# Working Paper



# **BETTER URBAN GROWTH IN TANZANIA** A Preliminary Exploration of the Opportunities and Challenges

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# Overview

Tanzania's urban population is projected to grow from less than 15 million people in 2012 to more than 60 million people by mid-century. This rapid urban population growth offers the potential for structural transformation, as well as scale and agglomeration economies that can accelerate human and economic development.

Planning and investment decisions made today will determine the performance of Tanzania's cities for decades to come. National policy-makers in Tanzania have a critical role to play in providing adequate housing, services, infrastructure and jobs for current and future urban residents.

This report provides an overview of the institutional, policy and financing landscape shaping Tanzania's urban areas, and summarises some of the social, economic and environmental costs associated with current trends. While recognising the historical and ongoing constraints on the Tanzania's urban development path, this report also highlights opportunities for the Government of Tanzania to drive a transition to more inclusive productive, inclusive and sustainable towns and cities.

This report recommends the preparation of an integrated economic, spatial and tenure plan to manage urban growth at the country level. It underscores the importance of prioritising infrastructure investments that can help to address socioeconomic needs or bottlenecks, and could effectively anchor compact and connected spatial form. And it emphasises the importance of aligning and enabling the activities of municipal authorities, grassroots organisations, private enterprises and research institutes behind a shared vision of urban development.



Photo credit: Justin Raycraft/Flickr

### About this working paper

This working paper was prepared for the Coalition for Urban Transitions, a special initiative of the New Climate Economy, which is a major international initiative to support decision makers to meet the objective of unlocking the power of cities for enhanced national economic, social, and environmental performance, including reducing the risk of climate change.

This report was led by the Coalition for Urban Transitions (NCE Cities) in partnership with the Economic and Social Research Foundation (ESRF), the African Centre for Cities (ACC), the International Growth Centre (IGC), the Overseas Development Institute (ODI) and a range of other NCE Cities partners. Research inputs and reviews were also provided by Anton Cartwright (ACC), Ammon Mbelle (University of Dar es Salaam), Mohamed Halfani (UN-Habitat), Xiao Zhao (NCE Cities), Priya Manwaring (IGC), Michael Blake (IGC), Joshua Chipman (IGC), Christina Wix Wagner (IGC), Astrid Haas (IGC), Clare Cummings (ODI), Tim Kelsall (ODI), Neil Balchin (ODI) and Dan Dowling (ICED, PwC), among others.

The report is by no means exhaustive and should be treated as a preliminary exploration of the opportunities and challenges facing Tanzania as it seeks to unlock the potential of rapid urban growth to support enhanced economic, social, and environmental performance.

The research was conducted as part of ongoing support to the Tanzania Planning Commission, Ministry of Finance and Planning, on the Five Year Development Plan (FYDP) II implementation strategy. The paper focuses on one of the five core pillars of the FYDP II implementation strategy on urbanisation.

This proposed work is consistent with support from the Supporting Economic Transformation (SET) programme to Tanzania's FYDP II, and follows the meeting and agreements reached between NCE, SET, ESRF and the Ministry of Finance and Planning on 27 October 2016 in Dar es Salaam, Tanzania. It follows a FYDP II Implementation Strategy workshop between the Planning Commission, NCE, SET, ESRF and others on 20 February 2017 in Dar es Salaam, Tanzania. This material has been funded by UK aid from the UK government; however the views expressed do not necessarily reflect the UK government's official policies.

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# **COALITION FOR URBAN TRANSITIONS**

A New Climate Economy Special Initiative

List of acronyms	
AMCOW	African Ministers' Council on Water
BRT	bus rapid transit
DARCOBOA	Dar es Salaam Association of Commuter Owners
DART	Dar es Salaam Rapid Transport
DAWASA	Dar es Salaam Water and Sewerage Authority
DAWASCO	Dar es Salaam Water and Sewerage Corporation
DUTA	Dar es Salaam Urban Transport Authority
EWURA	Energy and Water Utilities Regulatory Authority
FYDP	Five Year Development Plan
GDP	Gross Domestic Product
GVA	Gross Value Added
IFC	International Finance Corporation
LGA	local government authority
LRT	light rail train
MEM	Ministry of Energy and Minerals
MLHHSD	Ministry of Lands, Housing and Human Settlements Development
MoF&P	Ministry of Finance and Planning
MoHSW	Ministry of Health and Social Welfare
MoT	Ministry of Transport
MoWI	Ministry of Water and Irrigation
NBS	National Bureau of Statistics
NCE	The New Climate Economy
NUP	National Urban Policy
NP WSSA	National Project Water Supply and Sanitation Authority
OPIC	Overseas Private Investment Corporation
PO-RALG	President's Office—Regional Administration and Local Government
PMO-RALG	Prime Minister's Office—Regional Administration and Local Government
SET	Supporting Economic Transformation programme
SEZ	special economic zone
SME	small and medium-sized enterprises
SOE	state-owned enterprise
SPP	small power projects
SUMATRA	Surface and Marine Transport Regulatory Authority
TANESCO	Tanzania Electricity Supply Company
TANROADS	Tanzania National Roads Agency
WSSA	Water Supply and Sanitation Authority

# **Executive summary**

Tanzania is undergoing an urban transformation. By mid-century, the country's urban population is projected to quintuple, rising from less than 15 million people in 2012 to more than 60 million people.<sup>1</sup> Tanzania will only be able to achieve its development ambitions if it can provide adequate housing, transport, energy, water, and sanitation services for this growing urban population, as well as access to decent jobs and essential services. Currently, towns and cities across the country lack the essential infrastructure necessary to meet people's basic needs, let alone to keep pace with population growth.

National policy-makers in Tanzania—working hand-in-hand with municipal governments and other urban actors—will have a critical role to play in realising the urban dividend. In all contexts, cities are more likely to be successful where national governments recognise their economic and social importance. However, the role of national economic decision-makers is particularly central in Africa where well-resourced municipal governments with a good level of capacity are rare.

This report lays out how the Government of Tanzania can shape the transition to a more inclusive, sustainable urban development pathway. In partnership with other public, private and civil society actors, national governments can:

- establish enabling policy frameworks at the national level;
- foster the development of accountable and transparent institutions;
- facilitate effective and inclusive land use planning;
- mobilise the financial resources needed to crowd in funding for core urban infrastructure; and
- empower city governments, businesses, and civil society with the information, resources, and capacities to proactively plan for and invest in better urban development.

After outlining key urban trends in Tanzania, this report introduces Tanzania's urban challenges and opportunities, comparing its urban performance to date with countries at similar stages of development. This analysis informs an appraisal of key policy interventions and financing mechanisms that could facilitate an urban transition. The scope to deploy these instruments is then contextualised with an overview of the institutional, policy and financing landscape of urban Tanzania. The report brings all of this information together in a preliminary 'action plan', identifying key opportunities for the central government if it is to realise the Sustainable Development Goals, Paris Agreement, and New Urban Agenda, agreements to which it is a signatory.

The emerging priority is the preparation of a national, integrated economic and spatial plan to manage urban growth at the country level. This plan needs to recognise the limited resource envelope in Tanzania, and prioritise infrastructure investments that could help to address socioeconomic needs or bottlenecks, and could effectively anchor compact and connected spatial form. For example, early investment in public transport and infrastructure for non-motorised options can reduce demand for private vehicles and encourage higher-density housing. The development, implementation and monitoring of an integrated spatial and economic plan would be facilitated through the collection and publication of land use data in a convenient and modifiable form. This should include evidence collected by public agencies, research institutes, grassroots organisations, and satellite imagery.

