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Employment, Urbanization and Education: Migration's Mega-Challenges

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India's demographic dividend cannot be realized if young entrants to the labour force and potential migrants from agriculture do not gain new livelihoods. Structural transformation requires that people migrate from labour surplus sectors (e.g. agriculture) to sectors where output/demand is growing faster (industry and modern services) and from regions with total fertility rates (TFRs) higher than 2.1 to other regions where the TFRs are less than 2.1. That is exactly what has been happening in India, but data suggests that this process was relatively slow until 2004–2005. Structural transformation gathered momentum after 2004–2005 as the gross domestic product (GDP) growth rate sharply picked up. This hastening of the structural transformation brings with it three mega-challenges for policymakers: the migration of erstwhile agricultural workers on a vast scale seeking non-agricultural work, growing urbanization and the need to ensure better education and vocational training for increasing entrants into the labour force (as the demographic structure by age turns more cylindrical than pyramidical). India's planners will need to manage these three processes much better than ever before over the next two decades, as India's demographic dividend draws to a close by 2040. We will discuss each of these challenges in turn in this short chapter.

MIGRATION: ITS SCALE, SECTORAL DISTRIBUTION AND GEOGRAPHY

Lewis (1954) posited a two-sector model, the 'capitalist' and the 'subsistence', in which the transition of 'unlimited supplies of labour' from the latter to the former would lead to the final absorption of excess labour into the capitalist (read the industrial and services) sectors during economic development. Migration was inevitable. However, in India, this structural transformation has been so slow (and population growth fast) in the first half-century of its development that while the share of

agriculture in the total workforce was falling, the absolute number of workers in agriculture was increasing—until 2004–2005. Never in India's post-independence history till 2004–2005 has the absolute number of workers in agriculture fallen; the Lewisian turning point took over a half-century to arrive. The share of workers in agriculture fell to 57 per cent by 2004–2005. However, since then, it fell so sharply, as non-agricultural output and employment growth picked up, that the share of agriculture in employment fell to 49 per cent in seven years by 2011–2012, and the absolute number of agricultural workers fell on average by 5 million per annum over the same period (Mehrotra, Parida, Gandhi, & Sinha, 2014).

During 2004–2005 and 2011–2012, non-agricultural job growth was as high as 7.5 million per annum. At the same time, the number of young entrants into the labour force was only about 2 million per annum. The remaining 5 million plus workers were migrants from agriculture and were mostly absorbed in construction activity, which was booming as both public and private infrastructure and private real estate investment grew at unprecedented rates (Chand, 2018; Mehrotra, 2018a). As these workers were mostly poorly educated, they could only be absorbed in manual work in construction (or in traditional services) in rural or urban areas.

Meanwhile, after 2004–2005, the youths were getting much better educated than ever before in India's history, and therefore, the rise in the labour force of these youths remained limited. While 12 million joined the labour force during 1999–2000 to 2004–2005, that number fell sharply to merely 2 million per annum over the next seven years, because secondary school enrolment jumped from 58 per cent in 2010 to 90 per cent in 2016 (Mehrotra, 2018a).

The youths are potential entrants to the labour force; however, they would prefer urban jobs in industry and services to agricultural jobs. However, for that to happen, non-agricultural jobs must grow fast enough to absorb these youths as well as the older marginal farmers and rural landless—all of whom need non-agricultural jobs.

The Scale and Geography

Net migrant flows at the all-India level averaged close to 9 million annually (between 2011–2012 and 2016–2017), peaking around 2013–2014, considerably above levels suggested by the census (of 6.9 million in 2011, see Table in Ministry of Finance, Economic Survey, 2017).

The largest recipient was the Delhi region which accounted for more than half of the migration in 2015–2016, while Uttar Pradesh (UP) and Bihar taken together accounted for half of total out-migrants. This is consistent with our finding that of the 5 million leaving agriculture per annum, there were 3.5 million from UP and Bihar alone (Mehrotra, 2018a). Maharashtra, Goa and Tamil Nadu had major net in-migration, while Jharkhand and Madhya Pradesh had major net out-migration.

