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Human Settlements

DISCUSSION PAPER : DECEMBER 2012

Urbanization and development

Policy lessons from the BRICS experience

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Acknowledgements

This paper draws heavily on the work of the authors of the country papers listed in the Further reading section on page 25.

This research was part-funded by UNFPA and part-funded by UK aid from the UK Government, however, the views expressed are the author's own and do not necessarily reflect those of the UK Government or UNFPA.



Published by IIED, December 2012

McGranahan, G., Martine, G. *Urbanization and development: Policy lessons from the BRICS experience*. IIED Discussion Paper. International Institute for Environment and Development, London.

ISBN 978-1-84369-898-2

<http://pubs.iied.org/10622IIED>

Printed on 100 per cent recycled paper, with vegetable-based inks.

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Introduction

Urbanization and urban growth are intricately intertwined with economic growth — and the BRICS are no exception. The BRICS' vastly different individual experiences of 'urban transition' offer inspiring examples of how to seize urbanization's opportunities, but also lessons on the pitfalls and problems inappropriate policies can bring.

This Discussion Paper is part of a collaborative review of 'Urbanization in the BRICS' by IIED and UNFPA. The review aims to gauge urbanization's role in the development efforts of Brazil, Russia, India, China and South Africa and to identify the key policy implications for other developing countries. This project builds on our collaboration in preparing the UNFPA's report *State of the World Population 2007: unleashing the potential of urban growth*, and on related research summarised in the book *The New Global Frontier: urbanization, poverty and environment in the 21st century* (Martine, McGranahan, Montgomery and Fernandez-Castilla (eds) 2008, Earthscan, London).

Researchers prepared case studies (see Further reading on page 26) that examined how the speed and character of each country's urban trajectory has influenced both past developments and future prospects. A further study is in preparation, focusing on how China's approach to urban development has at once underpinned China's economic success, and constrained attempts to achieve more socially and environmentally harmonious development. Other outputs from the project include: *Learning from Urbanization in the BRICS*, a IIED/UNFPA technical briefing published in December 2012, and a book planned for late 2013.

The entire developing world is in the midst of a global urban transition that, together with economic globalisation, is shifting the economic loci of development. Economic power is drifting southward, most notably towards the large and emerging economies of the 'BRICS': Brazil, Russia, India, China and South Africa. The BRICS' integration into the world economy has been well-scrutinised but the specific role urbanization and urban growth processes played in these countries' recent economic and demographic transformation is still understudied and undervalued.

Examining these diverse urban transitions yields some powerful lessons for other developing countries. This paper discusses the individual experiences of each BRICS country, drawing out issues other countries may face.

History shows that as economic activity becomes more concentrated in some places, and as a country's income rises,

the share of the population living in urban localities grows, often sharply. This 'urban transition' process parallels the better-known 'demographic transition', in which mortality and fertility rates both tend to fall as countries achieve economic success.

The BRICS yield up some inspiring examples of how to seize the opportunities that urbanization can provide, and how to pursue inclusive urban development. They also highlight the problems inappropriate policies bring. All these countries have gone through difficult periods during their urban transitions, and several still bear heavy burdens of past failures to process urban growth equitably and efficiently.

The way urban growth is accommodated has enormous economic, social and environmental consequences. Cities have huge potential to ensure those consequences are advantageous but making that happen demands an appropriate policy framework.

The overriding lesson is that cities and nations must plan for inevitable urbanization, so as not to be left with an enduring legacy of inequalities and lost opportunities.

Urban transitions amongst the BRICS

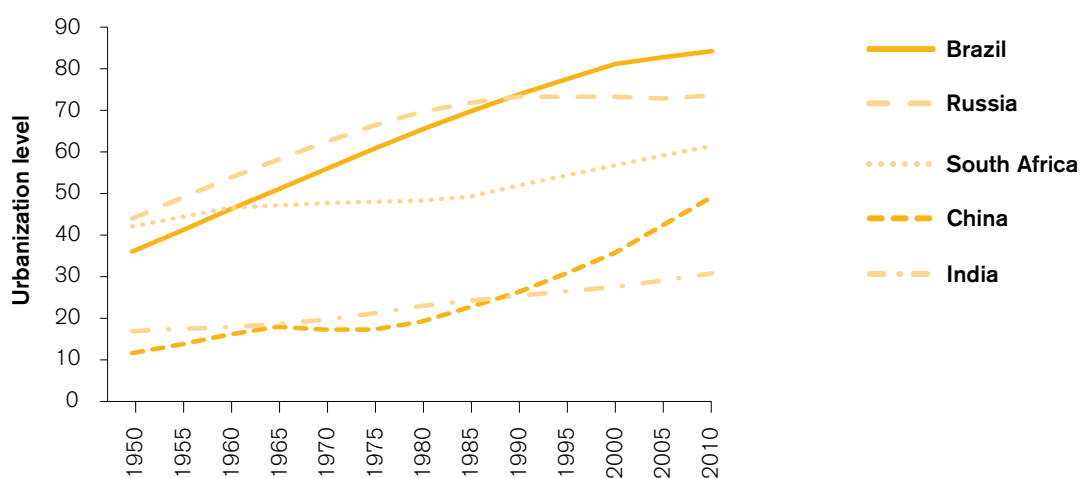
The BRICS have long had imposing geography and demographics. Together, they account for around 29 per cent of the world's land area and they still account for 42 per cent of world population, despite a slow decline in their population share. Recently, their economies have also begun to impose on the world stage. Led by China, the BRICS countries accounted for about 47 per cent of real growth in the gross world product between 2000 and 2010 (World Bank Development Data Group 2011, using GDP in constant 2005 dollars at purchasing power parity). As a result, their combined share of gross world product increased from 17 to 26 per cent. Their economic importance is expected to increase further in the coming years. Four of the BRICS were listed in the planet's ten biggest economies in 2010 and they are all expected to raise their ranking.

The interdependence between urbanization and modern economic growth is well recognised, and urbanization processes have played crucial roles in the BRICS' economic ascension. Yet their urbanization trajectories differ vastly from one another. Figure 1 shows how Brazil, Russia and South

Africa were comparatively early urbanizers, with roughly half of their populations living in urban areas by 1960. Since then, Brazil has shown the most rapid urbanization, South Africa urbanized very slowly and then picked up in the 1990s with the end of apartheid, while Russia urbanized steadily until the dissolution of the Soviet Union, and since has hardly urbanized at all. China and India had far lower levels of urbanization in 1960, and they continued to urbanize slowly until the 1980s, when India's rate of urbanization began to increase somewhat, and China's took off.

Rapid urbanization in the BRICS has generally been associated with economic growth and a shift out of agriculture, while sudden declines in urbanization rates have been associated with economic and social disruption. Nevertheless, BRICS governments have often been very ambivalent about urbanization and have even caused some of the interruptions, as with South Africa during apartheid or China during the Cultural Revolution. Each also has somewhat different lessons to teach us about the opportunities and risks that urbanization can bring.

Figure 1. Urbanization levels of BRICS countries 1950–2010



Source: United Nations Population Division, World Urbanisation Prospects: The 2011 Revision

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Brazil: rapid but resisted urbanization

Brazil has more of its total population living in towns and cities than do most European countries. Yet Brazil's leaders have often resisted urbanization, and previous governments' failure to plan ahead created deep social and environmental problems. This thorny legacy has been too big to swiftly eradicate, even with Brazil's highly regarded and much-copied pioneering city reforms.

By comparison to most other countries outside the 'first' or 'developed' world, Brazil has urbanized quickly and massively. By 1950, urbanization had reached 36.2 per cent (Africa and Asia reached comparable levels only in 2000 — at 34.5 per cent and 37.1 per cent respectively). Brazil now has a larger share of its total population living in towns and cities than do most European countries. At the last count (the 2010 Demographic Census), over 84 per cent of its population resided in urban areas. The country has recently gained recognition for pioneering innovative policies aimed at improving urban governance. Nevertheless, Brazil's leaders have often resisted urbanization and the government's failure to accept urbanization, and to plan ahead, has brought persistent and mounting problems in transport and housing, and through social disorganisation and environmental degradation in Brazilian cities.

What kick started rapid urbanization?