Delivering better urban development in Tanzania will only be possible if the central government can effectively harness the capacities of sub-national governments, civil society and the private sector. Municipal authorities' responsibilities include street cleaning, local planning, and local financial management, as well as public services provided by central and local governments working concurrently: for example, primary education, water supply, sewerage, local health services, and local roads. Training of individual local staff will be important, but it municipal authorities also need support to improve procedures and systems such as project planning, budgeting, and revenue collection. Introducing or expanding mechanisms for community participation and oversight can improve the efficacy of urban planning and infrastructure investment, as well as building public support for government. The central government can also engage private sector partners by developing a pipeline of bankable projects, such as mass transit and electricity/water utilities. Leveraging private investment may require strategic use of public finance or development assistance to reduce risk.

The draft recommendations presented in this report offer a starting point for detailed consultations with the Tanzanian Ministry of Finance and Planning. These include the development of a national urban development strategy, a clear financing plan linked to specific infrastructure priorities, an ambitious capacity development programme for local governments, and a land use plan that effectively links spatial and tenure reform. We hope that these will be of value in implementing the Five Year Development Plan, titled *Nurturing Industrialization for Economic Transformation and Human Development*.<sup>2</sup>

That is not to say that the path ahead will be easy. Tanzania faces fundamental structural, governance, and fiscal deficits that have constrained its development for decades. Technological and institutional innovations may partially redress these gaps, but delivering a low-carbon, inclusive, and prosperous network of cities will require a level of investment and coordination that few African states have achieved. Inevitably, there will also be trade-offs in terms of which investments to prioritise, as well as value judgements over which outcomes are most desirable. This is an immense challenge—but it is also an opportunity that Tanzania cannot afford to miss.

# 1. Introduction: Unlocking Tanzania's urban opportunity

Tanzania is undergoing an urban transformation. By mid-century, the country's urban population is projected to quintuple, rising from less than 15 million people in 2012 to more than 60 million people.<sup>3</sup> Tanzania will only be able to achieve its development ambitions if it can provide adequate housing, transport, energy, water, and sanitation services for this growing urban population, as well as access to decent jobs and essential services.

The Government of Tanzania has committed to progress from Least Developed Country status to middle-income status by 2025, as outlined in *Development Vision 2025*.<sup>4</sup> This equates to an increase from US\$879 to US\$1,206 in per capita GDP (in 2017 terms).<sup>5</sup> The national urban strategy was prepared by the Planning Commission to guide social and economic development to 2025. Tanzania has articulated its near-term development goals and proposed pathway in the Five Year Development Plan (FYDP) II, titled "*Nurturing industrialization for economic transformation and human development*.<sup>6</sup> It is also a signatory to a range of global agreements, including the Sustainable Development Goals, Paris Agreement, and New Urban Agenda. Realising these ambitious goals will require managing unprecedented levels of urban population growth to ensure the productivity, efficiency, and inclusivity of Tanzania's cities.

Rapid urbanisation presents a huge opportunity for low-income countries looking to advance to middle-income status:

- 1. The increasing population density associated with urban growth offers significant opportunities to achieve scale economies, whereby population density reduces the per capita costs of providing infrastructure and services. In other words, the more people who can connect to or use a system, the lower the average costs of that system.<sup>7</sup> Therefore, urbanisation reduces the investment needs associated with the provision of core infrastructure, such as power and sanitation.
- 2. Urbanisation is typically a necessary accompaniment to structural transformation, whereby labour moves from agriculture to industry and services. Firms in these sectors require access to labour pools, markets, and business services, so benefit from the higher population concentrations. Structural transformation increases the productivity of labour and diversifies the economic base, thereby increasing incomes and resilience to shocks and stressors.
- 3. The clustering of firms and workers in urban areas can produce agglomeration economies, whereby specialised supply chains, services, and labour develop in an area to serve an industry. This can reduce production costs for firms. The concentration of workers can also enable specialisations and knowledge spillovers that hugely enhance labour productivity and may stimulate innovation.<sup>8</sup>

Between 2014 and 2050, the global urban population is expected to grow by 2.5 billion people. Tanzania will be the ninth largest contributor to this increase, following giants such as India, China, Indonesia, Nigeria, and the Democratic Republic of the Congo.<sup>9</sup> The country's rapid urbanisation offers a unique opportunity to accelerate economic growth. If managed well, Tanzania's fast-growing cities could also drive poverty reduction and enhance social inclusion. In this report, we explore the potential for Tanzania to manage its rapid urban population growth to deliver more prosperous and sustainable cities. This involves:

- **Compact growth:** This involves promoting high yet liveable density with access to basic services and open space, contiguous development, functionally and socially mixed neighbourhoods, and human-scale urban environments through managed expansion and/or urban retrofitting.
- **Connected infrastructure:** This involves enhancing accessibility, mobility and efficiency through investments in infrastructure and technologies that connect people with employment opportunities and essential services, particularly in the transport sector.
- **Coordinated governance:** This involves establishing effective and accountable institutions to coordinate spatial planning and infrastructure investment across the public, private, and civil sectors country wide, and across multiple jurisdictions in a single urban agglomeration.

This model—the so-called 3C model—can significantly increase the economic productivity of cities by facilitating structural transformation, agglomeration economies, and scale economies. It can reduce the environmental footprint of cities by enhancing resource efficiency and reducing excessive loss of natural and agricultural land around the urban periphery. It also has the potential to reduce urban poverty and inequity in access to services and job opportunities, particularly where countries and cities invest in essential infrastructure and inclusive institutions.

Based on current trends, there is a real risk that Tanzania will not realise the economic, social, and environmental potential of its rapid urban growth. Currently, towns and cities across the country lack the essential infrastructure necessary to meet basic human needs, let alone to keep pace with population growth. Low per capita incomes and capacity deficits have contributed to ineffective urban planning and insufficient infrastructure investment, which in turn have led to urban sprawl and the growth of informal settlements: over 70 per cent of Dar es Salaam's population lives in unplanned settlements without adequate housing, safe drinking water, or affordable sanitation.<sup>10</sup> Dependence on private cars is growing, leading to congestion, air pollution, and inefficient energy use. While Tanzania has only 7 cars per 100,000 inhabitants,<sup>11</sup> these cars are concentrated in cities—and the vehicle stock is growing rapidly. The resource inefficiency, health costs, and other negative externalities associated with unmanaged urban growth could act as costly drags on the economy. The Government of Tanzania has recently overseen the construction of some key mass transit projects, most notably the new bus rapid transit (BRT) system in Dar es Salaam. While this remains unaffordable for many low-income households and does not yet service the whole city, investments like these are important to convince the middle class that there are alternatives to cars.<sup>12</sup>

Unfortunately, examples from across the African continent do not offer much in the way of positive urbanisation experience. Fortunately, Tanzania has an opportunity to learn from Africa's negative experiences of urbanisation, as well as from success stories from around the world. Its current development trajectory will not realise the possible "urban dividend", but the country has the opportunity to shift to more productive, sustainable, and inclusive urban growth. This will require more effective urban planning, service and infrastructure delivery, and better coordination of industrial, housing, and transport policies to meet the needs of the future urban population. Achieving this urban transition will require Tanzania to overcome a range of policy and institutional challenges, including:

- exclusionary land use planning processes, regulations, and markets, underpinned by a lack of political incentives to prioritise and enforce pro-poor and inclusive urban development policy and planning;
- insufficient access to capital for infrastructure, attributable in part to low municipal revenue bases and a limited domestic private sector; and
- deficits in urban governance, including poor policy coordination and lack of technical capabilities.

