revised the figures and placed these in

---

**INDIAN INSTITUTE OF SCIENCE EDUCATION & RESEARCH, MOHALI**

(Established by Ministry of Human Resource Development, Govt. of India)

IISER Mohali, Knowledge city, Sector 81, SAS nagar,
Manauli PO 140306. Punjab.

**Faculty openings in Humanities and Social Sciences, IISER Mohali**

IISER Mohali invites applications for faculty positions in the Humanities and Social Sciences (HSS) from highly accomplished researchers in a wide array of disciplines; such as history and philosophy of Science, Science Technology and Society (STS), Science policy, history, philosophy, sociology, psychology, art, aesthetics, ethics, literature, linguistics, anthropology, geography, and economics. The emphasis at IISER Mohali is on interdisciplinary scholarship and integration of teaching and research. Currently IISER Mohali offers MS and PhD degrees in the sciences and PhD in HSS. The HSS courses are well integrated into the MS curriculum with the following objectives: to make the students aware of the social/economic/ethical implications of science research; to inculcate an understanding of the historical and philosophical dimensions of knowledge production; to foster critical thinking and innovation; and to initiate an interdisciplinary dialogue. The IISER Mohali campus is located near the planned city of Chandigarh at the foothills of the Himalayas and the floodplains of Punjab’s rivers. Its unique location offers a high quality of life and immense opportunities for socially and environmentally engaged research. The selected candidate will have the opportunity to work within and contribute towards the establishment of a premier science institute.

The next round of review of applications will begin in the first week of November, 2011. Please send a cover letter outlining your research and teaching interests, CV, offprints of two published manuscripts, and the names and contact information of three references. **Incomplete applications will not be accepted.** Shortlisted candidates will be invited to make a presentation at the institute. For minimum requirement of qualifications and/or experience and salary details refer [http://www.iisermohali.ac.in/faculty_openings.html](http://www.iisermohali.ac.in/faculty_openings.html). For further details contact the Dean (Faculty), IISER Mohali, Knowledge city, Sector 81, SAS nagar, Manauli PO 140306 India Telefax +91 172 2240266 Email: deanfaculty@iisermohali.ac.in
the public domain, although not many researchers and administrators are aware of it. The RGI did not touch the figures for the first two decades of the present century and instead brought down the growth rates for the six years in the 2020s, in line with the historical trend. The revised growth rate for the urban population for 2021-26 comes to 1.57%, down from the earlier figure of 4.24%. The new rate is significantly below that of the preceding two decades as well and the percentage of urban population has been projected as 33.4% only in 2026. With the actual urban growth in 2001-11 turning out to be higher than projected, it goes against the dogged confidence of the rgi in the historical trend. This occasions probing into the underlying premises of the methodology as that would have implications for the pace of urbanisation in the next few decades.

The assumption of a deceleration in urban growth is, however, not without any empirical basis. There was a declining trend during the preceding decades of the Census of India. The growth of the urban population was as high as 3.83% in the 1970s but came down sharply to 3.09% in the 1980s and further to 2.74% in the 1990s. The decline of 0.40 percentage points in the predicted figure of rgi for 2001-11 from that of the actual figure of the 1990s can understandably be attributed to the decline in fertility observed during 1990-2000 and later years. Now that the urban growth is assessed to have remained unchanged over the past two decades, despite a fall in the natural growth, one would attribute this to urban dynamics manifesting in either an accelerated ru migration or new settlements emerging on the urban scene (as a part of agglomeration or otherwise) or both.

Why Then the Accelerated Pace?
The provisional figures for 2011 indicate that urban growth did not decelerate during 2001-11 which goes against the past trend and against the population growth figures for the metro cities already available from the 2011 Census. A proper explanation would require an in-depth analysis of demographic and economic growth process at the state, district and city level. The data from the 45th and 64th rounds of the National Sample Survey, however, suggest that migration for economic reasons has gone down among the ru migrants. Furthermore, the share of adult male migrants in the corresponding adult male population in urban areas has declined from 32% in 1999-2000 to 31% in 2007-08. The decomposition of the incremental urban population growth by components by the Census of India indicates a decline in the share of migrants during the 1990s, compared to the 1980s. All these would undermine the possibility of migration to existing urban centres being a factor accounting for the incremental urban population. The “impetus to urban dynamics” has understandably come at the lowest level. This is not reflected as much in an acceleration in the growth rate of small and medium towns as an increase in the number of census towns.