From the 15th to the 19th century, Brazil's Portuguese colonisers were less interested in settlement than in exploiting the occupied territories' riches. They established an agricultural-extractive economy, in which urban areas (usually ports) were mainly 'launch pads' for exploiting the hinterland and channels for taking New World produce back to Europe. Brazil had a mosaic of towns and cities along the coastline, but regional trade routes and economies remained undeveloped because maritime transport focused on maintaining contacts beyond Brazil's borders.

But modernisation in São Paulo state's coffee production during the last decades of the 19th century established the basic conditions for a new source of economic dynamism and urban concentration, and a growth axis in the São Paulo-Rio de Janeiro region. Import-substituting industrialisation,

the trigger for Brazil's rapid urbanization, took off after the coffee economy crashed in 1929. By now, Brazil had rapid demographic growth, driven by falling mortality. Unable to pay international debts or to import supplies, Brazil began producing industrial goods in the cities. This created a labour market, and started Brazil's concentration of population in ever-larger cities. But it was not enough to absorb the demographic surplus, and so migrants also moved to frontier agricultural areas, progressively occupying the country's interior. These two broad trends in population redistribution would last for the next 50 years.

Fuel for urbanization

Once industrialisation started, it reverberated across Brazil. Wartime production gave the switch to import-substituting industrialisation a huge boost. The state started intervening to develop key sectors, including transportation and communication. Demographic growth accelerated, increasing the stock of potential migrants over the next half century. During the 1960s the military regime tried to modernise agriculture through incentives that favoured larger farms. This displaced millions of small-scale farmers and farm workers. Brazil's leaders opened up frontier areas in the Amazon region, intending that these would absorb agricultural migrants. But even here it was new towns and cities, not rural areas, that thrived.

Despite political discontinuities, the import-substituting industrialisation model was reinforced throughout the entire 1930–80 period and lies at the root of Brazil's profound social, economic, political and demographic transformations. Table 1 presents summary information on changing urbanization and on rates of urban and rural growth for the period 1940–2010. It shows striking urban growth throughout the 1930–80 period, but an especially rapid rhythm in the 1950s and 1960s, the period in which demographic growth peaked.

Table 1. Percentage of total population living in urban areas, and annual growth rates of the urban, rural and total population: Brazil 1940–2010

Period	% urban, at beginning of period	Rate of population growth		
		Urban	Rural	Total
1940–1950	31.2	3.9	3.8	2.4
1950–1960	36.2	5.2	1.6	3.0
1960–1970	44.7	4.7	0.6	2.9
1970–1980	55.9	4.2	-0.6	2.5
1980–1991	67.6	2.6	-0.7	1.9
1991–2000	75.6	2.5	-1.3	1.6
2000–2010	81.1	1.6	-0.7	1.2
2010	84.4	-	-	-

Source: Martine and McGranahan, 2010

More cities, but also more concentration

The constant increase in the number of cities has been a defining characteristic of Brazilian urbanization. The number of settlements with populations over 20,000 grew from 59 in 1940 to 867 in 2010. Yet, seemingly paradoxically, the urban population has also concentrated into larger cities. Between 2000 and 2010, cities of one million or more inhabitants made up 53.9 per cent of the population growth in all localities of 20,000 or more inhabitants.

What slowed Brazil's urbanization?

Table 1 also witnesses Brazil's remarkable drop-off in rates of urban growth and concentration after 1980. The overall annual rate of urban growth was cut from 4.2 to 2.6 between the 1970s and the 1980s. All city size classes were affected, but larger cities the most. What caused this sudden turnaround? Three main factors can be cited: rapid fertility decline that reduced both the stock of potential migrants and the rates of natural growth in the cities; the profound economic crisis that marked the 1980s and part of the 1990s; and a broader process that 'de-concentrated' economic activity away from the dominant pole of São Paulo towards other regions and cities. The decreases in urban growth rates have persisted during the two more recent intercensal periods despite more urban localities and a bigger urban population overall — Brazil still gained some 43.6 million new urbanites (defined as people living in settlements of at least 20,000) during the two most recent decades alone.

Urbanization both fuelled and resisted

Brazil's remarkably precocious and rapid urban transition happened despite anti-urban sentiments that prevailed during the colonial and imperial centuries and persisted through all subsequent regimes. Brazilian officialdom has perennially perceived urban growth processes from the standpoint of the administrative difficulties and the social and environmental problems that they purportedly cause. But this negativism is actually the source of many social and environmental ills plaguing Brazilian cities to this day.

During the rapid urban growth of the 1930s and 1940s, policymakers were caught by surprise and forced into defensive emergency interventions in the cities because of expanded in-migration. Negative reactions intensified as Brazil's largest cities gained dominance and visibility from 1950–80. Yet it was state intervention, aimed primarily at promoting vigorous industrialisation, modernising agriculture, integrating the national market, and improving transport and communications, that drove population concentration at this time of rapid population growth.

Starting in the 1960s, Brazil's leaders adopted a variety of explicit tactics to slow or prevent urban growth: from roadblocks and fiscal measures to integrated migration policies. Brazil's military regime expanded regional planning, trying to stimulate economic activity in outlying regions and reduce migration to the main cities of the southeast. Nevertheless, migration to these large urban centres continued to increase, in both absolute and relative terms. Unable to stem this 'unplanned for' urban-wards migration, the government turned its attention to 'organising' urban growth, creating various agencies and programmes to curb or eradicate slums.

Political opposition to urban growth has led more often to setting up ineffectual and damaging obstacles to expansion than to forward planning. Failing to prepare for inevitable urban growth damages cities' ability to expand sustainably but it is particularly damaging for the poor. Despite being the largest social contingent, they have historically had to fend for themselves in tough housing markets, being forced towards squatter settlements and other informal communities, building makeshift dwellings wherever they can. Failure to accommodate urban growth has given rise to the world-known favelas that dot the hillsides, riverbanks and other inadequate locations in Brazilian cities.

More proactive planning and popular participation

Brazil's post-1985 democratic government, which took over from the military regime, emphasised participatory processes, decentralised decision making and reducing social inequality. Urban policy has become a crucial centrepiece in the country's efforts to make democracy a working reality and to combat entrenched social divisions. Brazil has pioneered bold innovative practices that have created great expectations, and that other countries have replicated.

The core of this democratic shift is undoubtedly the Statute of the City. This law takes a bottom-up approach to urban planning and has promoted democratic management. It seeks popular participation in urban planning with civil society organisations and private initiatives taking part in debates, public hearings, conferences and popular amendments. For the first time, the rich and powerful found themselves obliged to defend their interests explicitly in public debates rather than behind closed doors. Meanwhile, low-income citizens have obtained legal rights to the land they occupy within the centre of the city, preventing their unceremonious expulsion at the whim of future urban managers. But progress has been slow and irregular, due to the complexities of the issues, social sectors' varying capacity for participating in deciding the affairs of the city and also due to a still-blurred institutional framework for urban policy.

And there has been a less obvious, but even more prevalent, obstacle to adopting democratic practices that increase citizen involvement and promote equality. Many local administrations have displayed an innate tendency to try to

stabilise their problems by making it difficult for migrants and poor people to settle in their localities. Brazilian urban policymakers' failure to take a proactive approach to housing for the poor reflects more than mere apathy. In some cases at least it has been part of an explicit and systematic attempt to obstruct poor people, especially migrants, trying to settle in their cities or neighbourhoods. Such practices have far-reaching implications for the future of the cities and their population and, ultimately, for the country's development.

Participatory budgeting is another strand of Brazil's more democratic approach to urban management, and it has received considerable international interest. Essentially, civil society participates directly in defining priorities when allocating the municipal budget. The approach started at the height of the military dictatorship in the 1970s, in two small cities in Brazil's southern region. Since then, more than 200 cities in Brazil, as well as in many other Latin American and developed country cities, have adopted it.

Probably the longest-running experience with participatory budgeting is in the city of Porto Alegre, where an elected mayor from the Workers' Party initiated it in 1989. The process continues to this day. Part of the municipal budget is put up for public negotiation between the municipal government, social movements and the citizenry. They discuss needs and priorities for the population in sixteen administrative sub-regions. Meetings are scheduled every year in each of these regions, during which the mayor's office gives an account of expenditures, and civil society representatives present their views on priorities for the coming year. A 2006 World Bank-sponsored analysis of the Porto Alegre experience indicated that an impressive 20 per cent of the municipality's population had participated in some way, at one time or other, in these discussions.

How well has Brazil's democratic approach worked?