This report lays out how Tanzania can begin to transition to a more inclusive, sustainable urban development pathway. It starts with a review of the existing literature on encouraging well-managed urban growth and the impact that this can have in terms of economic, social, and environmental performance (section 2). The 3C approach is introduced as a framework for managing urban population and economic growth. After outlining the urbanisation trends in Tanzania, the paper outlines Tanzania's urban challenges and opportunities comparing the performance of its urban areas to date with countries at similar stages of development (section 3). This analysis informs an appraisal of key policy interventions and financing mechanisms that could facilitate an urban transition, with a focus on a national urban policy and financing strategy (section 4). The scope to deploy these instruments is then contextualised with an overview of the institutional, policy, and financing landscape of urban Tanzania (section 5). This report brings all of this information together in a preliminary 'action plan', identifying key opportunities and priority areas of action for the central government if it is to realise the Sustainable Development Goals, Paris Agreement, and New Urban Agenda (section 6).

The report should be regarded as a preliminary review of the evidence, intended to demonstrate the value of national urban transition assessments to prospective end users in central government and elsewhere. It offers an agenda for further analysis and action, drawing on the global evidence that the New Climate Economy programme and its cities-oriented special initiative, the Coalition for Urban Transitions, have assembled over the last three years. The work in Tanzania builds on pilot (partial) national urban transition assessments completed in Uganda<sup>13</sup> and Ethiopia,<sup>14</sup> work at the national level in India,<sup>15</sup> and complements forthcoming work on national urban policies in sub-Saharan Africa.<sup>16</sup>

#### Box 1

### An oversight of challenges and priorities facing Tanzanian cities

Tanzania's urban development has been largely informal and unmanaged. In most cases, urban areas have started with village characteristics and evolved to the level of trading centres and townships with no clear spatial plan or vision. These urban areas are typically clustered along key transport routes such as railways and highway roads.

#### **Conceptual development framework**

FYDP II identified urbanisation and urban development as critical to future economic and human development. The FYDP II prioritises the development of plans and strategies for three cities and two towns in the first instance, which will offer lessons for a nation-wide programme. The urban areas where the central government will initially "operationalize urban development and effective ways to manage urbanization management" are Arusha, Dar es Salaam, Dodoma, Mwanza, and Mtwara. These will pilot urban sustainability measures that can help Tanzanian cities to realise global and regional development agendas, such as the Sustainable Development Goals, New Urban Agenda, and the Africa Agenda 2063.

#### **Key challenges**

There are a growing number of Tanzanians living in urban areas, but cities continue to be constrained by deficits of infrastructure and social services, a lack of planning to enable sustained economic development, and limited private sector participation in planning and developing towns. Weak institutional coordination and prevalence of corruption prohibits efficient use and alignment of public funds, often leading to duplication of efforts on the same projects and piecemeal development of cities. This means that residents' basic needs such as sanitation are often unmet.

#### **Key priorities**

The following reforms are proposed: fast-tracking the formulation of a national urban development strategy; the harmonisation of urban-relevant national policies and legislation to promote compact and connected urban forms; streamlining legal and institutional responsibilities to enhance policy coordination and programme management; the alignment of spatial and tenure strategy to promote more effective and inclusive land use management; and investments in anchoring infrastructure such as amenities and public transport.

# 2. Urbanisation and shared prosperity: well-managed urban development

We live in an increasingly urban world. By 2050, two-thirds of the global population will live in urban areas, with nearly 90% of urban population growth occurring in Asia and Africa.<sup>17</sup> This urban population growth comes from multiple sources: natural increases (where the birth rate exceeds the death rate), in-migration as productivity improvements reduce the labour intensity of agricultural activity and urban boundaries extend to encompass formerly rural areas.<sup>18</sup> Whatever the local drivers, the scale and pace of the urban revolution mean that managing urban development is ever more important.

# 2.1 THE CONSEQUENCES OF POORLY MANAGED URBAN GROWTH

Cities have traditionally been viewed as powerhouses of the global economy: an estimated 85% of global GDP was generated in cities in 2015.<sup>19</sup> However, in recent decades, the historical relationship between income and urbanisation has broken down. Low- and middle-income countries are facing an increasing urban population without a commensurate rise in average national per capita incomes (though incomes in urban areas tend to be higher than rural ones). This manifests in continued low levels of GDP per capita for relatively high levels of urbanisation in low-income countries, as shown in Figure 1. Indeed, Figure 2 suggests that the relationship between urbanisation and economic growth has actually broken down for many low-income African countries over the period between 1980 and 2014.

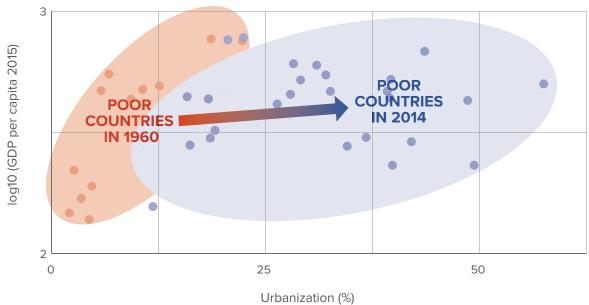
However, looking just at the relationship between GDP per capita and urbanisation can only ever offer a partial picture of the performance of a national urban system. It is therefore important to supplement this with other metrics to unpack the quantity and quality of urban growth in Tanzanian cities such as Arusha, Mbeya, Morogoro, and Tabora.

Firstly, urbanisation in sub-Saharan Africa has not been driven by the "push" from a green revolution in agricultural productivity, nor coupled with the "pull" from industrialisation. In the OECD and East Asia, there has historically been a close relationship between urban population growth and the development of manufacturing and tradable services. This structural transformation has fuelled technological convergence, skill development, and labour specialisation, driving increases in per capita incomes. This does not mean that industrialisation can resolve all development challenges. It is closely associated with environmental pollution, and factory jobs in East Africa carry significant risks of serious injuries and disabilities compared with entrepreneurial labour.<sup>20</sup> However, an industrial boom that leads to more skilled workers and more experienced management can improve labour conditions and wages in the longer term. Yet the link between industrialisation and urbanisation has been absent in much of the global South in recent decades, particularly in resource-exporting countries such as Angola, Gabon, and Nigeria. These exports drive the income growth that fuels urbanisation, but do not deliver the productivity gains and spillovers associated with structural transformation. These "consumption cities" account for 30–50% of urbanisation in the developing world.<sup>21</sup>

