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10 THINGS TO KNOW ABOUT THE IMPACTS OF URBANISATION

ODI is an independent, global think tank, working for a sustainable and peaceful world in which every person thrives.

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Most cities are growing quickly, with the majority of growth projected to be in low-income countries in Africa and Asia. By 2050, 6.5 billion people will live in urban centres – two-thirds of the projected world population.[1]

Urban living offers many benefits to residents including more job opportunities and higher incomes, and to businesses including lower input costs, greater collaboration and innovation opportunities.[2] But urbanisation – especially if it is rapid – also brings challenges.

City governments and policy-makers must plan for and manage the impacts of urbanisation on poverty, inequality, employment, services, transport, climate change and politics. Only by addressing these interconnected issues, and both the technical and political barriers to change, can they ensure a good quality of life for millions of urban dwellers.

01

THE NUMBER OF URBAN POOR IS ON THE RISE

Limited access to land in cities, and the high cost of food, water, electricity, transport, housing, education and healthcare all contribute to urban poverty.[3] Approximately 880 million people lived in city slums in 2014 – a number that could rise to 3 billion by 2050.[4, 5]
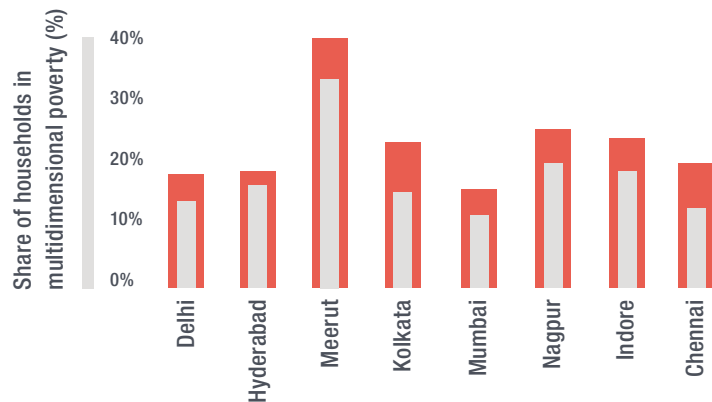
To address urban poverty, it is important to understand its scale. But current data collection methods are insufficient; they better apply to rural contexts and may fail to capture slum populations or aspects of urban poverty.[6] For example, by changing just some indicators in multi-dimensional poverty indices to account better for urban issues, poverty rates appear higher than original estimates. In the case of Delhi, this difference amounts to over 1 million more people living in poverty.

To realise the promise of the Sustainable Development Goals to 'leave no one behind', governments and international organisations need to improve the way they identify and support the urban poor.[7]

Urban poverty is likely to be under-estimated by conventional methods[8]

Multidimensional poverty index, 2005–2006

○ Original ● Modified

Share of households in multidimensional poverty (%) — y-axis: 0%, 10%, 20%, 30%, 40%

Cities: Delhi, Hyderabad, Meerut, Kolkata, Mumbai, Nagpur, Indore, Chennai

02

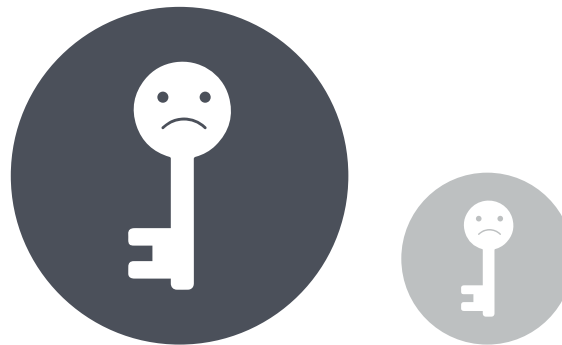## MORE PEOPLE ARE LIVING IN INSECURE, RENTED HOUSING

As urbanisation increases, so does the number of renters – especially in African cities. The share of renters who feel insecure about losing their property is twice the share of homeowners (39% vs 18%).[9] Renters are most worried about eviction by the property owner amid rising land prices, but lack of money, family disagreements and government seizures also play a part.

