From District to Town: The movement of food and food providers alike

Rahul Goswami

The encouragement from the central and state governments and from private industry given to urbanisation in India's districts is already changing the nature of agriculture and food. A set of linked ideas concerning the development of India has been repeated since the time the Eleventh Five Year Plan (2007-12) approach paper was drafted. Chief amongst these are: a desirable minimum of urban density (and therefore the encouragement of the movement of populations), the provision of employment opportunities concentrated in a few industry segments (retail food and its processing being amongst them), the target of overall higher individual and household incomes, the promise of more 'efficient' citizen services (through e-governance, with the proviso of a unique citizens' identity being in place). All these are already shaping the ways in which food grains and food staples are being cultivated, and are shaping how primary crop produce is being transformed and transported. This set of linked ideas held aloft as central to the doctrine of steady growth - has been repeated with increasing intensity within government and also within industry, thereby influencing considerably the discussion that accompanied the drafting of the Twelfth Five Year Plan (2012-17). Thus the memes of 'faster', 'inclusive', especially of 'growth' and also of the destruction of 'poverty' through 'growth' have been strengthened over more than a decade. This strengthening has blunted inquiry into the changes that we are seeing and experiencing in the cultivation of food crops and in the ways they are being transformed (for an urban consumer), so that a generation from now, the world's largest middle classes will know no alternative, and will have little memory of what 'local, 'fresh', 'diverse' and 'organic' used to mean.

Table 1. Twenty districts with the largest rural populations in Census 2011						
State	District	Total	Rural	Urban		
WB	South 24 Parganas	8,153,176	6,065,179	2,087,997		
WB	Murshidabad	7,102,430	5,697,224	1,405,206		
WB	Paschim Medinipur	5,943,300	5,228,308	714,992		
BIH	Purba Champaran	5,082,868	4,683,820	399,048		
WB	Barddhaman	7,723,663	4,644,079	3,079,584		
WB	Purba Medinipur	5,094,238	4,500,770	593,468		
UP	Allahabad	5,959,798	4,483,188	1,476,610		
BIH	Madhubani	4,476,044	4,311,466	164,578		
BIH	Muzaffarpur	4,778,610	4,308,714	469,896		
WB	North 24 Parganas	10,082,852	4,275,724	5,807,128		
UP	Azamgarh	4,616,509	4,223,125	393,384		
UP	Jaunpur	4,476,072	4,142,423	333,649		
BIH	Samastipur	4,254,782	4,107,725	147,057		
UP	Sitapur	4,474,446	3,944,454	529,992		
AP	East Godavari	5,151,549	3,836,952	1,314,597		
BIH	Gaya	4,379,383	3,803,888	575,495		
WB	Nadia	5,168,488	3,730,897	1,437,591		

MAH	Pune	9,426,959	3,687,243	5,739,716		
MAH	Ahmadnagar	4,543,083	3,630,012	913,071		
UP	Gorakhpur	832,981				
Source: Census of India 2011, Provisional Population Totals Paper 2						

It is this transformation that is one of the outcomes of a cursory examination of the changes in the population composition of our districts. How much have urban populations in the districts changed by? If we consider the additions to the urban populations of individual districts, then between the 2001 and 2011 censuses, there were 204 districts whose urban populations rose by at least 100,000. This is the equivalent of the addition of 204 Class I towns to the country's urban population - 109 of these have added more than 200,000 persons, while 37 of these have added more than half a million persons to their urban populations.

In this list of 37 districts with the highest addition to their urban populations are Visakhapatnam in Andhra Pradesh (an addition of 506,571 to a 2001 population of 1.53 million and an urban growth rate of 33%), Rajkot in Gujarat (an addition of 582,712 to a 2001 population of 1.62 million and an urban growth rate of 35%), Nashik in Maharashtra (an addition of 660,682 to a 2001 population of 1.93 million and an urban growth rate of 34%), Indore in Madhya Pradesh (an addition of 693,897 to a 2001 population of 1.73 million and an urban growth rate of 40%), and Kozhikode in Kerala (an addition of 973,633 to a 2001 population of 1.1 million and an urban growth rate of 88% (see Table 2).