Secondly, urbanisation has been poorly managed in many countries and results in significant economic costs. Ineffective spatial planning and underinvestment in urban infrastructure mean that cities do not fully realise possible agglomeration and scale economies. Low per capita incomes and historical underinvestment in public transport infrastructure have led to widespread dependence on walking, cycling, and motorbikes. However, higher-income urban residents in these contexts are increasingly able to afford cars. This is fuelling investment in car-based transport networks, which leads to congestion, higher expenditure on energy, and air pollution.<sup>22</sup> Globally, the total number of registered motorised vehicles worldwide is expected to double in the next 15 years. The modal shift to private vehicles has contributed to frequent road fatalities: an estimated 1.25 million people are killed, and a further 50 million people suffer non-fatal injuries, in accidents across the globe every year.<sup>23</sup> The costs of congestion are also severe, estimated at between 4% and 15% of GDP in Cairo, Jakarta, São Paulo, and Beijing.<sup>24</sup> Dependence on private vehicles also drives urban sprawl: the amount of urban land occupied in sub-Saharan Africa is projected to increase twelvefold over coming decades.<sup>25</sup> The negative economic, social, and environmental consequences of this expansive form of urban development have been well-documented.<sup>26</sup> Notably, urban sprawl increases the cost of providing basic services and trunk infrastructure, including electricity grids, roads, water supply, sewers, and healthcare.<sup>27</sup>

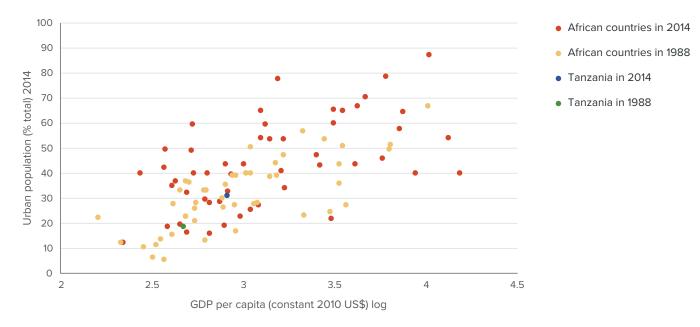


# The relationship between levels of urbanisation (% of total population) and income (GDP per capita) between 1960 and 2014



Source: Beard et al., 2016.

# Figure 2 The relationship between GDP per capita and levels of urbanisation (% of total population) in African countries between 1988 and 2014



Source: WDI, 2016.

It is not only that many towns and cities have failed to realise agglomeration and scale economies: many actually experience negative consequences from density and proximity. Although urbanisation should reduce the per capita costs of providing core infrastructure, many major cities continue to carry significant deficits in energy, water supply, and waste collection. When combined with overcrowded urban dwellings on small plots, this creates significant economic and health costs for the residents. For example, households with access to piped drinking water and sewers will still be at risk of faecal-oral diseases if the surrounding households depend on pit latrines that overflow during floods, or if other residents resort to open defecation.<sup>28</sup>

Two major factors typically constrain urban development in sub-Saharan Africa.

Firstly, both central governments and municipal authorities face severe resource shortfalls, primarily due to inadequate revenue bases. These fiscal deficits have reduced the power of local and national decision-makers to finance and manage large infrastructure projects in ways that balance social and private returns.<sup>29</sup> The need to secure development or private finance means that urban form may be developed through discrete bankable projects, rather than through a coherent urban plan.<sup>30</sup>

Secondly, formal urban governance is often weak, incoherent, or contested. Only 13 of the 54 countries in sub-Saharan Africa have a national urban development strategy.<sup>31</sup> Even fewer have embedded strategic urban planning within national economic development policies and plans. The result is that many countries possess a confusing mix of documents, master plans, development standards, and other planning laws and frameworks.<sup>32</sup> The complexity and fragmentation of urban governance means that decisions about urban policy may be made by canonical or shadow networks within and beyond formal government institutions.<sup>33</sup> These often intersect with traditional forms of governance. Additionally, both central and local governments may be under-resourced in terms of technical staff who can collect data, involve non-state actors, or design and implement bankable projects.<sup>34</sup> This constrains the effective implementation of national urban policies.

# 2.2 REALISING THE URBAN DIVIDEND

A different model of urban development is possible, one that delivers economic prosperity, enhances social inclusion, and ensures environmental sustainability. Tanzania's FYDP II policy framework recognises this by focusing on industrialisation and human development opportunities, including in urban centres (as a core pillar of the implementation strategy). Over the past three years, the New Climate Economy programme has assembled the best available global evidence, which has demonstrated the returns associated with more compact, connected, and coordinated urban growth. This 3C model encompasses:

- **Compact growth:** Promoting liveable density with access to basic services and open space, contiguous development, functionally and socially mixed neighbourhoods, and human-scale urban environments through managed expansion and/or urban retrofitting.
- **Connected infrastructure:** Enhancing accessibility, mobility, and efficiency through investments in infrastructure and technologies that connect people with employment opportunities and essential services.
- **Coordinated governance:** Establishing effective and accountable institutions to coordinate spatial planning and infrastructure investment across the public, private, and civil sectors, and across multiple jurisdictions in a single urban agglomeration.

The global evidence suggests that the 3C model of urban development can boost the economy, attract investment, improve air quality and public health, enhance accessibility and safety, reduce poverty, and avoid the costs of sprawl—all while reducing carbon emissions. Analysis by the New Climate Economy suggests, for example, that low-carbon urban actions that generate more productive, more compact, connected urban development are a US\$17 trillion global economic opportunity up to 2050, based on energy savings alone.<sup>35</sup> Such an approach also has the potential to reduce urban infrastructure capital requirements by more than US\$3 trillion over the next 15 years.<sup>36</sup> The Intergovernmental Panel on Climate Change has also concluded that the largest opportunities for reducing urban greenhouse gas emissions are in contexts where spatial form and infrastructure are not yet locked in, notably small- to medium-sized cities in the global South.<sup>37</sup> This reinforces the importance of focusing on networks of cities in rapidly urbanising low-income countries like Tanzania, where much of the projected urban population growth could be absorbed by secondary cities.

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There is also strong evidence that low-carbon investments in renewable electricity generation, clean cookstoves, and public transport can reduce air pollution and improve road safety,<sup>38</sup> with most of the health benefits enjoyed by the urban poor. Many of these options can also be deployed in a modular fashion that makes for a better (and more flexible) fiscal and institutional fit.<sup>39</sup> Informal urban sprawl often takes place in hazardous parts of the city where formal development has been prohibited, such as low-elevation coastal zones, floodplains, and steep slopes.<sup>40</sup> In other cases, misaligned incentives result in a mismatch between urban plans and implementation realities. Promoting more compact urban forms and inclusive modes of urban planning can therefore reduce exposure to environmental risks, such as storm surges and sea level rise.<sup>41</sup> It can also avoid ecological impacts around the urban periphery, including biodiversity and habitat loss.

This report adopts a framework to understand the performance and potential of the national urban system, which echoes the FYDP II framework on industrialisation and human development. This involves looking at the contribution and relationship between urbanisation and three core outcomes:

- 1. economic performance (with a focus on economic growth and industrialisation);
- 2. social performance (with a focus on poverty and service delivery); and
- 3. environmental performance (with a focus on greenhouse gas emissions and climate resilience).
- 4. In the next section, this report applies this framework to Tanzania.

# 3. Tanzania's urban trends and performance

The previous sections have introduced the 3C model of urban development, and considered the economic, social, and environmental performance of different urban trajectories. In this section, we apply these principles to the specific context of Tanzania, presenting key urban trends, evaluating the performance of the national urban system and benchmarking this with other countries at similar levels of economic development.

The Tanzanian National Bureau of Statistics (NBS) identifies a total of 33 urban local government authorities on the Tanzanian mainland, including town councils, municipal councils, and city councils, as well as sub-municipalities (in Dar es Salaam and Mwanza).<sup>42</sup> The NBS divides these urban areas within the country into four categories, presented in Table 1.