This perception can change the way urban residents plan for the future.[10] Insecure housing is a barrier to accessing jobs, financial credit and public services – all of which can significantly improve quality of life.[11]

City governments should improve urban land management to make sure that formal sector housing and land markets provide adequate supply. This should be coupled with regulation that prevents rental evictions and formal rental contracts that offer tenants legal protection.[12]

Renters are twice as insecure about losing their property than owners

● Renters   ● Owners

03
CITIES WILL NEED 331 MILLION NEW LOW-COST HOMES BY 2025

The Sustainable Development Goals state that, by 2030, everyone should have access to affordable housing and basic services. To achieve this, the current trends on slum population growth need to be reversed – especially in sub-Saharan Africa – and governments must provide affordable housing.[13]

Instead, many governments focus on 'slum upgrading' (as in Rio de Janeiro in the 1990s),[14] which involves limited improvements to housing and provision of very basic infrastructure and services, often in small patches.[15] But in cities where most inhabitants live in slums, large-scale upgrading programmes are not feasible.[16]

This is not enough. City governments in poorer countries must prioritise affordable homes for low-income households.[17] And to facilitate this, governments should scale up public housing programmes and leverage limited public funds to attract private housing finance.[18]

The affordable housing gap for urban areas is increasing[19]

Households in emerging economies without affordable housing

● 2012 ● 2025

232,000,000

331,000,000

04

THE NUMBER OF PEOPLE WITHOUT BASIC WATER AND SANITATION IS INCREASING

Water and sanitation services are struggling to keep pace with increasing urban populations.[20] In 2015, there were 667 million urban residents without 'at least basic' provision of sanitation[21] – an increase of over 100 million people since 2000. In the same period, the number of urban residents without 'at least basic' water increased by 50 million to over 181 million.[22] Reversing this trend is critical to achieving the Sustainable Development Goals and ensuring healthy cities.
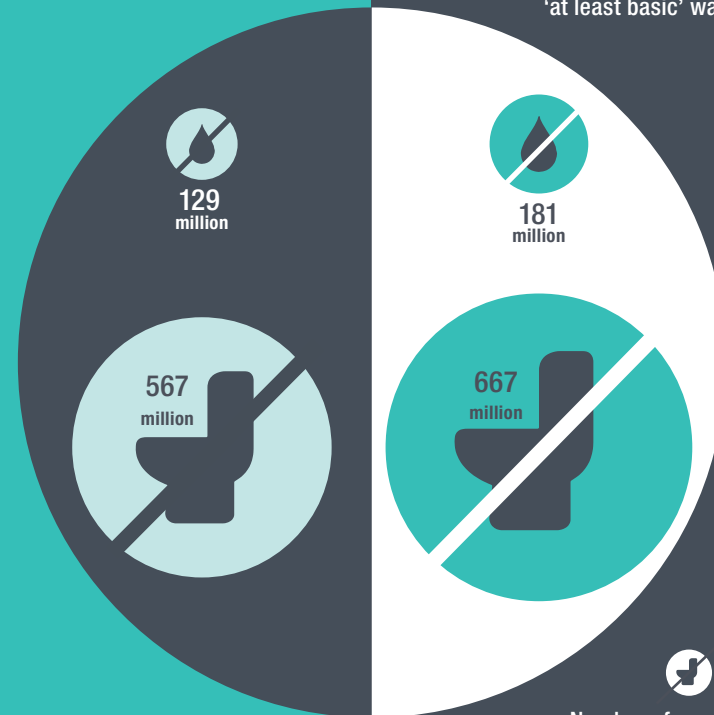
There is no simple solution but there are innovative approaches that are delivering results. Sanitation systems that recover nutrients and generate energy from human waste can be profitable. And new methods of regulation and monitoring[23] can incentivise water and sanitation providers to serve low-income residents. The key to success will be developing and tailoring scalable approaches to the needs of individual cities so they are integrated with wider city systems.

