Building the African cities of the future

Understanding how to manage the growth of cities is becoming an increasingly important issue both for policymakers and academics.

There will be 2.7 billion more people living in cities by 2050 – the equivalent of an extra 1.4 million people every week – mostly in emerging and developing economies, according to Professor Tony Venables of the IGC and Oxford University.

“For Africa alone that means two London’s need to be built every year for the next 30 years,” he told a framework session on cities at the IGC Growth Week 2014. “The scale of the challenge brings it home to you.” He pointed out that Africa was only one-third of the way through the urbanisation process, which created huge opportunities for research to provide answers to key issues.

Cities are wonderful places to live and boast high levels of productivity, both of which attract people. The key challenge is to ensure future cities in Africa are productive and liveable – something which is not wholly true today. Professor Venables set out a framework for looking at cities at one of two sessions to focus on the issue on the opening day of the IGC conference in London.

He said a city was based on three core elements – residential space, business space, and infrastructure. For cities to function the challenges raised by each of these has to be addressed.

Housing demand

Ensuring cities have high quality housing requires five basic conditions: decent property rights; a financial system; local infrastructure such as roads and sanitation; targeted building regulations and a robust construction sector. “This is a whole set of necessary conditions but if any one is missing you see that mass formal housing is simply not there,” he said.

Professor Wahiduddin Mahmud of the University of Dhaka, who is IGC Country Advisor for Bangladesh, said there was a subtle but important difference between indices of cities with strong economic growth and measures of cities as liveable places.

“For finding ways to solve Dhaka’s problems is a test case for the IGC,” he said, pointing to its strong economic growth and its habitual position at the bottom of liveability league tables. He said Dhaka’s place as one of the largest cities in the world population raised the question of whether low-income countries
population raised the question of whether low-income countries could afford mega-cities.

As cities grow and become successful, they attract more people putting pressure on land prices and forcing workers to live further away from the centre and commute for longer distances. This is a particular problem in Africa where development has tended to see cities sprawl out rather than being concentrated on an urban centre.

As Africa’s population grows, it will be important to ensure that new, secondary or satellite cities emerge and enjoy the benefits of density as cities in Asia do and which African cities do not currently have, Professor Venables said.

Urbanisation without industrialisation

There are huge rewards for ensuring a city can sustain jobs and production. Research has shown that doubling the size of a city can boost productivity by 3-8%. “Productivity is not a straight line – it increases with city size,” he said. “So if you do the transport improvements that will increase the city size you raise everyone’s productivity.”

One challenge is that in the early years of the development of a city, it may not yet generate the productivity benefits of agglomeration but will bear the costs of a rising population. This is particularly true in developing economy cities where a majority of people will be employed in sectors that do not generate productivity gains such as government and domestic services.

“If it is then too expensive a city to attract the tradeable sectors, there is a danger of getting stuck in the low level trap,” he said. “We can tell a story of urbanisation without industrialisation.”

Climate challenge

A further challenge for city policymakers is climate change. Rising temperatures will lead to a decline in the land available for agriculture with an impact on rural areas that will in turn lead to greater migration into cities.

Professor Adam Storeygard of Tufts University looked at the impact of climate change in terms of a decline in moisture – a proxy for climate change – and mapped that against 366 provincial districts in Africa over six decades up to 2010.

He found the impact depended on whether the city had a robust export manufacturing base or was still agriculture-based. In cities with an established manufacturing base, incomes tended to rise. These cities were equipped to deal with a migration of workers from rural areas where agriculture became harder to make a success as moisture levels fell.

“If the city district has a tradable manufacturing sector, decreases in moisture are going to lead to an increase in population and in total city income,” he told a research session. The urban manufacturing sector is competing with the agricultural centre for labour.

As agricultural productivity declined and wages stagnated, more workers headed to the cities. Storeygard’s conclusion was that
workers headed to the cities. Storeygard’s conclusion was there needed to be a greater focus on adaptation to climate change in rural areas and initiatives to improve management practices in cities.

Ashish Vachhani, director of infrastructure at the Department of Economic Affairs in India’s Ministry of Finance, said since the urbanisation of Africa was now broadly taken as a fact, the issue was how to handle the impacts.

“We have been witnessing an enduring global debate on climate change on who should be bearing the costs,” he said. “Policymakers cannot wait for this debate but would like to consider policy options, analyse costs and initiate action wherever feasible.”

Research umbrella

Population density will clearly be a major issue in terms of both ensuring future liveability in cities and helping to manage climate change. Professor Nava Ashraf of Harvard University said urban expansion contained both positive and negative consequences. Clearly the concentration of many people in a small space opened up the possibility of contagion. “We think of contagion as a bad thing but contagion can be a fantastic thing,” she said. Her research with Professor Edward Glaeser of Harvard is called Daemons of Density, building on the ancient Greek word for “godlike forces”, and is based on years of research in the Zambian capital Lusaka.

The challenge for policymakers, she said, was to enable positive contagion such as the exchange of ideas and skills, while reducing the risk of bad contagion such as disease. Ashraf and Glaeser are looking to identify areas of high policy relevance that could be incorporated into a national urban plan over the coming 18 months.

“We would like to create this umbrella where all researchers working in the city can learn from each other – just as much density helps spread ideas within a city – and allow the spread of ideas to be as fruitful as possible.”

Looking ahead, Professor Venables said it was important IGC research saw cities as whole units and worked to understand what had gone wrong when there was a failure to design a coherent policy. “There is a danger of fragmented thinking on both the research side and the policymaking side,” he said. “You have to build cities where people want to go.”

Concluding the session, Claudio Frischtak, IGC Country Director for Mozambique, said: “The interesting thing about cities is that there is a lot of experimentation going on worldwide. It is a great time for us at the IGC to jump in to create a solution.”