# Table 1The categorisation of Tanzanian cities used by the National Bureau of Statistics (2013)

Urban categories	Description	Cities (population, millions)	Total population (millions)
Primary	<ul><li>The largest city in Tanzania in terms of its population size</li><li>Contains 5 municipal councils</li></ul>	Dar es Salaam (4.4)	4.4
Secondary	<ul> <li>Cities with a population of 0.3 million or more</li> <li>Composed of one municipal council, with the exception of Mwanza which contains two municipal councils</li> </ul>	Mwanza (0.71) Dodoma (0.41) Arusha (0.42) Mbeya (0.38) Morogoro (0.31)	2.03
Other regional centres	Other regional urban centres with an average population of 150,000 22 municipal councils and town councils	-	3.4
Other urban areas	Remaining urban areas Other 'urban' district councils	-	-

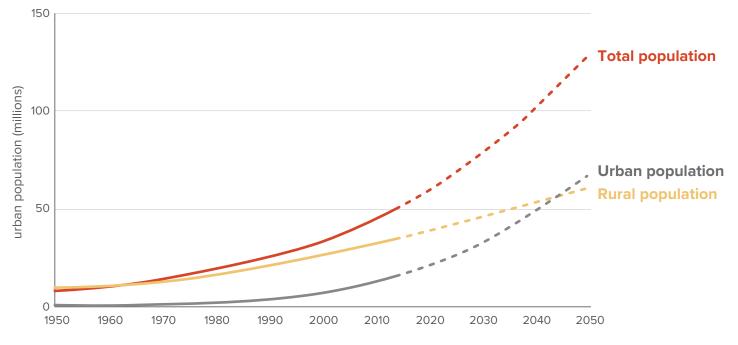
Note: Other government ministries in Tanzania adopt different definitions of 'urban areas', and characterise the devolved government structure differently.

# **3.1 URBANISATION TRENDS**

At the last population census in 2012, Tanzania's population had reached 44.9 million people, with 13 million living in urban areas.<sup>43</sup> This demonstrates that the share of the total population living in urban areas remains low by international standards, with more than 70% of the population based in rural areas.<sup>44</sup> However, with an urban population growth rate of 5.4% per annum, Tanzania had the sixth highest rate of urban population growth globally in 2015.<sup>45</sup>

Historically, most population growth has taken place in rural areas. Between 1967 and 2012, the rural population of Tanzania increased by 19.6 million people, compared with an increase of 12 million in urban areas.<sup>46</sup> This rural boom has in part been explained by the expansion of small-scale artisanal gold and gemstone mining in the 1980s, as well as the higher fertility rate in rural areas compared with urban areas (6.1 children per woman compared with 3.7).<sup>47</sup>

Yet Tanzania is now experiencing rapid urban population growth: the equivalent of 1.4 million people will be added to the country's urban population every year between 2012 and 2050.<sup>48</sup> The urban population is projected to grow at twice the rate of total population growth, meaning that over half of Tanzania's population will live in urban areas within 25 years (see Figure 3). By 2050, Tanzania's urban population is expected to reach 68.6 million people—which means more than a fivefold increase in a 40-year period.<sup>49</sup>



# Figure 3 **Tanzania's total population, rural population and urban population (millions), 1950–2050**

Source: UN DESA, 2015.

Rural–urban linkages have long been important in Tanzania. Households often rely on both rural and urban resources and livelihoods, and on exchanges between urban and rural areas. The relative significance of rural and urban livelihoods varies over time according to factors such as the cost of agricultural inputs, the relative prices of consumer goods and agricultural products, restrictions on wage levels, and increases or cuts to public expenditure. However, increasing mobility and improving communications increasingly enable migrants to urban areas to maintain strong social and economic links to rural areas. Rural households in turn depend more on remittances as the price of consumer goods outstrips the price for agricultural products, although rural families often continue to provide urban migrants with safety nets and social identities.<sup>50</sup>

Political factors have also significantly influenced levels and rates of urbanisation. Following independence in 1961, colonial restrictions on urban migration were removed and urbanisation accelerated.<sup>51</sup> Rural push effects were important from 1978 to 2002—such as through rainfall patterns and rural density effects.<sup>52</sup> Urban pull effects are also evident, particularly within regions near Dar es Salaam, Mwanza, Arusha and Mbeya. Box 2 provides an overview of key events that influenced Tanzania's urban population growth, while Figure 4 shows the impact on the country's largest cities.

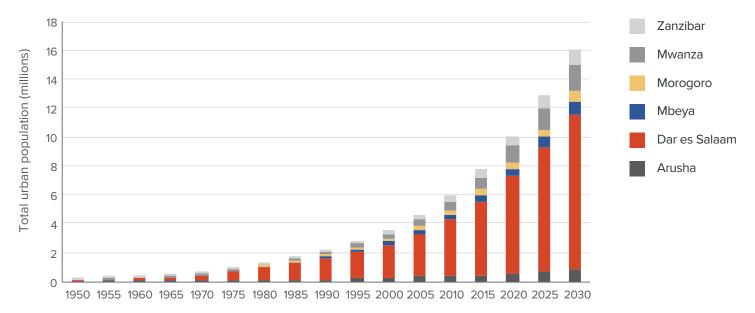
It is also important to note that much urban population growth comes from natural increase (births) or the extension of urban boundaries, rather than from rural to urban migration.<sup>53</sup>

# Box 2 Major development and urbanisation stages in Tanzania

- **Pre-Arusha (1961–67):** Tanzania's independence led to the removal of colonial restrictions on internal migration, enabling a significant movement to urban areas. Before this, internal migration among the indigenous population was restricted to those granted with permits, who were also required to return to their place of origin. The urban expansion of the 1960s was also fuelled by the new government's focus on industrial development, which promised jobs in urban centres.
- **Pre-crisis (1968–78):** The Villagisation Programme of the early 1970s actively relocated Tanzanian citizens into villages, with an estimated 5–13 million people (or up to 90% of the rural population) moved by 1976. Meanwhile, the abolition of local governments contributed to a deterioration of urban centres, which suffered from infrastructure deficits from the colonial era that were compounded by rapid urban population growth. These government policies contributed to a slowdown in urban population growth rates.
- Crisis and early reform (1979–88): Falling per capita incomes, slowing urbanisation, and a decline in agriculture were accompanied by rising mining employment. Urban migrants were increasingly attracted to other urban centres in Tanzania, with a commensurate decline in Dar es Salaam's dominance. In 1986, the national policy focus shifted to structural adjustment and liberalisation.
- **Consolidation (1989–2002):** Slower urban population growth was absorbed by the regional capitals, accompanied by increases in artisanal mining in rural centres. In 1996, the role of industrialisation in delivering the development agenda became the centre of policy-making.
- New dawn (2003–12): The country experienced a 3% per capita GDP growth rate per annum, with rising urban growth and urban migration, alongside rising formal employment. Dar es Salaam absorbed the majority of urban population growth in this time, while regional capitals lost importance compared with smaller urban centres. The government focus remained on industrialisation as a pathway to economic development.

Source: IGC, 2015; Balchin et al., 2016; Lorgen, 1999.





Source: UN DESA, 2015.