In retrospect, neither formulating socially guided master plans nor instituting participatory budgeting processes have been a panacea for Brazil's urban problems. Although these practices have made real progress, the problems were too large to swiftly eradicate.

Enacting democratic procedures presupposes an organised civil society, as well as an informed and interested citizenry. Such characteristics do not spring up overnight in a society that has historically been characterised by huge inequalities in assets and power.

In short, the government's efforts to resist rapid urban growth did not slow the pace of urbanization perceptibly. They did, however, contribute to a very unequal urbanization, with large segments of the population inhabiting poorly located and served informal settlements. Instead of recognising urbanization as an inevitable process that could help the country develop, increase rural-urban synergies and ultimately improve the lives of millions of poor people, the country persisted in efforts to curb and divert it — and, failing that, to somehow organise it post hoc. Such belated efforts are much more expensive and much less effective, leaving a legacy of thorny social and environmental problems for the next generations. Many inhabitants have done amazingly well under the circumstances, but these circumstances have historically been atrocious — hazardous locations, enormous barriers to service delivery, bad relations with local authorities, and so on. In retrospect, a more inclusive and pro-active approach to rural-urban migration and urban growth would have been not only fairer at the time, but very beneficial in the long run.

China: a delayed and then frenetic urban transition

Local alliances between entrepreneurial bureaucrats and developers drove China's explosive urban surge, and ultimately the biggest population movement in history. Urbanization has brought great wealth to the country, but also social inequality and environmental burdens that now need a new approach.

A late start on urbanization

Of the five BRICS countries, China has undoubtedly had the most belated (but explosive) urban surge. China aggressively defended the merits of its agrarian society well into the second half of the 1970s. The first Census of the People's Republic of China in 1953 recorded only 77.3 million urban residents in this huge country, accounting for 13.3 per cent of the total population. By 1979 urbanization had increased to 185 million, or 19 per cent of the total population. Most of this modest increase occurred in the decade after 1949, when China embarked on its First Five-Year Plan, launching industrial and military modernisation projects. Urbanization was actively and successfully resisted, particularly during the anti-urban Cultural Revolution of 1966–1976. It was not until the economic reform of 1978 that China's urbanization started to take off (see Figure 2).

Encouraging rural-urban migration

China is one of just a few countries that currently claim to have policies to increase rural-urban migration. And it is perhaps the country whose model of development is most closely linked to urbanization and city formation. China's approach to urbanization has contributed significantly to the country's economic success, and has profoundly influenced the form this success has taken.

Yet China's initial economic successes, and its experiments with industrialisation in the 1980s, were remarkably rural, and quite distinct from the dominant city-centred development in the 1990s. The reforms started in rural areas, where farmers were given more responsibility for the land they farmed and

the products they sold. Local enterprises were encouraged to produce for the market. The primary intent of these reforms was to raise the volume of agricultural production and increase food security, as well as to increase the market value of production.

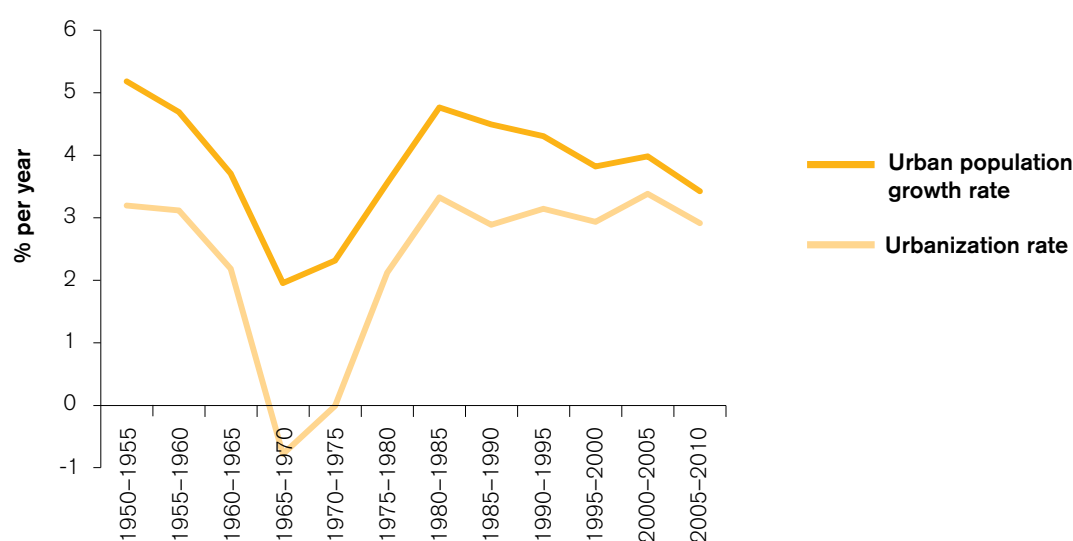
The mechanisation also drastically reduced the need for rural manpower. However, an estimated 100 million rural labourers were able to find employment in the rural industries that sprang up in the 1980s. Together, these reforms and China's rural industrialisation fuelled population concentration, and led many rural townships to acquire town and city status.

More and bigger cities

Throughout the 1980s, those places and enterprises considered the most likely to succeed were supported. Special industrial zones, created in mainly rural coastal regions, spurred a self-fuelling process of urbanization and industrialisation. Their economic success led to the opening up of more coastal locations to trade, foreign investment and capitalist enterprise. Government decentralisation followed and, by the 1990s, the coastal cities had emerged as the crucial engines of economic growth.

The underlying strategy was gradualist and experimental, but the pace was frenetic. Cities, particularly those in the eastern region, became central to China's development. They also became key arenas for institutional innovation, with central government encouraging successful (and suppressing economically unsuccessful or politically threatening) innovations. By steering capital to selected areas for industrial and physical development, China set in motion the biggest population movement in history. Hundreds of millions of migrant workers eventually set out to the towns and cities, providing labour for the rising industrial and service sectors of these rapidly growing urban economies.

Figure 2. Urbanization and urban population growth: China 1950–2010



Source: United Nations Population Division. *World Urbanisation Prospects: The 2011 Revision (POP/DB/WUP/Rev.2007)*

China's urbanization and economic growth have fed off each other in a manner that far exceeds anything observed in the other BRICS countries, or of any other region or time in history. By 1990, 26.4 per cent of the population already lived in urban areas. By 2000 this had risen to 36.2 per cent, and to 51.3 per cent by 2011. With central government's strong pro-urban policy, urbanization will undoubtedly continue. According to the United Nations' projections, China's urban population is expected to increase to 1037 million by 2050.

Actively urbanizing places, hesitantly urbanizing people

Increased decentralisation and devolution of power to town and city governments stimulated merging processes that created larger local governments and reduced the number of smaller 'townships' from over 85,000 in 1982 to below 20,000 in 2007. Meanwhile, the number of towns nearly tripled from 7,000 to close to 20,000. Nevertheless, most growth was concentrated in the largest cities of over 1 million inhabitants. These numbered 13 in 1982 but 58 in 2007. And while the number of urban centres increased fast, the expansion of built-up urban area increased even faster, and the area of land designated as administratively urban grew faster still, partly as the result of urban centres being given more control over their rural hinterlands.

But while China has encouraged urbanization, both national and local governments have been far keener on creating economically successful urban places than on accepting rural people as permanent urban residents. In the 1980s and 1990s, counties were given strong incentives to try to become cities, but only a small minority of rural migrants were given urban permits allowing them to claim urban citizenship. The number of officially urban people grew very slowly. Partly as a result, urban population estimates based on different statistical criteria began to diverge considerably. Thus, according to the 2010 census, about 220 million urban dwellers were officially registered as permanent residents of rural areas, often far from their urban homes. This 'floating population' is considered urban in the statistics presented here, but most do not have the same urban rights as those registered as permanent town or city dwellers.

Changing controls over land

In most urbanizing countries, gaining access to suitable urban land is critically important, whether one is a struggling low-income resident or an affluent and ambitious enterprise. In China, public appropriation of land for urban expansion, and this land's transmission to commercial enterprises, has been a crucial and unique feature of urbanization. Urban land has become central to how urban authorities raise revenue (through land sales), promote economic growth (through large development projects), finance urban infrastructure (by tapping the increase in land values), and brand their cities (with iconic architecture).