● 2000   ● 2015

Number of people without 'at least basic' water provision

129 million

181 million

567 million

667 million

Number of people without 'at least basic' sanitation provision

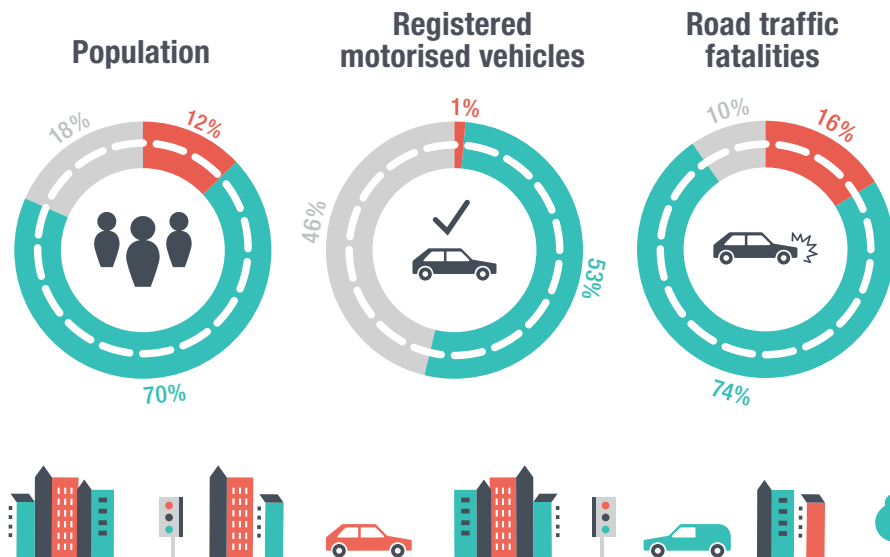# 05 GROWING CITIES LEAD TO MORE CONGESTION AND TRAFFIC FATALITIES

As a city's population grows and boundaries sprawl, high car usage, poor road networks and limited public transport increase congestion. In Bangkok, for example, the average downtown weekday traffic speed is 10 km/hour.[24]

Congestion affects road safety and inequality. The wealthy can afford the safest vehicles, leaving poorer citizens to face dangerous commutes. Each year, traffic collisions kill an estimated 1.25 million people and injure 50 million more, with huge healthcare costs.[25] Of these fatalities, 90% are in poorer countries.[26] Traffic and growing commute times also reduce job productivity.

This is a difficult political problem: building faster, wider roads wins votes – unlike speed limits or better pavements. But the many benefits of urbanisation will be lost unless city governments invest in public transport and make mobility safer, affordable and more efficient for everyone.

Low- and middle-income countries have fewer motor vehicles, yet more traffic fatalities[27]

● Low-income ● Middle-income ● High-income

Population

18%
12%
70%

Registered motorised vehicles

1%
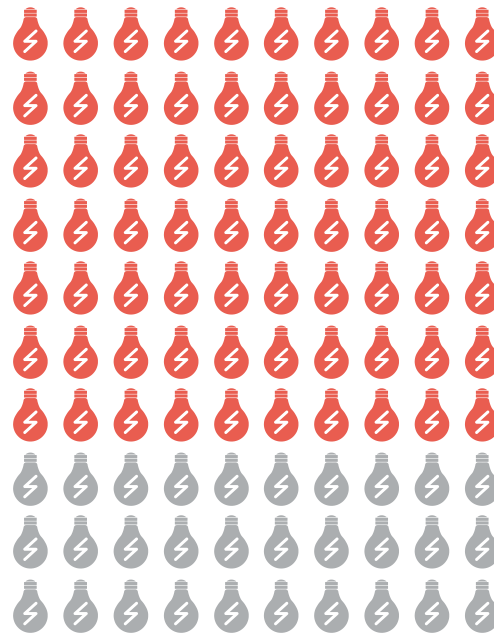46%
53%

Road traffic fatalities

10%
16%
74%

06

IN MANY CITIES, ENERGY DEMAND WILL RISE FASTER THAN POPULATION GROWTH

In 2014, cities accounted for 70% of worldwide energy consumption, largely powered by fossil fuels.[28] As urban jobs, housing and incomes increase, energy demand in many cities is predicted to outstrip population growth.[29]

If this trend continues, just fewer than 500 cities will produce 50% of the world's greenhouse gas emissions by 2030.[30] This is at odds with global climate change goals. And, for low-income communities, fossil fuel dependence is likely to threaten energy security and the quality of energy access.[31]

City governments can mitigate these issues by investing in renewable energy power generation and energy efficiency.[32] Systems such as distributed solar photovoltaics can balance intermittent energy supplies, enhance energy security and supply urban neighbourhoods outside the grid.[33] Regulating infrastructure and creating energy efficiency strategies could offer significant savings.[34] These approaches will enable cities to meet energy demand and climate change targets, and tackle energy poverty.