Although Dodoma has replaced Dar es Salaam as the capital of Tanzania, Figure 4 clearly shows that Dar es Salaam remains the primary city. In 2015, it accommodated 10% of the national population and 30.3% of Tanzania's urban population.<sup>54</sup> Dar es Salaam is one of the ten largest cities on the African continent in terms of population size.

The region of Dar es Salaam is the most urbanised in Tanzania. Mjini Magharibi region in Zanzibar has the next highest proportion of its population residing in urban areas, with 45% of the island's total population. The most urbanised regions after Dar es Salaam on the Tanzanian mainland are Mwanza, Arusha, Mbeya, and Pwani, which all have approximately 33% of their populations living in urban areas.<sup>55</sup> It is worth noting that Zanzibar's rate of urbanisation is also higher than that of mainland Tanzania.<sup>56</sup>

Most of Tanzania's future urban population growth is also expected to take place in Dar es Salaam,<sup>57</sup> where the population is projected to more than double from 4.4 million in 2012 to 10.8 million in 2030.<sup>58</sup> By comparison, the populations of Arusha, Mbeya, and Mwanza are expected to increase by 0.37–0.96 million people respectively in the same time period, reaching 0.8 million people in Arusha, 0.9 million in Mbeya and 1.8 million people in Mwanza.<sup>59</sup> Estimates for Dodoma are missing from the database. However, the relocation of the central government to Dodoma is likely to accelerate urban population growth in the capital, particularly as public demand for services creates employment opportunities. The proportion of Tanzania's urban population in these secondary cities and regional capitals has fallen from three-fifths to one-third of the total over the last 40 years, with the remaining urban population growth taking place in the smallest human settlements instead.<sup>60</sup>

There is therefore little sign of population convergence among the cities, with Dar es Salaam outcompeting secondary cities and regional capitals for urban migrants. Rural out-migration pull effects, for example, reduce with distance from Dar es Salaam. Conversely, urban in-migration shows the greatest pull effects are into smaller urban areas—with the majority of urban migration occurring into these smaller urban centres, rather than regional capitals, which are not attracting as many migrants. This is demonstrated in the regions of Mbeya and Arusha, as well as some other poorer regions.<sup>61</sup>

# **3.2 URBAN PERFORMANCE**

The section analyses Tanzania's urbanisation in terms of its economic, social, and environmental performance, as well as urban challenges.

### Economic performance<sup>62</sup>

Tanzania's GDP per capita reached US\$842.40 in 2015, increasing rapidly from US\$708.50 in 2010.<sup>63</sup> On its own, the aggregate GDP for Tanzania's urban centres of Dar es Salaam, Mwanza, Arusha, and Dodoma accounted for over 52.7% of Tanzania's GDP in 2012.<sup>64</sup> The share of national GDP held by these urban centres is projected to increase to 59.5% in 2030, which means that—in absolute terms—the GDP of these urban centres is projected to almost quintuple from 2012 to 2030.<sup>65</sup>

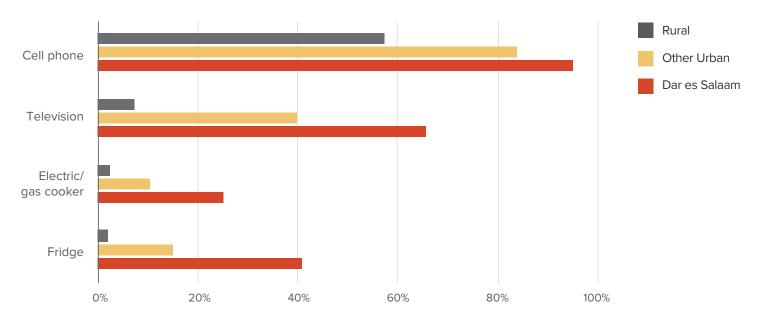
Higher average incomes in urban areas translate into higher purchasing power. This is evident from levels of ownership of select assets, such as cell phones, televisions, electric/gas cookers, and refrigerators. As an example, cell phone ownership is 95% in Dar es Salaam and 84% in other urban centres, compared with 57% in rural areas.<sup>66</sup> The disparities are even greater with respect to refrigerators. Approximately 48% of Dar es Salaam residents own a refrigerator, compared with 15% of other urban dwellers and just 2% of rural Tanzanians. See Figure 5 for further examples. Access to these kinds of consumer goods can enhance economic productivity; for example, by enabling safe storage of fresh food, refrigerators enable people to buy in bulk, reducing unit costs. This means that people can get more calories for the same level of expenditure, improving their health.

Gross value added (GVA) and type of employment are important indicators of labour productivity and structural transformation. Industry contributed an estimated 29.8% of GVA in Dar es Salaam, followed by financial and business services (21.8%) and consumer services (20.6%). Transport, storage, and information and communications are projected to increase steadily in importance in the primary city. Meanwhile, industry contributed 31.5% of GVA in Arusha, Dodoma, and Mwanza, followed by consumer services (22.3%) and public services (20.2%).<sup>67</sup> Although less productive in terms of GVA, consumer services are currently the major employer in Dar es Salaam (52.4%) and the selected secondary cities (48.8%), and projected to remain important through to 2030.<sup>68</sup> These figures include formal and informal employment.

Table 2 offers some evidence of structural transformation in Tanzania, particularly the significant economic and employment share of various services. This is supported by other evidence; for example, the number of non-farm businesses is growing at a rate of 12–15% every year.<sup>69</sup> Yet, while urban areas prove significantly more productive than rural areas, there is evidence to suggest that Tanzania has not realised its potential urban dividend. A selection of the major challenges identified in the literature review include:

- A high cost of doing business in Tanzania's cities with lengthy administrative burdens, corruption, changes in policy, a lack of clearly defined property rights, and an unpredictable judicial system. This results in only 4 of every 10 Tanzanian new businesses surviving, creating disincentives for informal businesses to formalise and for international corporations to operate in the country.<sup>70</sup> In 2016, Tanzania was ranked 132nd in the world (and 14th in sub-Saharan Africa) for ease of doing business.<sup>71</sup>
- A lack of employment opportunities in cities. The labour force participation rate in Tanzania mainland's urban centres is lower than in rural centres—at 89.9% of persons (aged 15+) participating in the rural labour force, compared with 76.2% in Dar es Salaam and 84.4% in other urban centres.<sup>72</sup> There are 1.1 million people that are unemployed in Tanzania's urban areas, compared with 1.2 million in rural areas—strikingly similar numbers considering that the rural population is more than twice the size.
- Major deficits in core urban infrastructure, including electricity, transport, waste collection, water, and housing. This extends to essential trade infrastructure, with limited air and port capacity. For example, it is estimated that inefficient transport connections between actors and firms in Dar es Salaam are reducing profits by US\$2.5 million every day.<sup>73</sup>
- Inefficient land and property markets, with blurred lines between the formal and informal sectors, mean that it is difficult to promote inclusive or productive use of urban land. The result is urban sprawl, with high and rising land and property prices in urban centres, particularly in Dar es Salaam.





Source: NBS, 2015

### Social performance

Tanzania has a large youth bulge, particularly in urban areas: over 60% of the country's urban population is aged between 15 and 35 (see Figure 6). This means that most of the population is currently in the workforce, and will remain so for three or more decades (depending on fertility rates). Tanzania therefore has the opportunity to enjoy a "demographic dividend" if it can effectively harness and enhance this economic activity.