The rising importance of urban land in China's development is intricately linked with the growing political importance of cities and their governments. The manner in which the land is

secured and distributed raises problems of efficiency, equity and environmental quality, as well as economic instability linked to property speculation. It is a locus of corruption. But it has also become a major force behind China's rapid economic accumulation and growth.

There are certain paradoxes in the way in which land in China has come to take on this central role, at least from the perspective of conventional economic thinking. Firstly, and contrary to the view that clear land rights are a precondition for effective land markets, the rapid market-based transformation of China's urban and peri-urban land took off when land rights were ambiguous at best. Secondly, the two biggest losers have ironically been those groups with the strongest claim to land ownership according to the Chinese constitution: the central government and the rural collectives. The two big winners have been the local governments and the developers. The struggle for control over land has been quite different within urban centres (where various central authorities have had land claims) and at the urban periphery (where rural collectives have had claims), but in both cases local government and developers have combined to play the lead role in securing and servicing the land, and then making it available to investors.

Urban government officials have had powerful incentives to gain control over land conversion and conveyance, and to use this control to promote development projects. Government plans, at least until recently, prioritised economic growth. Career advancement for senior officials depended on economic performance. Revenues from land sales were extra-budget, allowing the local government to keep most of the proceeds. And controlling land conversions and conveyance provides important opportunities for corruption.

Land conversion has become so central to China's economy that the central government adjusts national policies towards urban land conversions and development to stimulate or stabilise the economy, and has been trying to gain more control over the process. There is also resistance to the land conversions from below, epitomised by so-called 'nail households' who refuse to move, at least until the financial incentive or physical force becomes overwhelming. Nevertheless, the extent to which urban authorities can secure and deliver land to developers and investors far exceeds international norms.

Changing controls over people

The household registration system, or hukou, once tightly controlled people's movement, making it very difficult for rural dwellers to migrate to urban locations to work. These controls have been loosened considerably with the economic reforms, and indeed the economic success of the urban-centred development model depended on the relatively unrestricted movement of people to jobs.

However, and despite continuing incremental reforms, it remains difficult for people from distant rural areas to be registered in the major urban areas, and economic studies suggest that the hukou system still constrains mobility, interfering with economic productivity. Without the right registration, migrants still do not

have the rights of local residents. This puts actual and aspiring migrants at a particular disadvantage, amplifying market-driven inequalities. But it assuages local authorities' fears that these migrant workers will impose high service costs, or become a significant political force locally.

Soaring housing prices also make it difficult for an increasing number of people, especially migrants, to afford proper housing in China's cities. Under pressure from central government, local governments are taking initiatives to build low price houses, but the demand outstrips supply and migrants lacking local hukou are denied access, in effect if not in law.

Weaknesses in China's urban-based economic model

Within China there has been a growing concern with economic inequalities. While overall poverty has declined (extreme poverty and hunger — once common to China — are now rare), inequality has grown rapidly. A particularly large share of this inequality is spatial, including rural-urban inequalities, related inland-coastal inequalities, and the more ambiguously spatial inequalities between urban residents with and without permanent residence rights. It is difficult to avoid rising inequality during periods of rapid economic growth and urbanization, but these inequalities are being amplified by the past tendency to favour well-located cities with special policies, and the continuing tendency to discriminate against migrants. Spatial inequalities pose a special challenge for urban-based reforms, as even comparatively egalitarian urban-based coalitions have little incentive to address inequalities that extend beyond urban boundaries.

There has also been a growing concern with environmental problems. Not-surprisingly, China's narrow focus on marketable economic output has created serious environmental burdens ranging from severe air pollution in the cities, to growing demand for, and contamination of, water and land surrounding the cities, through to increasing global ecological and carbon footprints. A growing share of these burdens now fall well beyond the cities where they originated, again posing a challenge for locally driven urban management.

A third concern is economic instability, and here too China's current reliance on entrepreneurial bureaucrats and developers poses a particular challenge. The same tools that city governments have deployed to stimulate economic growth can also create economic instability. For instance, short term political interests in a rising real estate market, city boosting and speculative manipulation of housing markets have combined to turn booming housing markets into potentially large real estate bubbles. Real estate's economic importance in China is striking. Real estate investment accounts for about 20 per cent of total investment and 9 per cent of GDP.

China's environmental and social problems demand new approaches

The notion was that economically backward places and people would catch up, once a better understanding of how to promote growth was secured, and that environmental problems would be addressed over time. While China is increasingly concerned with social and environmental issues, it remains to be seen whether this will translate in to decisive corrective action, particularly given the current global economic downturn.

The challenge may be no greater than that of achieving economic success was at the start of the urban transition, and urban experimentation could still play a central role in pursuing environmental and social agendas, and reducing economic instability. But local alliances of entrepreneurial bureaucrats and developers are unlikely to drive such agendas. Economic growth is at the centre of these alliances. Moreover, a large share of environmental burdens and social inequalities harm distant populations or disadvantaged groups. Reforming urban governance, while keeping healthy urban economies, will require new forms of experimentation. The sort of locally driven experimentation that has been so successful in driving economic growth cannot simply be applied to addressing inequality and growth-related environmental burdens. Reforming urban governance is likely to be crucial.

Russia: misplaced urbanization brings dislocation

Russia's history shows how long-term economic growth from urbanization needs people and economic enterprises not just in cities, but in productive places. The end of the Soviet Union left many cities exposed to unfamiliar market forces. Despite recent recovery in several vibrant cities, Russia is still dealing with the spatial restructuring — and considerable dislocation — brought on when the Soviet central planning system was dismantled.

While China's accelerated urban transition went hand in hand with its shift away from central planning, Russia's accompanied a consolidation of central planning between the World Wars, creating very different dynamics. Russia's history shows how long-term economic growth from urbanization needs people and economic enterprises not just in cities, but in productive places. Given the complex interdependencies involved in urban transitions, this is difficult to direct without relying on markets to a greater degree than did the Soviet Authorities.

Delayed and largely ineffective industrialisation efforts, begun only during the last decades of the Tsarist regime (which saw rural exodus as a threat), had brought urban population to higher levels than in most of Asia or Africa by the early 20th century. But Russia's urbanization level remained low by comparison to Europe or even Latin America.

Yet Russia's urbanization, which accelerated from the mid 1920s as the Soviet Union was being consolidated, was still relatively early compared with China. By the time the Soviet Union began to be dismantled, Russia was already more urban than China is today. In effect, Russia urbanized through its planned economy whereas China urbanized as its commitments to a planned economy declined. And in Russia, the dissolution of the Soviet Union brought on demographic and economic collapse, with per capita incomes dropping by more than a third, and urban populations actually declining for over a decade. More recent years have brought dramatic, but uneven, recovery.

Rural Russia peaks then declines

Contrary to what might have been expected, the early years of the Revolution failed to generate a large influx to the cities. The First World War (1914–17) and the Civil War (1918–21) had produced sharp declines in fertility and had increased mortality, depleting the pool of potential migrants to cities as well as the rate of natural increase in the cities themselves. These calamities also delayed clear economic action centred on industrialisation, keeping growth slow in Russia's cities in the first quarter of the 20th century.

In 1926, Russia's rural population peaked at 76.3 million and there were still no large regions where even 25 per cent of the population lived in urban areas. After 1926, rural areas started to depopulate as high rates of natural increase in rural areas were more than offset by larger urban-bound migration and later — in the post-war era up to the mid-1980s — also by reclassification of some rural areas as urban.

Rapid urban growth in spite of high mortality and lower fertility

Historically, Russia had always had many small scattered outpost cities in difficult climates or geographic areas without densely populated rural hinterlands. Western Russia around Moscow and St. Petersburg urbanized more rapidly than the remainder of the country during the Tsarist and early Soviet eras, but the differences in urbanization levels were never large. Russia's stagnated urban growth revived dramatically between 1926 and the 1939 census, with the USSR's urban population

rising by 119 per cent. In the years before the Second World War, when the USA and other advanced capitalist countries were mired in depression, Soviet urban population grew at an annual pace of 6.2 per cent and the proportion of the population living in cities nearly doubled. By 1939, urbanization levels above 40 per cent were recorded in the northwest and Russian Far East, while most other regions were between 25 per cent and 40 per cent urban.