Table 2. Twenty districts with the largest additions to theirurban populations between 2001 and 2011						
State	District	Total	Rural	Urban		
KAR	Bangalore	3,051,611	91,855	2,960,022		
MAH	Thane	2,922,506	321,694	2,600,627		
GUJ	Surat	1,803,803	96,056	1,917,355		
AP	Rangareddy	1,721,373	-65,160	1,786,509		
MAH	Pune	2,194,368	655,469	1,538,797		
KER	Malappuram	485,455	-974,939	1,460,310		
UP	Ghaziabad	1,347,467	19,171	1,328,161		
GUJ	Ahmadabad	1,314,814	3,552	1,318,689		
KER	Thrissur	136,214	-1,114,478	1,250,348		
TN	Kancheepuram	1,113,330	110,618	1,002,819		
WB	South 24 Parganas	1,246,631	244,470	1,001,800		
KER	Kozhikode	210,461	-763,341	973,633		
WB	North 24 Parganas	1,148,906	192,328	956,131		
TN	Thiruvallur	971,023	38,016	932,914		
WB	Haora	568,725	-344,025	912,665		
RAJ	Jaipur	1,413,029	505,746	907,201		
KER	Ernakulam	173,932	-581,469	755,512		
HAR	Gurgaon	643,571	-88,719	732,296		
KER	Kollam	44,466	-675,802	720,359		

UP	Lucknow	940,745	223,846	716,723			
Note 'losses' of rural populations.							
Source: Census of India 2011, Provisional Population Totals Paper 2							

Eleven districts have added more than a million persons to their urban populations -South 24 Parganas (West Bengal), Kancheepuram (Tamil Nadu), Thrissur (Kerala), Ahmedabad (Gujarat), Ghaziabad (Uttar Pradesh), Malappuram (Kerala), Pune (Maharashtra), Rangareddy (Andhra Pradesh), Surat (Gujarat), Thane (Maharashtra) and Bengaluru (Karnataka). The decadal urban population growth rate for these top eleven is 100%, whereas it is 71% for the top 37 districts (with over 500,000 persons added to their urban populations).

What of those districts with traditionally large rural populations? When considered with their cultivation patterns and their importance to the provision of cereals, coarse cereals, pulses, vegetables and horticulture, here are the districts that ought to serve as examples to counter the galloping urbanisation. The districts with the largest rural populations are to be found in eastern India (a trend that has remained for the most part unchanged since the 1901 and the 1911 censuses) - 17 of the top 20 districts with the most rural residents are in West Bengal, Bihar or Uttar Pradesh (see Table 1). Six of the top ten are in West Bengal with the top three all in that state - South 24 Parganas (6.06 million), Murshidabad (5.69 million) and Paschim Medinipur (5.22 million). These are followed in the top 20 by Bardhaman, Purba Medinipur, North 24 Parganas and Nadia (all West Bengal), Purba Champaran, Madhubani, Muzzafarpur, Samastipur and Gaya (all Bihar), Allahabad, Azamgarh, Jaunpur, Sitapur and Gorakhpur (all Uttar Pradesh), East Godavari in Andhra Pradesh, and by Pune and Ahmadnagar in Maharashtra. The rural populations of these districts, in the fourth to twentieth positions are between 4.68 million and 3.6 million.

This list of districts with the largest rural populations in India has urban populations, which, as a percentage of total population, vary considerably. In the list of 50 districts with the largest rural populations, the maximum urban population is 5.8 million (North 24 Parganas, which contributes to the Kolkata metropolitan agglomeration, although Pune with 5.73 is comparably large) and the minimum is 0.14 million in Samastipur, Bihar. The average rural population of the top 50 is 3.71 million and the average urban population of the top 50 is 1.04 million.