One of the major challenges to realising the demographic dividend will be the scale of poverty in Tanzania. Extreme poverty is often defined as an income of less than US\$1 per person per day, subsequently adjusted to US\$1.90 for purchasing power parity. This poverty line was set based on the cost of food in a group of low-income nations with little allowance for non-food needs. Although this measure continues to be used across Tanzania and other low-income countries (for example, in the World Development Indicators), it often bears no relation to the real costs experienced by low-income groups in most urban contexts. It assumes that the income needed to avoid extreme poverty is the same throughout the country—as if the costs of food and non-food needs are the same in large cities as in small towns and rural areas.<sup>74</sup> Therefore, although World Bank figures may suggest that poverty levels in urban Tanzania are half those of rural areas,<sup>75</sup> these estimates hugely understate the incidence of urban poverty. Much higher rates of urban poverty would be found if these analyses accounted for other deprivations, such as: poor quality, insecure, or overcrowded housing; inadequate income to buy sufficient and nutritious food; access to reliable, affordable, and safe drinking water and sanitation services; or protection of rights through effective and equitable operation of the law.<sup>76</sup> In this section, we therefore present some more robust measures of Tanzania's social performance.

	City		GVA (% of total US\$ Employment (% population)						n)					
	Туре	Name	Agriculture	Industry	Transport, Storage, Info, Comms	Financial services	Consumer services	Public services	Agriculture	Industry	Transport, Storage, Info, Comms	Financial services	Consumer services	Public services
2	1	Dar es Salaam	1.3	29.8	13.0	21.8	20.6	13.5	9.7	11.5	11.6	2.5	52.4	12.2
201	2	Arusha, Dodoma, Mwanza	3.1	31.5	11.1	11.7	22.3	20.2	16.7	12.4	6.7	1.1	48.8	14.3
0	1	Dar es Salaam	0.6	28.8	19.8	17.8	20.9	12.2	3.5	11.2	21.1	2.6	47.6	14.1
2030	2	Arusha, Dodoma, Mwanza	1.5	30.7	16.3	9.7	23.0	18.9	5.6	13.1	14.8	1.6	47.9	17.1

# Table 2GVA and employment by sector in primary and secondary cities in Tanzania in 2012 and 2013

Source: Data (2014) from Oxford Economics database.

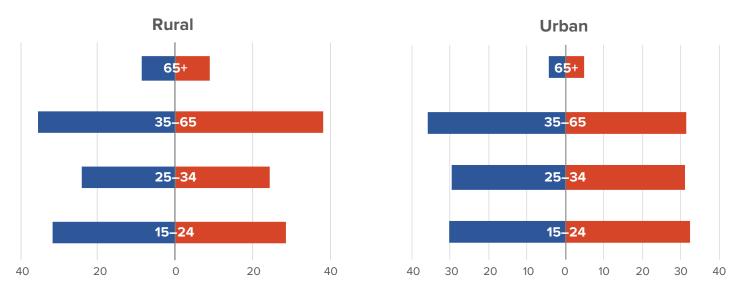
Of urban populations, 71.9% have access to "improved sanitation", compared with 15% of rural populations. Similarly, 83.9% of urban populations have access to an "improved water source" compared with 44.1% of rural populations.<sup>77</sup> However, "improved sanitation" and "improved water sources" were originally defined for rural areas: many interventions that are considered to be "improved", such as pit latrines, cannot ensure hygienic separation from faecal matter where there are large and dense concentrations of people living on small house plots with limited space.<sup>78</sup> Similarly, households that rely on standpipes or public taps are classified as "improved" without assessments of the quality or regularity of supply or of the time and effort needed to fetch and carry water to the home.<sup>79</sup>

In urban Tanzania, only 25.6% of the urban population have water piped to their home, while a further 23.7% depend on water piped to their neighbour. When asked about the two-week period before the Demographic and Health Survey was completed in 2015–2016, 62.2% of urban Tanzanians said that they had experienced at least one day without access to water. Similarly, only 9.1% of urban Tanzanians had sanitation facilities linked to a sewer or septic tank (including those who shared among several households).<sup>80</sup> In other words, millions of urban Tanzanians lack access to reliable and safe services. This burden is borne unequally. In peri-urban and smaller urban areas, cultural norms mean that the burden of collecting water continues to fall on women and girls.<sup>81</sup> Urban sprawl can make this task much more time-consuming and physically arduous.

This reflects the informal nature of urban development taking place across the country. Almost two-thirds of Tanzania's urban areas are informal and an estimated 80% of its urban residents live in informal areas.<sup>82</sup> Informal urban development can create patterns of sprawl, and it is difficult and expensive to extend infrastructure and services to reach these areas.<sup>83</sup> Because these areas have been settled outside legal or formal systems, governments may also lack the incentives to provide essential services and infrastructure.

# Figure 6 Tanzania's demography transition in urban and rural areas in Tanzania mainland, 2014 (excluding 0–14 years)

🗖 Male 🛛 🗧 Female



#### Source: NBS, 2015.

It is important to note that not all informal development is undertaken by the urban poor. Much of the housing and infrastructure constructed in African cities does not comply with spatial plans, building codes, and other legal frameworks. There are wealthy informal settlements in Tanzania, such as Wazo, Kivule, and Tegeta. However, formal businesses and high-income households that violate regulations are less likely to face eviction and demolition, which are daily risks for many low-income urban residents and other marginalised groups.<sup>84</sup>

This highlights another challenge: widening social inequalities, particularly with respect to access to services and services. Studies from Kenya, Bangladesh, and other low-income and lower middle-income countries demonstrate that residents of informal settlements have significantly worse health than their counterparts in other parts of the city—or even those in rural areas.<sup>85</sup> The large proportion of Tanzanian urbanites living in informal settlements means that there may actually be an urban disadvantage in health terms. Life expectancy is 59.7 years in urban areas compared with 62.4 years in rural areas, while urban residents face higher risks of under-5 mortality, maternal mortality, HIV, cholera, diabetes, and road traffic accidents.<sup>86</sup> When workers are ill, they may need to take time off work; when workers' families are ill, workers may need further time off for caring responsibilities. The latter is particularly likely to affect women, who are more likely to be household caregivers. Ill health can also mean workers are physically weaker due to both the impacts of disease and poor nutritional status due to lost income. There are therefore multiple pathways through which poor health affects economic productivity and social equity in cities.

