Workers Commuting between the Rural and Urban: Estimates from NSSO Data

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How large is the workforce that resides in rural areas and commutes to urban areas and vice versa? This note examines this unnoticed issue and compares different aspects of the share of commuting workers in rural and urban workforce based on two National Sample Survey rounds in 2004-05 and 2009-10.

The level of urbanisation and the factors contributing to urbanisation in India has been discussed in this journal by at least two recent articles (Bhagat 2011; Kundu 2011). At the same time, the release of numbers from the National Sample Survey Office’s (NSSO) survey of Employment and Unemployment (2009-10) sparked a discussion on implications of estimates of India’s workforce. Irrespective of whether the debate is based on census numbers or NSSO estimates, an issue that has typically slipped under the radar relates to the workforce that resides in rural areas and commutes to urban areas and vice versa.

A possible reason for this is that these people are not migrants. In India, the size of the workforce is estimated by place of residence and not place of work. However, it is only logical if the rural resident who works in urban areas is counted as part of the urban workforce and not as part of the rural workforce. Similarly, adjustment needs to be made to account for urban residents reporting that their place of work is a rural area.

Estimates of the commuting workers can be generated by using a very relevant piece of information available from NSSO’s survey of Employment and Unemployment. The NSSO survey has information on residence (rural, urban, no fixed place) of workers. This information is available for workers engaged in non-agricultural activities, i.e., for persons employed in industry groups 012, 014, 015 and the National Informatics Centre (NIC) divisions 02-99.

So what does the NSSO 2009-10 data say about the commuting worker? In 2009-10, a total number of 8.05 million workers not engaged in agriculture commuted from rural to urban areas for work, while 4.37 million workers not engaged in agriculture commuted from urban to rural areas for work (Table 1).

Thus, a total of 12.42 million non-agricultural workers commuted across the rural-urban boundary, in one direction or the other, for work.

These numbers need to be taken into account when arriving at the estimates of the rural and urban workforce. Typically, the size of the rural (urban) workforce is set equal to the number of workers living in rural (urban) areas. Mohanan (2008) is the only study that is devoted to the issue of the commuting worker in India and adjusting the size of the rural and urban workforce for 2004-05 to reflect the commuting worker. Other than this article, there is little available in the literature on the commuting worker. In addition to those who commute between rural-urban or urban-rural, there exists another group, i.e., those without fixed place of work. Over five million rural and seven million urban residents report that they do not have a fixed place of work (Table 2, p 23).

If one were to ignore the workers with no place of work, then for the year 2009-10,
the urban workforce needs to be adjusted upwards by 3.68 million (8.05 million rural-urban commuters less 4.37 million rural residents) and the rural workforce will have to be adjusted downwards by a similar magnitude. This number is lower than the adjustment arrived at by Mohanan (2008), who revised the urban workforce upwards by 5.29 million for the year 2004-05.

A comparison of the share of commuting workers in rural and urban workforce based on the NSSO’s two recent rounds of survey of Employment and Unemployment (66th round: July 2009–June 2010 and 61st round: July 2004–June 2005) reveals the following picture. Among rural residents, the proportion of individuals working in rural areas increased from 80% in 2004-05 to 87% in 2009-10. Among urban residents, the proportion of workers without a fixed workplace increased by 4 percentage points to 8% (see the Figure).

**Characteristics**

The median age of the rural-urban commuter is 32 years and that of the worker commuting from urban to rural is 35 years. Nearly 11% of workers commuting across the rural-urban boundary are women, while 13% of urban-rural commuters are women.

Among the rural residents commuting to urban areas, 40% worked as regular salaried/wage employees, while 36% were engaged in other types of work, not related to household enterprise. Among the urban residents commuting to rural areas, 49% worked as regular salaried/wage employees, while 15% were engaged in other types of work, not related to household enterprise. Combining both rural and urban residents who cross the rural-urban border for work, 48% worked as regular salaried/wage employees. Among the rural-urban (urban-rural) commuters, 12 (15%) work in government/public sector and 8 (11%) in public or private limited companies, respectively. Hence, this gives further credence to the idea of a commuting worker.