However, in this group of 50, in only 14 districts is the decadal growth rate of the rural population - the rate at which the number of rural residents has grown in the ten years between 2001 and 2011 - greater than the decadal growth rate of their respective urban populations. There is not much change in terms of how much the population balance in these districts has shifted between 2001 and 2011: the average percentage of rural population (of the district's total population) for the top 20 districts is 79.49% in 2011 while in 2001 the figure was 81.5%. Expanded to include the top 50 districts, the average percentage of rural population (of the district's total population) is 81.63% in 2011, while in 2001 the figure was 83.33.

It is in the speed of change in the decadal growth rates of the rural and urban populations in these districts that we see the impending shift in balance, within a generation from now. The average decadal growth rate of the rural populations of the top 20 districts is 15.76% and for the top 50 it is 16.88%. On the other hand, the

Population			Baseline food demand in 2011					
State	City	addition	in 2001	C + M	Р	M + MP	v	F
TN	Virudhunagar	202,413	777,315	139,464	29,681	107,280	107,280	35,760
GUJ	Valsad	252,906	381,169	90,261	19,209	69,431	69,431	23,144
UP	Aligarh	351,856	864,725	173,180	36,856	133,216	133,216	44,405
AP	Visakhapatnam	506,571	1,530,887	290,032	61,725	223,102	223,102	74,367
CHT	Raipur	564,610	917,617	210,995	44,904	162,304	162,304	54,101
HAR	Gurgaon	732,296	309,704	148,329	31,567	114,099	114,099	38,033
TN	Kancheepuram	1,002,819	1,535,006	361,259	76,883	277,892	277,892	92,631
MAH	Pune	1,538,797	4,200,919	817,049	173,885	628,499	628,499	209,500

associated decadal urban population growth rates in these districts are 34.24% for the top 20 and 32.99% for the top 50.

Urbanisation, the Planning Commission has said in the draft Twelfth Five Year Plan document, "will be central to India's strategy of achieving faster and more inclusive growth because agglomeration and densification of economic activities (and habitations) in urban conglomerations stimulates economic efficiencies and provides more opportunities for earning livelihoods". This is stated in Volume 2, Chapter 18, on urban development). The immediate bias against the retention of rural populations in our districts follows with the following: "urbanisation increases avenues for entrepreneurship and employment compared to what is possible in dispersed rural areas".

There are several aspects of the change in the rural-urban balances at district level that have a profound bearing on the demand for food by urban settlements, and on the provision of primary crops in rural talukas and tehsils. The table immediately above illustrates the scale of the new demand that urbanisation in the districts makes on basic food baskets. With an addition of 200,000 persons to a district's urban population, the additional average demand for cereals and millets is just under 29,000 tons (bringing the baseline annual cereals and millets demand, in this case illustrated by Virudhanagar in Tamil Nadu, to just under 140,000 tons). Virudhanagar's urban population grew from 777,315 in 2001 to 979,728 in 2011 at a decadal rate of 26% (see Table 3). These demand estimates are derived from the recommended per capita daily dietary allowances of the National Institute of Nutrition. The city estimates therefore represent the absolute minima for annual nutritional security of their populations.

These new demand volumes will determine the investment, both public and private, in warehouses and godowns, typical kirana shops and retail outlets in newly urbanised wards and urban outgrowths. They will also influence the provision of greater quantities of processed and packaged foods, whose price-for-nutrition ratios will be 'exported', at the marketable price points of five and 10 rupees that have become so commonplace now, into rural distribution channels, and thereby further alter for the