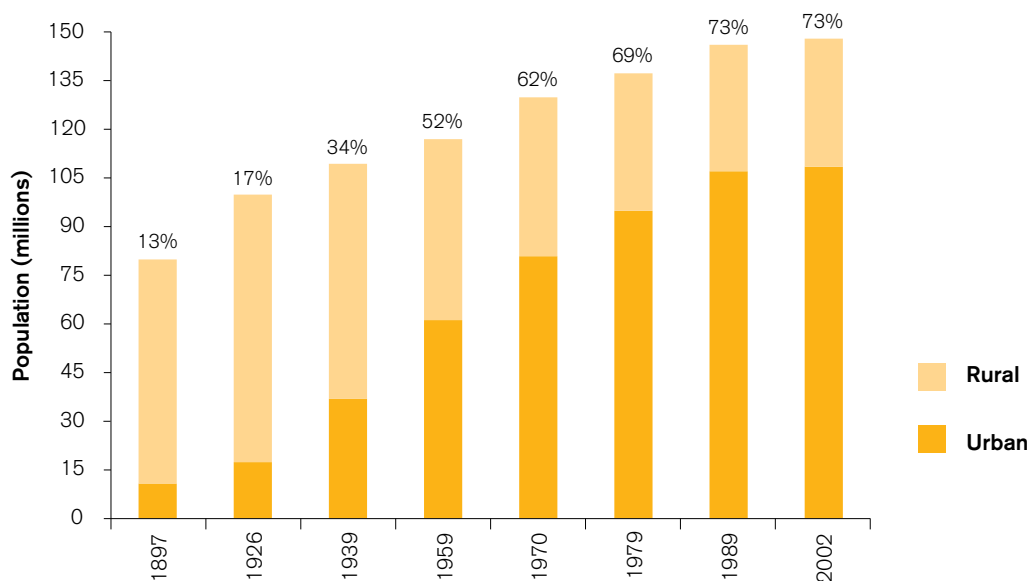
Urban populations continued to grow through the Second World War period despite the enormous destruction and mortality. The shift to a wartime economy more than offset the decline the war caused in urban populations. By the first post-World War Two census, Russia had urbanized substantially, especially in the Urals, Western Siberia, and other areas less affected by the war. And after the war, Russia took just 20 years to achieve urbanization levels comparable to those that had taken France 80 years.

Such rapid urbanization was accomplished despite the conflict's loss of life and the country's persistently high mortality, which had immediate as well as long-term effects. This meant that its cities required far more replenishment from in-migration than their European, North American or Japanese counterparts. Russia as a whole, and its cities in particular, actually grew far more slowly than would have been the case had mortality levels been closer to world norms. Figure 3, based on census data, records the steady urbanization throughout the 1926–79 period, with the urban share ultimately rising to 66 per cent of the population in 1989 and subsequently staying level. Russia's cities thus have consistently had a very high proportion of in-migrants (generally from rural areas). Research has estimated that this proportion was high even before the industrialisation push (52.5 per cent in 1897 and 49.5 per cent in 1926) mainly because the base urban population was so small, and that rural-urban migration accounted for 62.8 per cent of urban growth during 1926–39 and 62.4 per cent during 1939–59.

Like other central and eastern European countries that industrialised, Russia experienced high fertility through the 1950s, and then went through a long-term decline (despite efforts by the government to maintain birth rates). As in Brazil, fertility decline slowed both natural population growth and, to some extent, rural in-migration. It also led to a 'greying' of Russia's cities, which eventually had an effect on the vigour of urban economies.

Centrally planned cities

A peculiar feature of Russia's city size distribution is that it does not look particularly primate by international standards, despite the importance of Moscow and St. Petersburg. Central planning has unquestionably influenced Russia's spatial and urban structure, while severe restrictions on population movements, especially to desirable cities, has prevented Moscow and St. Petersburg from becoming even more dominant. Migration to cities, as well as the spatial distribution of urban population in the Soviet era, was largely a story of industrialisation and industrial policy, especially up until the 1970s. Planning objectives rather than labour markets or other economic factors determined the specific directions of migration flows.

Figure 3. Urban population: Russia 1897–2002

Source: Becker, Mendelsohn and Benderskaya, 2012

Under the Soviets, policies on migration and urban growth were embedded within broader policies on regional growth. Ideological commitments to equality — in accordance with a mantra of ‘balanced industrial growth’ — drove the socialist government to promote investments that favoured spatial equality, even in the face of considerable locational and physical disadvantages. Industrial production was shifted forcibly to the eastern areas of the country. Indeed, industrialisation, together with military and transportation decisions and the supply of hydroelectric power, became the mechanisms for directing regional and urban growth. Oblasts (administrative divisions of the Soviet Union) were encouraged to develop ‘secondary capital cities’, especially those oblasts dominated by ethnic minorities, and republics and autonomous regions.

In pushing industrialisation east and north, the Soviets were also exploiting natural resources (minerals and energy). Eastward industrialisation was partly in anticipation of, and in response to, the Great Patriotic War (Russia’s World War II). But because of Russia’s vast distances, it was not easy to locate new cities far from trunk rail lines. Cities in the Urals, Siberia and the Far East that grew beyond their mining or energy base needed new rail access. Electrification was another challenge. Even in the post-war era, after the huge industrialisation push, cities at hydroelectric sites were among those that grew most rapidly.

Russia’s urbanization came to an abrupt halt with the collapse of the Soviet Union, and cities’ mean growth rates both converged and declined in the 1990s. While these patterns surely reflect the collapse of urban economic activity and job growth, other factors also were at work. Russia’s urban population aged

considerably in the post-war era, some urban areas were reclassified as rural, and birth rates, already low, plummeted further in the 1990s. This decline in natural growth was not compensated by in-migration, either from rural areas or from the ‘near abroad’ (other former Soviet republics: much of this migration involved repatriation of ethnic Russians).

Viewed in retrospect from an economic, and more especially from a market perspective, it would seem clear that the biggest problem was that the Soviet system located urban activities and populations in the wrong places. Economic efficiency considerations — for example, minimising industry’s input costs — were often ignored in favour of military and political objectives, ensuring dispersed industrialisation, and creating a proletariat throughout the USSR.

Migration controls

People’s locational preferences were also largely ignored. Remarkably, even the vast rural-urban flows in the Soviet Union described above failed to accommodate the entire contingent of people wanting to move to the cities. To stem the tide, the USSR imposed an internal passport regime that restricted access to its urban areas as early as 1932. Rural residents who wished to migrate needed to obtain the proper urban passport. Such restrictions, combined with a housing shortage and the absence of a housing market, forced undocumented workers to live in miserable conditions as second-class citizens, much as in the case of China’s rural-to-urban migrants.

Potential migrants in latter-day Russia still face daunting physical and economic distances between lagging areas and potential

destinations. Poor wages across Russia have restricted mobility, especially in the light of the distances and costs involved, and help explain the skilled labour shortages in some areas while high unemployment persists elsewhere. However, unregistered migration almost certainly has increased, leading to large population undercounts for the more dynamic cities.

Recent recovery

But overall, Russia's more recent picture is one of dramatic but uneven economic recovery. Moscow, which continues to be the centre of Russia's highly centralised government structure, now also serves as headquarters for nearly all major companies and has made the biggest leap in terms of investment, taxes collected and per capita income. There has also been significant growth in St Petersburg, in interregional and regional centres with populations above 500,000, some industrial cities, service centres, science centres and other closed centres. Moderate suburbanisation has also started, for the first time in Russian history, leading to population losses from central cities.

Russia's urbanization trajectory is unique in many ways, but it does share three obvious similarities with that of China — an extended period of centralised government under socialism, a historical opposition to urban growth, and explicit controls on

migration. However, the communist regime in Russia embraced industrialisation and urban growth much earlier than in China, while its controls over population movements were broader, involving more forced migration as well as restrictions on rural-urban mobility. Russia's pace of urban growth during the height of its urbanization process, however, is more akin to Brazil, although Russia's process largely stagnated before reaching Latin American levels of urbanization.

The end of the Soviet Union left many cities exposed to unfamiliar market forces and it was inevitable that dismantling the Soviet central planning system would be accompanied by significant spatial restructuring. This has amplified the inequalities emerging through the market economy, and has driven a significant shift in populations towards newly vibrant cities in the south and west — which may be the right response economically, but has involved considerable dislocation. The converse has been movement away from the far north and east, and from industrial cities with few amenities. Cities with natural resource bases or other strengths in the market economy suffered in the 1990s but have since thrived. Others have continued to struggle, especially those based on uncompetitive manufactures that produced for the military-industrial complex or that provided consumer goods in the absence of competition.