States such as Delhi, Maharashtra, Tamil Nadu and Gujarat were recipients of migrants from UP, Bihar and Madhya Pradesh. Kolkata in West Bengal attracts migrants from nearby states of Jharkhand, UP and Odisha consistent with the laws of migration whereby people immediately surrounding a rapidly growing town move into it and the gaps they leave are filled by migrants from more distant areas. Thus, Surat (in Gujarat) has been a counter-magnet region to Mumbai and attracts migrants from the neighbouring districts of Maharashtra. Other counter-magnet region dynamics exist in Jaipur and Chandigarh (to Delhi).

The report by the Working Group on Migration (GoI, 2017) identified 54 districts with a high level of interstate out-migration intensity. These districts account for half the male interstate out-migration in the country.

Of these, 36 districts are concentrated in eastern UP and Bihar, with certain districts in other states like Nadia and Midnapore (West Bengal), Ganjam (Odisha), Gulbarga (Karnataka), Jalgaon (Maharashtra) and Pali (Rajasthan) and a few in western UP (Working Group on Migration, 2017).

Over the course of time, there has been a shift towards the southern states, suggesting the emergence of new migration corridors. So, language is not a barrier to the migration of people. The Economic Survey (2017) predicted an increasing rate of growth of migrants over the years. Internal migration has been rising over time, nearly doubling in the 2000s relative to the 1990s. This suggests that the rewards (prospective income and employment opportunities, a la Harris–Todaro model, 1970) have become greater than the costs and risks that migration entails. Higher growth has triggered this acceleration of migration. This acceleration has not been discouraged by disincentives such as domicile provisions for working in different states, lack of portability of benefits, legal and other entitlements upon relocation.

THE EMPLOYMENT CHALLENGE

The job challenge created by migration will be monumental in scope. After a dramatic fall in the entrants into the labour force from 2004–2005 to 2011–2012 due to the increase in educational enrolment, there should have been a sharp rise in the entrants to the labour force, post-2012 to at least 5 million per annum. However, that did not happen as job growth fell sharply. I have noted elsewhere (Mehrotra, 2018a) that the number of entrants merely increased to 2.5 million per annum between 2011–2012 and 2015–2016, primarily because non-agricultural job growth itself fell. Also, while 5 million agricultural labourers per annum left agriculture between 2004–2005 and 2011–2012, that number fell

to merely 1 million per annum, thereafter, as construction jobs collapsed.

Just as the youths were getting better educated, non-agricultural job growth collapsing had the effect of stalling the structural transformation process. While the number of youth (aged 15–29 years) leaving agriculture was at a rate of 4 million per annum from 2004–2005 to 2011–2012, the number of youths in agriculture increased by a remarkable 24 million (or 6 million per annum) from 2011–2012 to 2015–2016—the exact opposite of the process of structural transformation (Mehrotra, 2018a).

In manufacturing, in urban areas, 38 per cent of the male workforce is composed of migrant workers, with a similar share in modern services (Working Group on Migration, 2017). However, one difficulty is that historically, less than 5 per cent of India's workforce has acquired vocational skills formally. With low levels of general academic education of the workforce (see the section 'The Education Challenge'), the extremely low share of the workforce with any formally acquired vocational skills is a mega-challenge if the manufacturing share of GDP is to rise above 17 per cent, where it is stuck for the past quarter century (since 1991). In contrast, with the stereotype of migrants being largely in low-income occupations such as street vending, they are employed across all sectors and are essential for manufacturing growth (Working Group on Migration, 2017). It is also an important contributory factor underlying the very high share of informality among the workforce.

Although the census does not capture short-term flows, there is a high likelihood that because of the sharp increase in construction works, especially in urban areas, work-related migration is turning more short term. 'If indeed work-related migration is becoming more short-term, given the growing number of urban centres and their increased accessibility, it could also be just the nature of migration that is changing—and becoming blurred with

Table 2.1   Occupational Structure of Short- and Long-term Male Migrants

	Rural Origin		Urban Origin	
	Short term (%)	Long term (%)	Short term (%)	Long term (%)
Primary	24.9	59.5	13.2	14.7
Manufacturing	16.8	13.1	26.0	19.9
Construction	41.6	5.3	25.2	5.3
Traditional services	13.0	11.3	23.0	25.0
Others	3.7	10.7	12.6	35.1
Total	100	100	100	100

Source: Working Group on Migration (2017).

commuting—and not the extent of migration' (Working Group on Migration, 2017).