Table 4. Twenty districts with the greatest decadal growth rates of rural population in Census 2011								
		Population 2	Decadal growth rates					
State	District	Total	Rural	Urban	Total	Rural	Urban	
CHT	Kabeerdham	822,239	734,894	87,345	40.66	36.18	94.57	
RAJ	Jaisalmer	672,008	582,798	89,210	32.22	34.95	16.78	
RAJ	Barmer	2,604,453	2,422,037	182,416	32.55	33.12	25.45	
HAR	Mewat	1,089,406	965,389	124,017	37.94	32.16	109.13	
MP	Jhabua	1,024,091	932,086	92,005	30.60	31.70	20.10	
CHT	Bilaspur	2,662,077	1,983,255	678,822	33.21	31.20	39.48	
BIH	Kishanganj	1,690,948	1,527,249	163,699	30.44	30.83	26.89	
UP	Shrawasti	1,114,615	1,076,166	38,449	30.21	30.82	15.27	
GUJ	Dohad	2,126,558	1,935,463	191,095	29.95	30.76	22.24	
BIH	Madhepura	1,994,618	1,906,448	88,170	30.65	30.70	29.72	
MP	Singrauli	1,178,132	951,304	226,828	28.00	30.70	17.90	
BIH	Khagaria	1,657,599	1,570,470	87,129	29.46	30.43	14.15	
BIH	Araria	2,806,200	2,637,656	168,544	30.00	30.17	27.35	
UP	Bahraich	3,478,257	3,191,039	287,218	28.75	29.53	20.68	
BIH	Supaul	2,228,397	2,122,869	105,528	28.62	29.10	19.64	
BIH	Pashchim Champaran	3,922,780	3,528,781	393,999	28.89	29.07	27.28	
BIH	Vaishali	3,495,249	3,262,715	232,534	28.58	28.87	24.58	
BIH	Katihar	3,068,149	2,794,765	273,384	28.23	28.53	25.25	
UP	Balrampur	2,149,066	1,982,784	166,282	27.74	28.19	22.64	
JK	Rajauri	619,266	575,332	43,934	28.14	27.96	30.54	
Source: Census of India 2011, Provisional Population Totals Paper 2								

worse the nutritional imbalance of rural populations who continue to spend more than 60% of their monthly per capita expenditure on food.

The change in the rural and urban population balances at the district level affects cultivation and the availability of labour during the significant spells (sowing, harvest) in the crop calendar of an agro-ecological region. This leads to the second aspect, which concerns the districts in which the rural population (and therefore the number of cultivating households) has grown between the two census periods. These population growth rates range from 36% to 28% for the top 20 districts with the fastest rural population growth rates and include districts in Bihar, Rajasthan, Chhattisgarh, Uttar Pradesh and Madhya Pradesh (see Table 4). ⁱ However, a reading of this growth parameter must be qualified by two factors; the first being the addition to these rural populations of children; for, in the 0-6 years age group the rate of growth in all these states is between 18% and 20%. How much of the balance of the rural population growth is in the 6-15 years age group (from where on participation in the work force is recorded)? How much of the balance can be counted as addition to the work force? These are questions relevant to understanding the change in the composition, at district level, of the cultivating population, but which can be better answered when Census 2011 releases more detailed data.

The National Food Security Mission has been working in a number of these districts to raise the production of rice, wheat and pulses. Indeed in a manner that is alarmingly schizophrenic, the chapter dealing with agriculture in the draft Twelfth Five Year Plan document (Volume 2, Chapter 2) has said: "With cereals supplying over 50 per cent of total calorie intake even now, falling cereals consumption is the main reason why per capita calorie intake has not increased despite rising incomes. It is not just that the share of cereals in total food expenditure is falling; even poor people are reducing the share of income spent on all foods in order to meet other non-food needs. In such a situation, where there is a disjunction between such a basic element of human development as nutrition and other demands in an increasingly consumerist society, there is need to ensure that minimum nutrition requirements are actually met."