South Africa: apartheid's urban controls and fragmented cities

A mining boom drove South Africa's early urbanization, but apartheid policies shaped its form and left 'fractured' cities with poverty traps on their peripheries. South Africa still faces a legacy of social inequality, and problems for infrastructure, transport, congestion and urban service provision.

South Africa has the largest and most industrialised economy in Africa, and the 28th largest economy in the world. Nearly two-thirds (62 per cent) of its total population of 50 million live in urban areas, making it the most urbanized large country in sub-Saharan Africa. South Africa's experience of urbanization is unusual in several respects. It has been a source of controversy for over a century, posing dilemmas for successive governments and resulting in wide-ranging interventions, first to accelerate rural-urban migration (though only temporary migration was sought) and later to restrict and control it in various ways.

Urbanization started with exploited migrant workers

In the late 19th and early 20th centuries, a distinctive form of racially segregated urban development was put in place. Urbanization was closely associated with industrialisation, and involved the exploitation of both natural resources (minerals) and human resources (rural migrants). It was stimulated by the discovery of diamonds, and more importantly gold. The mining boom suddenly required an extremely large workforce, and wanted cheap labour.

This need to rapidly assemble a bigger labour force through in-migration had profound social and geopolitical ramifications, transforming South Africa from a patchwork of agrarian states to a unified industrial nation with a strong political centre. Gold mining remained the mainstay of the South African economy for decades, and was almost the only source of export revenues.

Major demographic shifts were an essential feature of the mining boom. Early on, most labour came from neighbouring autonomous African states and Mozambique on a temporary basis, establishing a pattern of 'oscillating' or 'circular' migration, which created migration chains and temporary dormitory towns. These expanded and sprouted their own permanent roots. Later, companies also introduced large residential compounds or hostels to keep male migrant workers on site. By creating stable residential areas for black workers, these developments were to have huge significance for the country in later years.

Very low wages were being offered to ordinary labourers in order to sustain both the mining profits and the high wages of the skilled white workers. The migrant labour system helped keep the wages of black mining workers low by providing a constantly replenished source of cheap labour. The result was very poor living standards for black migrant workers.

But the voluntary migration system was not reliable enough to provide the expanding labour force the mining companies required. Creating a stable, growing workforce soon became the primary objective of the mining companies and the colonial government. They invested in various schemes to attract workers for longer periods and from further afield. Corporate agents travelled throughout the region offering fixed contracts and pre-arranged wages to attract young men to the mines. Increasing numbers of workers were recruited from neighbouring countries but their governments

would only release large numbers of citizens if the migration arrangement was temporary and their families stayed behind at home.

By 1900 there were 100,000 black workers living in mining compounds and it has been estimated that by 1910 their number actually exceeded the entire white population of the Witwatersrand.

Natural resources shape urban and political developments

The mining boom provoked development of a wide range of support industries and services, stimulating further industrialisation and urbanization. Growing rural-urban migration, gold exports and increasing urban demand for rural produce prompted investment in the country's transport and communications infrastructure, linking the various ports and interior cities and helping to define the relative functions of each in the country's urban system.

The mineral revolution also had a big impact on political developments. In order to secure a regular flow of workers to the mines, the colonial government began to annex neighbouring African states and introduced taxes that could only be paid by working in the mines. Some of the wars at the time can be traced to the mining boom.

And there was a profound impact on social relations. The restrictions imposed during the mining revolution formed the basis of the draconian apartheid system of legalised racial discrimination and subjugation. These segregations dominated South African society and influenced urbanization for a century through various forms of social control and 'spatial engineering'.

Segregation and apartheid emerge

White leaders' political desire to control mobility in the black population, and to restrict rural-urban migration, increasingly conflicted with the economic imperative for more cheap labour in the mines and expanding urban industries. The system of transient migrant labour was a compromise between white and industrial interests, with black workers forced to bear the costs. During the first half of the 20th century a series of piecemeal laws were passed that restricted spatial development patterns and denied land and citizenship rights to blacks in urban areas. But rapid industrialisation and positive government stimuli were attracting more and more rural migrants into the cities, stoking political nervousness amongst the white minority ruling class.

After the Second World War, these adverse reactions prevailed over the needs of industry, and increasingly draconian controls were imposed to suppress black urbanization. The aim was to sustain white lifestyles and political domination.

A welter of new laws and the creation of a large state bureaucracy after WWII paved the way for 'Grand Apartheid', which separated races and entrenched segregation by

Table 2. Urban population: South Africa 1911–2001

Year	Number of urban areas (with over 5,000 people)	Total urban population (thousands)	National population (thousands)	Share of urban population (%)
1911	25	1,085	5,973	18.2
1921	36	1,369	6,927	19.8
1936	53	2,476	9,588	25.8
1951	89	4,463	12,671	35.2
1960	120	6,066	15,994	37.9
1970	161	8,986	23,311	38.5
1980	183	12,419	29,208	42.5
1991	244	17,327	38,012	45.6
1996	280	21,674	40,580	53.4
2001	307	25,355	44,819	56.6

Source: Turok, 2012.

compelling people to live in different places defined by race. Both different territories/regions of South Africa, and different suburbs/neighbourhoods within urban areas, were segregated. The result was a 'spatial mismatch' between jobs and homes, creating economic restrictions for blacks by constraining where they could live, run businesses, or bring their family. Poor public transport for blacks meant long and costly journeys to work, which affected workforce productivity and wage demands. Apartheid controls criminalised black workers' social and economic needs, and brought violence on both sides. Urban violence became commonplace, leaving an enduring legacy for social norms.

Although the restrictions did not completely halt urbanization, they seem to have slowed it down, particularly during the 1960s — the height of the apartheid era (see Table 2).

A legacy of fractured cities

Apartheid disrupted the lives of black residents, forcing them to city peripheries. A long-lasting consequence of this suppression has been South African cities with low central population densities and fragmented forms. These fractures have harmful social, economic and environmental consequences. They create poverty traps on the periphery and favour road-based transport — private cars and minibus taxis. Cities are the dominant centres of economic activity and jobs, and continue to attract most foreign investment, but they are not performing to their potential or reaping the benefits of agglomeration because of shortages of energy and water infrastructure, transport congestion and shortfalls in education and skills. The post-1994 government recognises the problems of a distorted urban form, but its policies have been too short-term and sector-specific to bring about significant settlement restructuring. Indeed, some of the pro-poor policies have reinforced people's exclusion

by subsidising the cost of living on the periphery, rather than supporting better location decisions.

Even-handedness is not enough

With the demise of apartheid, repressive controls were withdrawn and urbanization rates recovered. The post-1994 government has sought to treat cities, towns and rural areas even-handedly. There has been no explicit policy either to support or discourage migration, because of its sensitivity and perceived negative effects on both sending and receiving areas. This neutral stance has avoided the serious social damage of the past, but relatively little has been done positively to overcome the legacy of urban segregation. Similarly, South Africa does not pursue economic investment in cities as vigorously as many other countries do.

Ambivalence to urbanization also translates into a reactive, indifferent and sometimes hostile approach towards informal settlements and backyard shacks. In short, there is no consistent national policy for planning and managing the process of urbanization that is clearly still happening.

South Africa's vast institutional transformation after 1994, from government by established white minority to government by previously suppressed black majority, inevitably disrupted technical capacity, bringing challenges to cities' ability to manage their growth effectively and to create the conditions for economic expansion. But there are several new initiatives emerging that may facilitate more coherent urban development. They include a more flexible and responsive housing policy and a commitment to devolve public transport functions to cities. This should help integrate transport with investment in the built environment, and so favour more compact forms of development.

Lessons for other countries

South Africa's experience since 1994 holds important lessons for other urbanizing countries. It shows how formulating progressive policies, passing laws and creating city-wide municipal institutions are not enough to harness urbanization's potential, or to ensure integrated urban development. Broad policy aspirations and sectoral programmes (for housing, transport, schools, and so on) need to be translated into focused city-level strategies that are deliberately aligned within a long-term vision of a better future. Such strategies also need to engage local communities, the private sector and other stakeholders, in order to channel their energies in common and constructive directions.