Though the proportion of short-term migrants is much lower than long-term migrants, they are definitely drawn from the lower consumption quintiles. Most short-term migrants are of rural origins and males. Of the estimated 13.6 million short-term migrants from the National Sample Survey Organization round of 2007–2008, 12.6 million were of rural origins, of which only 1.9 million were female.

There is a certain concentration of migrants in specific sectors that is noticeable in Table 2.1. Moreover, in construction, the concentration of Scheduled Tribe (ST) and Scheduled Caste (SC) categories is rather high. The SCs tend to be landless, poorer and with the least education. Hence, it is not surprising that they are found to engage in manual work in construction.

THE URBANIZATION CHALLENGE

This migration has been, and will be to a greater extent than before, accompanied by faster urbanization in India. Asia is going through a historic demographic transformation from being a rural society to an urban society that is far larger than any transformation seen in the past, in any part of the globe (Asian Development Bank [ADB], 2011). By 2025, the majority of Asia's population will be urban. By 2050, there will be approximately 3.2 billion urban inhabitants in Asia which will double the current Asian urban population of 1.6 billion people. India's urban population is expected to grow from 410 million in 2014 to 814 million by 2050.[1]

Rapidly growing cities, increasing slum populations, disputed land tenure and corrupt officials combined with high open unemployment among educated youths and underemployment among less educated adults can lead to violent social conflict. Latin America's wave of urbanization was roughly 65 years ahead of Asia's (ADB, 2011). Argentina, Brazil, Mexico and Venezuela were unable to manage the rapid growth of illegal and unserviced settlements and failed to provide adequate services. Slums and urban peripheries can become the hub of drug trafficking. In many cases, urban gangs filled a gap left by weak local governments. Delayed action to improve living conditions of the poor in Asian cities could lead to Latin American-style

[1] India, China and Nigeria—will account for 37 per cent of the projected growth of the world's urban population between 2014 and 2050. India will add 404 million urban dwellers, China will add 292 million and Nigeria will add 212 million (UN DESA, 2014). By 2025, 46 per cent Indians will live in cities, that is, more than 1 million people. By 2030, cities with populations of more than 1 million will grow from 42 to 68 (McKinsey, 2010). Ahmedabad, Bangalore, Chennai and Hyderabad with currently 5 to 10 million inhabitants are projected to become megacities in the coming years, for a total of seven megacities projected in the country by 2030 (UN DESA, 2014).

development—characterized by great inequalities. The difference in the Indian case is that the total population involved will be much larger, given that India is slated to become the world's most populous country and also already has a much higher density of population. This combination can be explosive.

Already, poor services and squalor are ubiquitous in Indian cities today. More than half the world's slum population currently resides in Asia—some 490 million people in 2005, according to UN Habitat. Poor power supplies, intermittent water availability, insufficient treatment of wastewater, flooding due to poor drainage and uncollected garbage, combined with poor sanitation in low-income areas, lead to poor health conditions.

What is most unfortunate is that contrary to successful cities in the world, India has been locking itself into more dispersed patterns of urbanization. Compact, higher density cities like Singapore, London, Seoul and Tokyo encourage a high percentage of walking and public transport trips and have lower per capita CO_2 emissions than lower density cities (ADB, 2011). However, urban densities in Asia are decreasing while the growth in car ownership is increasing so fast that carbon emissions could increase by 2.5 times over current levels in China and by four times in India by 2035 (ADB, 2011). Public transport is experiencing a significant loss of transport mode share. Lower densities are leading to sprawl which is leading to higher rates of motorization, leading to more sprawl in a vicious cycle.

High-density cities are less expensive on a per capita basis than low-density cities (witness Tokyo, Hong Kong, China, Singapore, Berlin, Paris, London, San Francisco and New York). 'While a few cities have adopted a formal vision for a sustainable future, most cities in Asia are moving in the wrong direction. They face the danger of being locked into an irreversible, high cost, high energy land use and infrastructure pattern' (ADB, 2011). Clearly, the country needs a far more sophisticated planning framework, to imagine and implement a new urban vision to ensure that India prepares to receive migrants in its burgeoning cities.