Yet it is abundantly clear that the rate of growth in urban populations of our districts is outstripping that of rural populations – and that it is the 'growth' frame that disallows all other considerations. The priority given to habitat and population engineering on a vast scale can be seen from these data - while a 36.18% decadal growth is the highest figure for a district rural population group, there are 136 districts in which urban populations have grown at faster rates (this is from a set of districts in which urban populations are at least 100,000). To emphasise the difference, the last 50 of these 136 districts has an average decadal growth rate of urban populations of 41.3%, whereas the top 50 of the districts with the fastest decadal rural population growth rate has an average decadal growth rate of 28.2%.

Where are the centres of cultivating strength in India and how critical are they to the provisioning of primary food crops to the country? There are 100 districts whose rural populations comprise more than 90% of the district's total population (25 in Bihar, 19 in Uttar Pradesh, 14 in Assam, 11 each in Jharkhand and Odisha, the balance amongst eight states). These are districts like Supaul in Bihar, Shrawasti in Uttar Pradesh, Garhwa in Jharkhand, Darrang in Assam, Kendrapada in Odisha, Idukki in Kerala, Dungarpur in Rajasthan and Mandi in Himachal Pradesh. From the point of view of the next phase of the Rashtriya Krishi Vikas Yojana (whose Twelfth Plan budget is likely to almost treble) and the apparently reformed MGNREGA with a new agricultural mandate, will these districts be the food providers to their nearby urban centres and also to needy districts around them?

Our planners and promoters of the Indian urbanisation project do not say so. They do not – not because the data is unavailable but because it is uncomfortable to publicly acknowledge it. And they do not because the only framework that is permitted to exist in a discussion about our country's food and cultivation futures is the framework that enthrones 'growth' as the single objective. That is why we have been informed that the average of annual growth rates of GDP in agriculture and allied sectors during the Eleventh Five Year Plan has now been calculated by the central government at 3.3%, which is short of the target of 4% but which provides a consolation in that during the Tenth Plan such growth was 2.4%.

That in itself is extremely alarming, that the matter of Indians choosing to feed themselves by cultivating a crop biodiversity at least as varied as the number of districts, is reduced to a GDP factor. Worse is the attempt by the central government and its agencies to point to the 'failure' in reaching this 'target' as being "one reason for the high inflation in prices of food and other primary commodities that persist". The opposite is true – it is the brazen partiality given to the agri-food industry (in

terms of land acquisition for 'mega food parks', of infrastructure to move primary agricultural produce to processing and packaging centres in order to feed urban and urbanizing centres, the designed abandonment of the extension system and the ushering in of corporate input and advisory services in its place, to name but a few) that has driven up food inflation since 2007. And still the Planning Commission is blasé enough to persist with its monocular vision, that "the growth target for agriculture is maintained at 4 per cent".

What does the propagandist approach to the 4% rate of growth of agricultural GDP have as its intent? As urbanisation grows – so runs the argument of the central planners – demand for food items other than food grains (that is, vegetables, lentils, milk, eggs and so on), also grows, thereby leading to "investments in infrastructure, logistics, processing and packaging in rural and peri-urban areas". Such investments and other economic inter-linkages connect and build synergy between rural and urban centres, the chapter on urban development has claimed, "thus the rural sector also benefits from good management of neighbouring urban conglomerations".

This is the ill advice and motivated practice that will ensure the rural-urban divide in India, in the districts briefly mentioned here, will persist through the Twelfth Five Year Plan period. The growing inequality will be shaped by this deliberate programme of social displacement, fostered in no small part by the transformation of cultivation and by the interference of the state in the right of a community to decide what it must grow and how it may feed itself.

Note: Comments may be sent to Rahul Goswamy at <makanaka@pobox.com>

ⁱ The top 30 districts ranked by size of rural population, by decadal rural growth rate of population and by percentage of rural population to district total can be found in the spreadhseets at these links (in both xls and xlsx formats):

http://dl.dropbox.com/u/8248462/RG Macroscan rural districts 201301.xls and http://dl.dropbox.com/u/8248462/RG Macroscan rural districts 201301.xlsx