A broader lesson from South Africa's historic experience is that the processes of urbanization and industrialisation are politically mediated and may not automatically improve the livelihoods of rural migrants. People moving to cities may have to organise themselves to press for access to labour markets and well-located land on which to settle, so as to secure better living and working conditions. Creating constitutional rights for the poor can help to promote their cause, especially if backed by political will and sufficient government resources to meet basic needs. But equally important are determined city-level leadership and investment plans that manage urban development more effectively, boost jobs and livelihoods, and work with poorer communities to improve essential services.

India: ambivalence to urbanization makes for an uncertain future

India appears ambivalent about urbanization, particularly for the rural poor. But there could be at least another 400 million people in the labour force by 2050. It seems inevitable that India will have to transfer a massive number of people from primary to secondary and tertiary industrial sectors, and from rural to urban living. How and where this happens will be decisive for the country's development.

Social disparities and sluggish urbanization

During two centuries of colonial rule, India's political economy hampered technological development and productivity in both agriculture and industry. Inter-settlement linkages and synergies across different sizes of urban centres were weakened. Public facilities were not only concentrated in the towns and cities as could be expected, but were accessible only to a privileged few.

Independence in 1947 brought political as well as economic structural change. Massive public-sector investment, especially in 'backward' areas, helped restructure the urban hierarchy but regional and rural-urban disparities persisted. Private investment continued to be attracted to a few large cities, and the benefits of economic growth failed to 'trickle down' to smaller urban centres or rural areas.

Post-colonial India has seen considerable 'absolute' growth in urban populations, due to the very size of the population. However, India's urbanization process has been sluggish in comparison to other BRICS countries. It started later, peaked later and has not been sustained. Even when the pace of urban growth was fairly rapid, during the first three decades after independence, it was the informal economy that developed, and inadequate basic services led to growing urban deprivation. The highest rate of urban growth, 3.8 per cent, was recorded during the 1970s. It fell to 3.1 per cent in the 1980s, to 2.73 per cent in the 1990s, and may have stabilised at 2.76 per cent in the

first decade of this century (according to preliminary census data, see Table 3).

Large cities, poor peripheries

India's urbanization has been distinctly 'top heavy', that is, oriented towards large cities. In 2001, 37.8 per cent of the urban population resided in metropolitan cities (cities with population of a million or more), compared with just 6 per cent in 1901. India has a higher percentage of the urban population living in metropolitan cities than do most other countries of the region.

Larger cities are growing due to both in-migration and spatial expansion. Satellite towns spring up nearby, and may eventually become part of the city agglomeration as municipal boundaries expand. Large industrial units are often established beyond municipal limits because of environmental concerns set out in city master plans. Poorer migrants build shelters nearby and either find local (often industrial) jobs or commute to the central city for work. The entrepreneurs, engineers and executives associated with these peripheral industries generally live within the central city and commute along rapid transport corridors. When cities expand, industry can sell up and move further out. But low income residents, who don't own the land on which they live, are often simply displaced (creating the ingredients for social conflict). This segmented process of city expansion can be seen in all Indian states, and is why squatter settlements and new migrants accumulate in the rural peripheries of many large cities.

Table 3. Urban population: India 1901–2001

Census year	Number of towns/ urban areas	Urban population (as percentage of total population)	Annual growth rate of urban population
1901	1,827	10.84	-
1911	1,815	10.29	0.03
1921	1,949	11.18	0.79
1931	2,072	11.99	1.75
1941	2,250	13.86	2.77
1951	2,843	17.29	3.47
1961	2,365	17.97	2.34
1971	2,590	19.91	3.21
1981	3,378	23.34	3.83
1991	3,768	25.72	3.09
2001	4,368	27.78	2.73
2011	-	31.16	2.76

Source: Kundu, 2011.

Participation, but not for everyone

In the large cities, residents' associations have implemented participatory governance. These associations are formed largely by upper- and middle-income groups and supported by non-governmental organisations. This has improved transparency and accountability, but it has also made it possible to provide differential levels of amenities depending on affordability or collective willingness to pay. This situation makes it increasingly difficult for migrants and the most poor to access basic amenities, as public expenditure on slum improvement and settlement of poor people falls.

In large cities, the dominant residents' associations' major concerns are for residents' safety, better delivery of public amenities and more efficient management of development projects. They have tried to sanitise their neighbourhoods by removing encroachments, slums, squatters and petty commercial establishments they see as a threat to local security and hygiene. These anti-urban stances in India are reinforced by high levels of destitution, impervious social stratification, long-standing ethnic, religious and linguistic divisions, as well as by enduring deficiencies in infrastructure and communications. These all reduce the upper- and middle-income groups' understanding of migrants' lifestyles as well as increasing the physical barriers to migrants' mobility.

'Renewal' is still not reaching the poor

Such attitudes are strengthened by explicit and implicit government policies that overlook the economic benefits of migration, both for the country and the migrants themselves. Governments have made frequent efforts aiming to reduce migration flows, both in urban areas and through well-meaning but ineffective interventions to promote economic activities in 'backward' rural regions.

While recognising the value of large cities, recent national development plans have expressed concern over the concentration of demographic and economic growth, and have sought to promote spatially balanced urbanization through support for small towns and new townships. A massive programme for infrastructure investment, the Jawaharlal Nehru National Urban Renewal Mission, was launched in the mid 2000s to secure commitment from local governments for structural reforms of governance. Most of the projects aim to improve services such as water supply, sanitation and sewer treatment, as well as roads and city flyovers. But the Renewal Mission offers no explicit provision to improve such facilities in deprived areas where low incomes often make basic services unaffordable.

In practice, the new system of governance has benefited several large cities the most, as these have been able to obtain a larger share of public and private as well as international resources.

This further increases the distance between India's 'emerging global centres of growth' and its smaller towns, particularly those in less developed regions. Increasing differentials in social amenities, and particularly in education, will reinforce the advantages of larger cities in developed regions. Moreover, the industries experiencing high growth are not ones that will need an expanding labour force, and that does not bode well for absorbing rapidly growing human capital resources. In such a framework, the slow inflow of rural poor into large cities can be expected to continue.

Ultimately, these trends imply severe limitations for integrated development in India. For the relatively low number who have moved, migration towards any size classes of urban centre has helped improve economic prospects. But the process of urbanization in India has been much slower and more segmented than expected and has actually appeared to decrease in intensity during recent decades.

The importance of urbanization policies for rural as well as urban futures

India could have at least another 400 million people in the labour force by 2050. At the moment, agriculture and related activities provide subsistence livings to about 220 million of India's 500 million-strong workforce. Clearly, current agricultural systems cannot absorb the additional labour without further reducing incomes, which are already quite low. It seems inevitable that India will have to transfer a massive number of people from primary to secondary and tertiary industrial sectors, and from rural to urban living. How and where this transfer occurs will be decisive for the country's future development.

One approach might be to adopt more inclusive policies in the larger cities, ensuring that they can absorb a large part of the necessary migration. But this is likely to encounter strong political opposition, as the foregoing discussion illustrates. Urban elites simply do not want their cities to accommodate a large influx of low-income migrants, and the elite's political dominance grows with economic success. However, purposely and permanently alienating millions of people while a minority multiplies its wealth constitutes a poor recipe for long-term development, especially in an era of globalised communication and awareness.

Given the current impasses, serious economic and social disturbances would seem to be a distinct possibility. The very real dynamism of the Indian economy and, within it, of certain large cities, will face serious challenges if the country is unable to find effective channels for massive social mobility.

India's economy has demonstrated its potential for rapid growth, but it is the urban policies that will help to determine whether this growth is maintained, who benefits, and what the environmental consequences are.

Accommodating urbanization and urban growth efficiently and equitably

Urbanization usually offers economic prosperity — but often also brings increasingly unequal incomes. It tends to create environmental damage — yet can also bring environmental benefits. Attempts to curb it generally amplify rather than ameliorate its problems. The task is clear. Urbanizing countries must find better ways to accommodate urban growth, by planning proactively, and by getting key urban markets to function more efficiently, equitably and sustainably

It is an undeniable fact that higher levels of income are generally associated with higher levels of urbanization (see Figure 4). This relationship derives in large part from the benefits that urbanization brings to countries diversifying out of agriculture. The economic benefits of urbanization are often referred to as returns to agglomeration, and include benefits related to sharing (for example, of larger and more efficient facilities), matching (for example, among a greater variety of suppliers and users) and learning (for example, through easier communication).