70%
of worldwide energy consumption is in cities

07
POOR AIR QUALITY IN CITIES POSES SERIOUS HEALTH RISKS

In 2018, only 3% of cities in low- and middle-income countries met the World Health Organization's air quality guidelines.[35] Outdoor air pollution is set to be the leading environmental cause of mortality.[36]
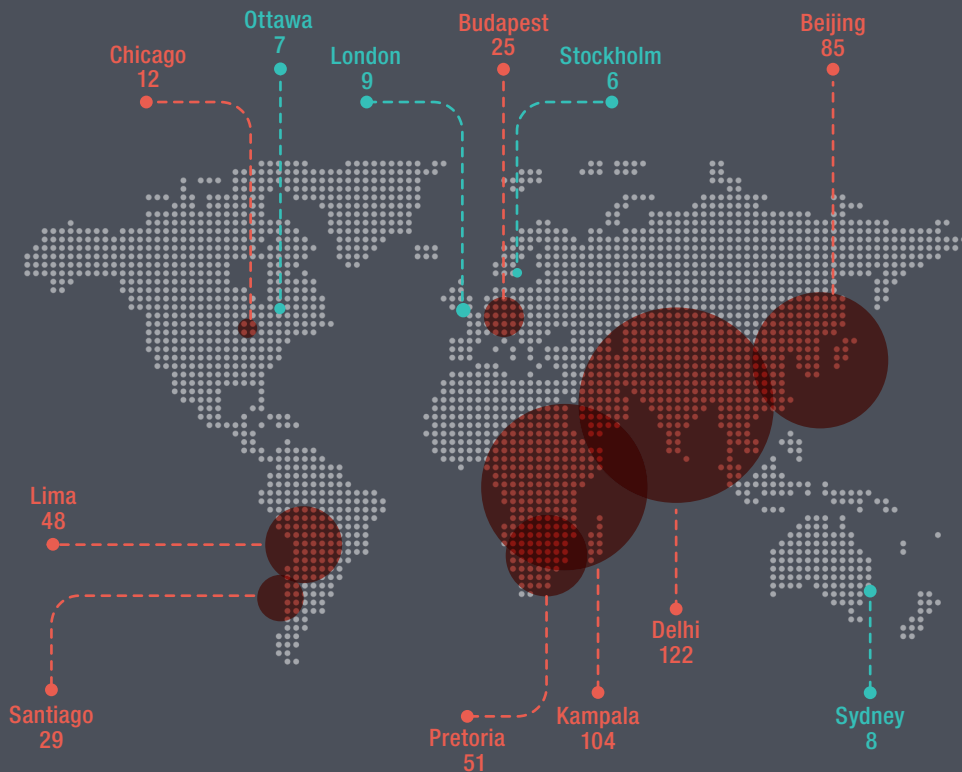
As urban populations grow, so does the use of petrol and diesel vehicles and polluting household fuels, and manufacturing, power generation and waste burning.[37] These activities release pollutants that contribute to heart attacks, lung cancer and asthma[38] as well as to greenhouse gas emissions, which exacerbate global warming.[39]

Tackling urban air pollution can have health and climate change benefits. Technical solutions include prioritising clean household, industrial and vehicle fuels, investing in public transport and monitoring air quality levels.[40] City officials also need to take a more integrated approach to policy and regulation.