An alternative way to slice the data would be to look at the occupation of the individuals. Among the rural-urban commuters 33% are engaged in elementary occupations, 25% in craft and related trades, and 12% as service workers and in shop and market sales. These definitions are from the occupational descriptions available as part of the Revised Indian National Classification of Occupations – 2004. Based on the definitions, it is apparent that a third of the rural-urban commuters have very low skill levels. In contrast, 25% of the urban-rural commuters are officials, managers or professionals and hence have higher skill levels. The occupation profile gets mirrored in the educational attainment of the commuting workers. Among rural-urban commuters engaged in elementary occupations, 38% are not literate, 11% have not finished primary school, 20% have completed middle and secondary school, respectively.
Nearly 31% of rural-urban commuters are engaged in construction, 20.5% in manufacturing, 12% in wholesale and retail trade and nearly 16% in transport, storage and communication. The industrial distribution of workers commuting from urban to rural areas is slightly different. Nearly 28% are engaged in wholesale and retail trade, less than 15% in construction and nearly 24% in manufacturing (Table 3).

### Table 3: Industrial Distribution of Workers

<table>
<thead>
<tr>
<th>NK Groups</th>
<th>Rural Residents</th>
<th>Urban Residents</th>
</tr>
</thead>
<tbody>
<tr>
<td>D</td>
<td>20.59</td>
<td>23.74</td>
</tr>
<tr>
<td>F</td>
<td>30.87</td>
<td>14.69</td>
</tr>
<tr>
<td>G</td>
<td>12.02</td>
<td>27.73</td>
</tr>
<tr>
<td>I</td>
<td>9.96</td>
<td>7.24</td>
</tr>
<tr>
<td>K</td>
<td>1.32</td>
<td>3.14</td>
</tr>
<tr>
<td>L</td>
<td>7.91</td>
<td>4.27</td>
</tr>
<tr>
<td>M</td>
<td>4.79</td>
<td>6.46</td>
</tr>
<tr>
<td>N</td>
<td>2.01</td>
<td>1.54</td>
</tr>
<tr>
<td>O</td>
<td>2.54</td>
<td>3.42</td>
</tr>
<tr>
<td>Others</td>
<td>7.99</td>
<td>7.77</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

D: Manufacturing, F: Construction, G: Wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods; I: Transport, storage and communication; K: Real estate, renting and business activities; L: Public administration and defence; compulsory social security; M: Education; N: Health and social work; O: Other community, social and personal service activities.

Among rural-urban commuters without a fixed workplace, 30%, 15% and 29% are engaged in construction, wholesale and retail trade, and transport storage and communications sectors, respectively. These three sectors also dominate when one examines the distribution of sector of activity among those commuting from urban to rural areas. The fact that the above-mentioned sectors are attracting workers should not come as a surprise. These sectors have been growing at a brisk pace that last five years. After all, the construction sector grew at 7% in 2009-10, manufacturing grew at 8.8% while trade, hotels, transport and communication grew at 9.7%.

### The Sub-National Picture

For the year 2009-10, a disaggregation of the number of commuter workers by state reveals patterns that fit popular perceptions. The states adjoining the National Capital Territory of Delhi, i.e., Punjab, Haryana, Rajasthan, Uttar Pradesh have a large number of rural residents reporting working in urban areas. Focus on the disaggregated analysis suggests that the National Sample Survey regions adjoining Delhi from these four states have a sizeable number of workers reporting living in rural but working in urban areas. These four states account for nearly 35% of the workers (all-India) living in rural areas but working in urban areas. The data does suggest interesting commuting dynamics (rural-urban and urban-rural) in these four states and these needs to be explored in detail in the future. The four southern states – Andhra Pradesh, Karnataka, Kerala and Tamil Nadu – account for nearly 25% of such workers, while Maharashtra and Gujarat account for 11% of workers living in rural, but working in urban areas. These averages are not surprising since these states not only have higher level of urban population, but also sizeable urban centres that would attract the commuter worker.