Given the opportunity, people and enterprises will tend to congregate in cities as agriculture declines in relative importance. In a simple account of industrial urbanization, manufacturing creates the opportunity for concentrating production spatially, returns to scale create the incentive for individual manufacturers to concentrate their production, and transport costs create the incentive for producers to locate near large markets. The costs of congestion, which also take a wide variety of forms, limit the benefits of increasing city size, and to a lesser degree the benefits of urbanization. Even in a market economy, the government clearly has a role to play keeping the peace, administering justice, collecting taxes and ensuring that there is the urban infrastructure and regulation needed to secure the returns to agglomeration and to avoid excessive congestion costs.

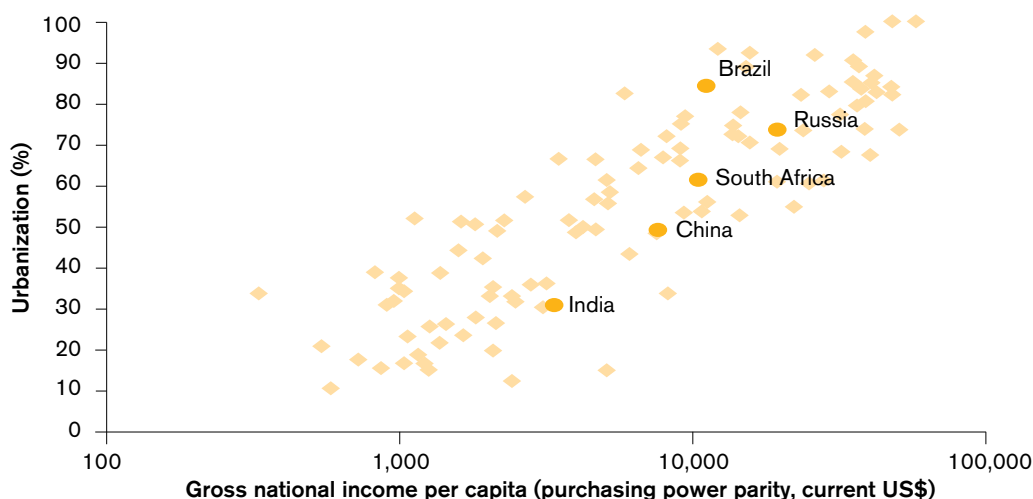
Urbanization's relations to social development and environmental change are more ambiguous and contingent, but are also generally positive. Urbanization often takes place during times of transition and dislocation, when populations are increasing rapidly, new social distinctions are emerging, and ambient pollution and resource degradation are growing. As such, urbanization is often statistically correlated with increasingly unequal income distributions and new forms of environmental degradation. But somewhat paradoxically, urbanization can potentially provide many social and environmental benefits. And attempts to curb urbanization can amplify social and environmental problems.

For the most part, people migrate to urban areas because they rightly perceive they will benefit economically. Some of the same advantages of scale and proximity that benefit economic growth also facilitate access to poverty-reducing services and amenities. Not all migrants succeed in making themselves better off, and not all migrants intend to stay in urban locations. Having low-income people concentrated in urban locations can threaten the interests of urban elites, but efforts to reduce urbanization by keeping rural-urban migrants from gaining access to urban land, housing and services are often not only harmful for aspiring migrants, but increase existing intra-urban inequalities. Thus, for example, registration systems, strict housing standards or the eviction of people in informal settlements, tend to make life more difficult for poor urban residents and rural migrants alike.

Somewhat similarly, many environmentally damaging activities and enterprises tend to concentrate in cities. But, with some exceptions, simply excluding them from cities is likely to be counterproductive. Dispersing polluting and resource intensive enterprises across the rural landscape may reduce the immediate burden, and hide the damage, but it is not an alternative to clean, efficient and environmentally adaptive production. Demographic concentration per se, offers many environmental advantages both in terms of conservation and reduced emissions. For example, affluent city dwellers have large ecological footprints, but their suburban counterparts typically have even larger footprints. More generally, given the right investments and regulations, urban industrial and commercial development can typically be made less resource intensive and less polluting than sprawling rural development.

This review of the different paths taken by the BRICS reveals key positive lessons from their success, but also draws attention to the pitfalls they have encountered. The challenge for other developing countries that are on the cusp of their own urban transition will be to plan for both advantages and challenges. Improving the urbanization process remains key to good economic, social and even environmental development.

Figure 4: Levels of urbanization plotted against gross national income per capita in 2010 (on a logarithmic scale)



Countries with populations of less than 5 million are not shown. Source: The World Bank's World Development Indicators – <http://data.worldbank.org/data-catalog/world-development-indicators>. Accessed November 19, 2012.

Further reading

This discussion paper draws on five reports and two articles (one still in preparation), all of which are part of an IIED-UNFPA series on urbanization and emerging population issues, and were prepared for a collaborative project reviewing Urbanization in the BRICS (see page 2). Readers are invited to consult these publications for further details and references:

Brazil

Martine, G., McGranahan, G. 2010. *Brazil's early urban transition: What can it teach urbanizing countries?* Urbanization and Emerging Population Issues 4. IIED and UNFPA, London and New York.

<http://pubs.iied.org/10585IIED>

A subsequent article updated some of the analysis in the case study, drawing on more recent census data, and focusing especially on the social dimensions: Martine, G., McGranahan, G. 2012. The legacy of inequality and negligence in Brazil's unfinished urban transition: Lessons for other developing regions. *International Journal of Urban Sustainable Development*.

[www.tandfonline.com/doi/full/10.1080/](http://www.tandfonline.com/doi/full/10.1080/19463138.2012.735236)

[19463138.2012.735236](http://www.tandfonline.com/doi/full/10.1080/19463138.2012.735236)

Russia

Becker, C.M., Mendelsohn, S.J., Benderskaya, K. 2012. *Russian urbanization in the soviet and post-soviet eras*. Urbanization and Emerging Population Issues 9. IIED and UNFPA, London and New York.

<http://pubs.iied.org/10613IIED>

India

Kundu, A. 2011. *Trends and processes of urbanization in India*. Urbanization and Emerging Population Issues 6. IIED and UNFPA, London and New York.

<http://pubs.iied.org/10597IIED>

China

Yeh, A.G.O., Xu, J., Liu, K. 2011. *China's post-reform urbanization: Retrospect, policies and trends*. Urbanization and Emerging Population Issues 5. IIED and UNFPA, London and New York.

<http://pubs.iied.org/10593IIED>

A study still in preparation is focusing on how China's approach to urban development has at once underpinned China's economic success, and constrained its attempts to achieve more socially and environmentally harmonious development.

South Africa

Turok, I. 2012. *Urbanization and development in South Africa: Economic imperatives, spatial distortions and strategic responses*. Urbanization and Emerging Population Issues 8. IIED and UNFPA, London and New York.

<http://pubs.iied.org/10621IIED>



Human Settlements

DISCUSSION PAPER : DECEMBER 2012

The entire developing world is in the midst of a global urban transition that, together with economic globalisation, is shifting the economic loci of development. Economic power is drifting southward, most notably towards the large and emerging economies of the 'BRICS': Brazil, Russia, India, China and South Africa. The BRICS' integration into the world economy has been well-scrutinised but the specific role urbanization and urban growth processes played in these countries' recent economic and demographic transformation is still understudied and undervalued.

Examining these diverse urban transitions yields some powerful lessons for other developing countries. This paper discusses the individual experiences of each BRICS country, drawing out issues other countries may face.

The International Institute for Environment and Development is one of the world's top policy research organisations working in the field of sustainable development. With its broad based network of partners, IIED is helping to tackle the biggest issues of our times — from climate change and cities to the pressures on natural resources and the forces shaping global markets.

This discussion paper was produced by IIED's Human Settlements Group. The Human Settlements Group works to reduce poverty and improve health and housing conditions in the urban centres of Africa, Asia and Latin America. It seeks to combine this with promoting good governance and more ecologically sustainable patterns of urban development and rural-urban linkages.

This research was part-funded by UNFPA and part-funded by UK aid from the UK Government. The views expressed are the author's own and do not necessarily reflect those of the UK Government or UNFPA.

<http://pubs.iied.org/10622IIED>

ISBN 978-1-84369-898-2

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