However, this too would require a reinstatement of a much more powerful planning commission for India—and vastly more competent than the National Institution for Transforming India—and institutions that can undertake urban planning in each state. Urban planning on a national scale is essential because the challenge of generating decent work for rural migrants and for the growing and more educated workforce cannot be met by megacities. India's urbanization challenge is made clear by comparing it with China's urbanization pattern. Only 27 per cent of India's urban population lives in tier 2 cities (the ones with populations between 0.5 million and 4 million), while only 28 per cent of the urban population is found in small (0.5–1 million) and medium (1–4 million) cities. Comparatively, almost 50 per cent of urban citizens in China live in tier 2 cities (1–4 million) (Mckinsey Global Institute, 2014).

While most new industrial and service sector jobs will be created in urban locations, it will be expensive to accommodate such jobs in the megacities. Rather, what governments, both union and state, will have to focus on is infrastructure for tier 2 cities because it will be much too expensive to invest in the 193 tiny towns with populations below half a million, but at present, these tiny towns are home to half of India's urban residents (as against a quarter of China's urban residents). In other words, the missing middle in respect of urban India will need to be filled to attract the migrant population to tier 2 cities.

THE EDUCATION CHALLENGE

Major rural to urban migration went hand in hand with the economic growth of the 19th to mid-20th centuries in today's high-income countries. As high-income countries transition to urbanized, ageing societies,

these movements have subsided (Champion, Cooke, & Shuttleworth, 2017). Today, the largest internal population movement occurs in low- and middle-income countries, particularly in China and India. In 2016, about 77 million Chinese migrant workers moved to find work in another province and 93 million moved within their province (UNESCO, 2018). In India, interstate migration rates doubled between 2001 and 2011.

The education level of India's workforce is extremely poor (Mehrotra, 2018a). When male migrants move, they leave behind their children who go to school. If families migrate together, children must then enrol in schools in urban locales.

If the state and union governments were serious about the well-being of migrants and the quality and productivity of enterprises employing these migrants, there would have been concentrated efforts to skill these workers at both source and destination. However, there is no evidence that India's fragmented skills ecosystem is prepared to deliver on this urgent requirement (Mehrotra, 2014, 2018b; Ministry of Skill Development and Entrepreneurship, 2016).

In India, 10.7 million children between 6 and 14 years of age lived in rural households with a seasonal migrant in 2013. About 28 per cent of youth aged 15–19 years in these households were illiterate or had not completed primary school, compared with 18 per cent of the cohort overall (Chandrasekhar & Bhattacharya, 2018). We noted above that the construction sector absorbs majority of short-term migrants. Between 65 per cent and 80 per cent of all children aged 5–14 years living at the kilns worked there from 7–9 hours per day. About 77 per cent of kiln workers lack access to early childhood or primary education for their children (Anti-Slavery International and Volunteers for Social Justice, 2017).

Under the Right to Education Act, 2009, local authorities are legally obliged to admit migrant children. It recommends to allow flexible admission, develop seasonal hostels, provide transport and mobile education volunteers and improve coordination between sending and receiving from states and districts (Chandrasekhar & Bhattacharya, 2018). However, implementation challenges remain.

Vocation education and training (VET) can also help the poor and disadvantaged, and those who have dropped out of school and thus promote inclusion and equity. The percentage of secondary students enrolled in VET programmes in Asia (13%) is low relative compared with Europe (24%) and particularly low in South Asia (Lee & Mehrotra, 2017). Children will need to be diverted to vocational schooling/training between the age of 15 and 18 years, instead of allowing them into an aimless general academic tertiary education, where too rapid massification from 2006 to 2016 has already resulted in a dramatic decline in the quality of education.

CONCLUDING REMARKS

Clearly, without a visionary planning framework that deals with each of these mega-challenges—employment, urbanization and education/skills—that increasing growth in internal migration will entail, India risks experiencing growing social conflicts. The increase in social conflict has already been evidenced: the agitation by some caste groups for reservation in government jobs (the Patels in Gujarat, the Marathas in Maharashtra, the Jats in Haryana and the Kapus in Andhra Pradesh) is only the tip of the iceberg. India's migration rate has already increased and will continue to increase. The three mega-challenges will be hard enough to handle even with a synergy among employment policies, sophisticated urban planning on a national scale and a far greater focus on diverting youth towards occupational trades where labour market demand is growing.

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