Individuals might be inclined to live in rural areas to take advantage of lower cost of living, in particular housing. The four southern states account for 27% of urban residents working in rural areas, while the share of Maharashtra and Gujarat is 16%. Thus, the movement of workers across the rural-urban or urban-rural corridor is in the urbanised states of India or where large urban centres act as magnets.

### Size of Peri-Urban India

Given the dichotomous definition of rural and urban areas followed in India, there exist no estimates of population or workers living in peripheral urban (peri-urban) areas. Literally, the word refers to an area around a city or town. At best, estimates of population residing in peri-urban areas can be inferred from the Census of India. Even then these estimates are far from precise. Despite the data deficit and without precisely defining what constitutes a peri-urban area, discussions typically veer towards abject living conditions or people living in these areas.

Conceptually, a peri-urban area is rural in nature, with diverse land-use and some or many of its residents commuting to work in the nearby urban area. One can use this concept in conjunction with the NSSO data. On the not-so-unreasonable assumption that people do not travel incredibly long distances for work, the estimate of workers commuting from rural to urban areas provide the size of workers living in the peri-urban areas. A total of 31.99 million individuals, accounting for 4.3% of India’s rural population, live in the households where one or more worker commutes from rural to urban areas.4 This provides a lower bound estimate of the total population living in peri-urban India. This is a lower bound since there are households living in peri-urban (rural) areas who do not have any member commuting to urban areas for work. Given that information on these households is not available in the NSSO data, what we are estimating as peri-urban population is a lower bound. It should be noted that Mohanan does not advance the numbers on those commuting from rural to urban areas for work as an estimate of the peri-urban population. Though he does state, “This excess movement of rural workers to urban areas is somewhat reinforced by the daily picture of overcrowded trains and buses bringing people to the cities and towns from the surrounding areas, sometimes called the floating population” (p 61).

### Policy Implications

In 2001, of the 5,161 towns in India, the four southern states along with Maharashtra and Gujarat accounted for 2,091 towns.

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Of the 384 urban agglomerations, these states accounted for 161 urban agglomerations. Hence it is not surprising that along with the states adjoining the National Capital Territory of Delhi, the above-mentioned states account for bulk of rural-urban and urban-rural commuters. In this decade, three factors could lead to a steady stream of commuter workers. The first factor is an increase in the number of towns from 5,161 in 2001 to 7,935 towns in 2011. It is possible in many of the small towns the flow of workers would be from urban to rural. Second, an expansion in construction, manufacturing and the wholesale and retail trade sectors, will boost the phenomenon. The third factor is greater transport linkages between rural and urban India. The fact is that eventually 640 districts of India, the 5,924 sub-districts, the 7,935 towns and 6,40,867 villages spread across 35 states and union territories will be interlinked.

The dynamics between the rural and urban areas will be different across the towns and villages of India. Hence, it will be incorrect to focus only on urban engines of growth. What the NSSO data reveals is the size of the rural-urban linkage. Hence, it is important to undertake rural and urban planning within an integrated framework.

NOTES
1 Elementary occupations consist of simple and routine tasks which mainly require the use of hand-held tools and often some physical effort. Most occupations in this division require skill at the first skill level.
2 Craft and related-trades workers apply their specific knowledge and skills in the fields of mining and construction, form metal, erect metal structures, set machine tools, or make, fit, maintain and repair machinery, equipment or tools, carry out printing work as well as produce or process foodstuffs, textiles, or wooden, metal and other articles, including handicraft goods. The work is carried out by hand and by hand powered and other tools, which are used to reduce the amount of physical effort and time required for specific tasks, as well as to improve the quality of the products. The tasks call for an understanding of all stages of the production process, the materials and tools used, and the nature and purpose of the final product. Most occupations in this division require skills at the second skill level.
3 Service workers and shop and market sales workers provide personal and protective services related to travel, housekeeping, catering, personal care, or protection against fire and unlawful acts, or they pose as models for artistic creation and display, or demonstrate and sell goods in wholesale or retail shops and similar establishments as well as at stalls and on markets. Most occupations in this division require skills at the second skill level.
4 A total of 15.44 million individuals accounting for 5.5% of India’s urban population live in a household where at least one member commutes from urban to rural area for work.

REFERENCES