Urban air pollution levels (2016)[41, 42]
Particulate Matter 2.5 – (annual mean µg/m³)
- ● Above 10 µg/m³   ● Under 10 µg/m³

Chicago
12

Ottawa
7

London
9

Budapest
25

Stockholm
6

Beijing
85

Lima
48

Santiago
29

Pretoria
51

Kampala
104

Delhi
122

Sydney
8

08 CITIES NEED TO CREATE BETTER JOBS

Cities are 'hubs' for skills, knowledge, innovation, businesses, and jobs. Between 2014 and 2016, 300 large cities – containing only 22% of world population – drove 67% of world GDP growth.[43] Smaller cities also deliver significant economic benefits. People in Bien Hoa, Porto Alegre and Arusha have incomes far higher than their respective countries' average national per capita GDP.[44]

But in many 'secondary' cities in poor countries, especially in Africa, businesses face severe obstacles: congestion, disrupted electricity, fragmented markets and lack of finance.[45] This raises costs and limits creation of 'good' jobs, leaving most people in low-productivity, low-pay work in informal services.

National and city governments should focus on smaller cities. Improving energy supply and transport – for people and goods, within and between cities – would lower costs and expand markets for local businesses. More skills training for workers would raise productivity.[46]

Capitalise on growth in secondary cities by

1 Improving **access to finance**

2 Improving **local business skills**

3 Improving **infrastructure**

4 Improving movement of **people and goods**

09

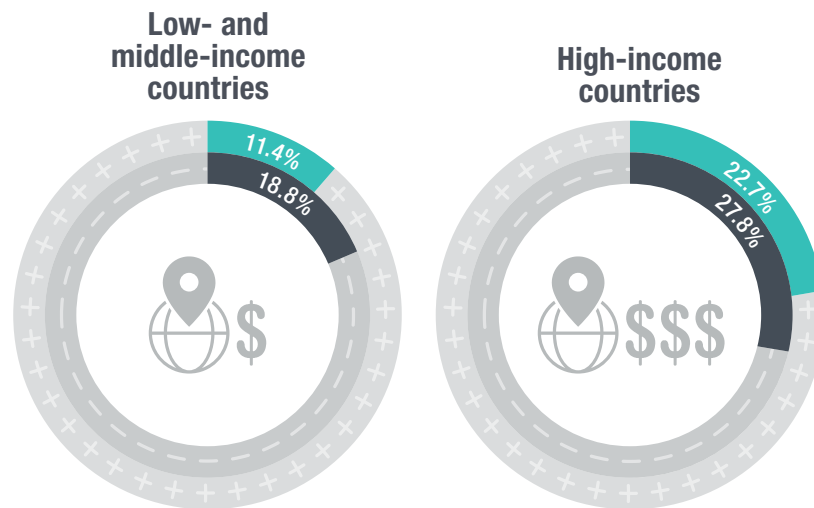## CITY GOVERNMENTS IN POOR COUNTRIES REMAIN UNDER-RESOURCED

More than 80% of world gross domestic product is generated in cities[47] but city budgets do not reflect this. In poorer countries, city government taxes average only 2.3% of GDP and average expenditure is only 5.1% of GDP – each about one-third the level in richer countries.[48]

Some cities do not have the right to levy taxes; others don't have the capacity or local political support. And the situation also reflects national governments' under-investment in cities. City governments are expected to do more with less. But without sufficient revenues, they cannot finance the infrastructure and services their growing populations need.

National governments should make sure that cities have appropriate revenue-raising powers and supplement this with increased grants out of national taxes. City governments should improve local tax collection and show their residents that taxes are being spent effectively on local services.

The sub-national share of taxes and public spending is lower in poorer countries than in richer ones

● Taxes ● Expenditures

Low- and middle-income countries

11.4%
18.8%

High-income countries

22.7%
27.8%

10 THE CHALLENGES OF URBANISATION ARE POLITICAL, NOT JUST TECHNICAL

City master plans set out a vision for what an urban centre will look like in future. On the one hand, they make sense: urban services and resources are linked; a city needs to be understood as a system. For instance, how water is supplied depends on land management and whether housing is dense or sprawling.

Yet while master plans offer technical solutions, decisions about how a city invests its resources and whose welfare is put first are made by those with economic and political power. Turning plans into action relies on negotiation and compromises. For example, improving urban sanitation might require investment in sewers but powerful interests may use funds for more popular infrastructure such as roads.

When city governments – and those who seek to support them – develop technical solutions to service growing urban centres, they need to look beyond master plans to who holds the power and give voice to less powerful groups.

National-level political actors

City-level political actors

THE CITY
AS A SYSTEM

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