The total number of urban agglomerations and other cities and towns has increased sluggishly, at a rate much slower than the urban population. The number had gone up by only 2,541 in all the 10 decades of the last century. However, now, it has gone up by 2,774 in just one decade. The phenomenal jump in the number of “census towns” from 1,362 to 3,894 is unprecedented in the history of the Indian census. Importantly, the mgi had predicted that only 1,000 towns will emerge on the urban scene in the next 22 years. The departure from the past trend is being attributed to census activism. The rgi’s office has been under tremendous academic and administrative pressure to review its methodology for collecting data on urban centres.

A few researchers have argued that the Indian definition of an urban centre, particularly the criteria of a population size of 5,000 and 75% of the male main workers being outside agriculture are very restrictive, making the data non-comparable internationally. However, an overview of the definitions across countries, as given in wup reports, does not help in forming a definitive view. Eminent scholars like Jagdish Bhagwati and Arvind Panagariya have at different fora noted that the low urbanisation scenario conflicts with the high growth manifestations of the emerging giant called India. Understandably, they are sceptical of the urbanisation and migration data from the Census of India. Such criticisms have emanated from the highest level in the Planning Commission as well. The responsibility of “urban undercount” has often been placed on bureaucratic inertia or casualness in identifying urban centres, that has contributed to the exclusion of many towns from the census net. Also, the researchers relying on census data are finding it hard to confront the experts from the World Bank (World Development Report 2009) when they quote a figure of 52% people in urban areas, as derived through an alternate methodology, based on population size, density and travel time, which delinks urbanisation from the socio-political context. Faced with all this, it would be understandable if the directorate of census operations has become a bit more enthusiastic in identifying new urban centres.

The new towns accounted for 5% to 7% of the urban population in the four previous censuses. If we assume that there has been no change in the definitional parameters of urban centres and the employment structure has evolved smoothly, one can assume that the average size of these towns would remain about the same. The fact that the increase in the number of towns in 2011 is six times that of the previous censuses would then imply a sixfold increase in the contribution of these towns to the urban population. By deducting the population of new towns from the urban population in both 2001 and 2011, the growth rate of the resulting urban population in 2001-11 would be significantly less than in the previous decade. Alternately, if one assumes that the share of the new towns in the urban population has remained unchanged, their average size should come down dramatically. This would imply that the Census of 2011 would have identified new urban centres that are of much smaller denomination than in the earlier censuses, strengthening the thesis of census activism. For helping the researchers and administrators interpret and use the data meaningfully, one expects the rgi to come out immediately with a monograph indicating how the new census towns have been identified in different states and if the method and process are different from the previous censuses. This would be important not only for
assessing the degree of urbanisation but for working out the urban frame used by the Central Statistical Organisation (CSO) to collect critical socio-economic data for the country.

**Future Urbanisation**
The Census of India is considered one of the most robust sources of demographic data in the world. Given the system of data gathering through door to door canvassing of questionnaires that are finalised through a rigorous system of scrutiny and data processing being subject to numerous checks and balances, it is difficult to hold that the quality of population count in the urban centres has gone down in the present census. There is, however, a certain discretionary judgment involved in identification of new towns as this is done before the actual census operation. The officials involved in this, thus, do not have the benefit of knowing the actual population, density or the extent of non-agricultural employment. Given the context of the Census 2011, as discussed above, the possibility of the discretionary judgment being used more liberally cannot be ruled out. The emergence of new towns is thus yet another indication of method in madness.

The HPEC rightly regrets the fact that “the small and medium towns have languished for want of an economic base” and emphasises the need and potentiality of more than 20,000 villages, with over 5,000 people, acquiring urban status. Unfortunately, the thrust of its report is on harnessing the agglomeration economies in the metro cities. It demands urgent attention to be given to “their infrastructure deficits and the state of service delivery” and envisages an extremely top heavy urban structure. The Twelfth Plan document, however, talks of a “distributed model” of urbanisation which would “ensure that migration flows aren’t unbalanced toward any particular city or cities”. Now the real question is whether this sectoral diversification in rural areas has already taken place, so much so that there is a massive crop of new towns in 2011 to meet the dream of a distributed model. If indeed that has happened, the central and state governments must recognise their urban status “statutorily” and design a scheme similar to the Jawaharlal Nehru Urban Renewal Mission to strengthen their infrastructure base and promote them as centres of inclusive growth.