### **Environmental performance**

Tanzania has very low levels of greenhouse gas emissions, producing 1.55 tonnes of carbon dioxide  $(tCO_2)$  per person in 2013 (excluding emissions from land use change and forestry). For reference, the G7 produced an average of 11.82  $tCO_2$  per person, while sub-Saharan Africa has an average of 0.80  $tCO_2$  per person.<sup>87</sup>

Economic development (which is concentrated in urban areas) is likely to drive higher energy demand, and a corresponding increase in Tanzania's emissions. Data at the city level are not reliable (they are estimated by allocating a proportion of national emissions to cities), but one estimate suggests that emissions from Dar es Salaam, Arusha, Dodoma, and Mwanza will almost double between 2012 and 2030.<sup>88</sup> While these estimates should be treated with a significant degree of caution, they do demonstrate the likely scale of potential increases in key urban areas.<sup>89</sup>

Under business-as-usual trends, the transport sector is likely to be a major driver of rising urban emissions in Tanzania. There has been a steady increase in the number of cars in urban centres compared with rural areas in Tanzania: 9.5% of the population in Dar es Salaam owns a car, compared with 4.8% of the population in other urban centres and 1% in rural areas.<sup>90</sup>

Although they have a tiny carbon footprint, low-income and other marginalised urban residents in Tanzania are particularly vulnerable to the impacts of climate change. Their exposure to risk is largely due to the lack of risk-reducing infrastructure (all-weather roads, good-quality water piped to premises, good-quality sanitation, drainage, and wastewater removal) and risk-reducing services (healthcare, household waste collection, emergency services and policing/rule of law). Moreover, many of these people live on dangerous sites, such as flood plains or steep and unstable slopes, where they may have low rent or access to employment but they face more frequent environmental hazards<sup>91</sup> Infrastructure-based solutions to these risks can be extremely expensive: the cost of protecting the 100-kilometre coastline of Dar es Salaam with a sea wall would be US\$270 billion.<sup>92</sup>

As one of 48 countries in the Climate Vulnerable Forum, Tanzania was instrumental in negotiating the target of 1.5°C in the Paris Agreement.<sup>93</sup> This is in part because the country is already experiencing the impacts of climate variability and change. Increases in temperature, unpredictable rainfall, and intense droughts and floods have led to food shortages, water scarcity, and power outages.<sup>94</sup> Extreme weather events occur frequently, and the Government of Tanzania estimates that each one costs in excess of 1% of GDP.<sup>95</sup>

In its Intended Nationally Determined Contribution (INDC), Tanzania committed to enhance forest carbon sinks, expand the use of natural gas and renewable energy, invest in mass transit, and improve waste management.<sup>96</sup> These priorities reflect the country's major sources of greenhouse gas emissions,<sup>97</sup> as well as opportunities to align economic development and mitigation goals. Pursuing compact and connected urban growth could further reduce the carbon intensity of economic development, while increasing economic productivity.

The City Resilience Index developed by Arup<sup>98</sup> was developed using primary data from six cities including Arusha, which is one of the 100 Resilient Cities supported by the Rockefeller Foundation. The City Resilience Index measures the performance of a city over time based on four dimensions:

- health and well-being: ensuring the health and well-being of everyone living and working in the city;
- economy and society: the social and financial systems that enable urban populations to live peacefully, and act collectively;
- infrastructure and environment: man-made and natural systems that provide critical services, protect and connect urban citizens; and
- leadership and strategy: the need for informed, inclusive, integrated and iterative decision-making in our cities.

The research team in Arusha found that the utility systems and services (water, sanitation, electricity, education, and health services) are not able to keep pace with the city's rapid population growth, particularly in peri-urban areas. Poor legal enforcement of policies, codes, and standards for the built environment and natural ecosystems has led to ecological degradation, which creates new hazards (such as flooding) for urban residents. Budgetary constraints limit the municipal government's ability to maintain and upgrade risk-reducing infrastructure, or to support disaster management and emergency planning. However, Arusha benefits from well-established community groups that underpin a strong collective identity and are strengthened by inclusive social policy, such as in-kind support for incremental upgrading.<sup>99</sup> These groups disseminate information to reduce residents' exposure to risk and provide mutual support networks that reduce the impacts of hazards. The strengths and vulnerabilities of Arusha are likely to be comparable with those of other secondary cities and regional capitals of Tanzania.

# Figure 7

# Absolute GDP (US\$ millions), emissions (MtCO $_2$ ) and population (millions) in the cities of Dar es Salaam, Mwanza, Arusha, and Dodoma, 2012 and 2030

2012 20	030		
City	<b>GDP</b>	<b>Emissions</b>	<b>Population</b>
	USD million (2012 prices)	Million tonnes of $CO_2$	Millions
Dar Es Salaam	<b>12.6</b>	3.0	4.3
	<b>48.7</b>	6.8	9.4
Mwanza	1.2	0.3	0.7
	4.8	0.7	1.5
Arusha	0.8	0.2	0.4
	3.0	0.5	0.9
Dodoma	0.6	0.2	0.4
	2.2	0.3	0.9
Share of Tanzania's total	52.7% 59.5%	54.2% 61.1%	12.2% 15.7%

Source: Data (2014) from Oxford Economics database.

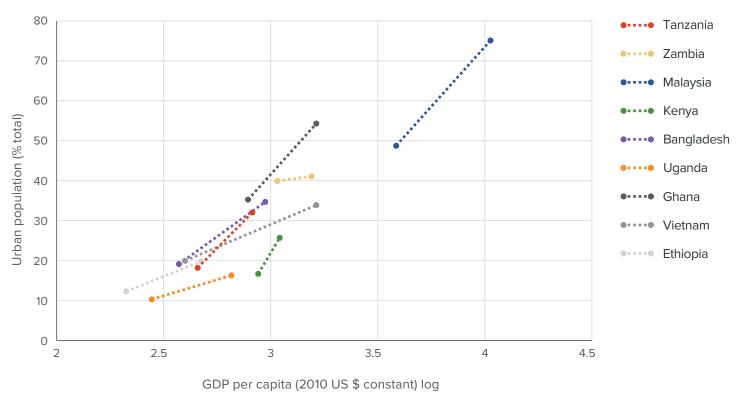
# 3.3 BENCHMARKING TANZANIA'S URBAN PERFORMANCE AGAINST COMPARATOR COUNTRIES

In this section, we compare Tanzania's urbanisation trends and performance against selected countries. These were identified in a previous paper to the Planning Commission, and include Tanzania's "neighbours (Kenya and Uganda), other African countries (Ghana and Zambia) and three Asian countries (Bangladesh, Vietnam and Malaysia)". These countries were selected based on comparable production structures, determinants of economic transformation (trade, skills, finance, and infrastructure), and specific growth rates.<sup>100</sup> This helps to provide continuity with the previous research submitted to the Planning Commission. Ethiopia is included as an additional neighbour country, following recent research by the Ethiopian Development Research Institute for the Coalition for Urban Transitions.<sup>101</sup>

This section adopts the conceptual urban framework outlined in section 2.2, encompassing:

- 1. economic performance (specifically economic growth and industrialisation);
- 2. social performance (specifically urban poverty and access to services); and
- 3. environmental performance (specifically climate mitigation and resilience).

It is firstly important to understand the history of urban development across these different countries. The rates and levels of urban population and economic growth in these countries differ considerably, influenced by historical and current policy, sociocultural norms, and levels of income. On the whole, Tanzania has seen higher rates of urbanisation relative to per capita GDP than comparable countries since 1988, with the notable exception of Kenya (see Figure 8). Tanzania's urbanisation rate of 5.4% per annum is matched only by Uganda, and followed by Ethiopia at 4.8%. Notably, both Bangladesh and Vietnam had lower per capita GDP in 1988, but have now outstripped Tanzania by a considerable amount. This is a stark illustration of the limitations of the economic growth-urbanisation relationship in sub-Saharan Africa (see section 2).



### Figure 8 GDP per capita (US\$ 2010 constant log) relative to urban population (% of total) in selected countries, 1988-2015

Note: Malaysia is the only upper-middle income country in this sample. Data source: WDI, 2016.

Malaysia started at a higher level of income and urban share of proportion than almost all the other countries in this sample, and continued to see a close coupling of economic and urban population growth. It is the only country in the sample classified as uppermiddle income, having graduated from lower-middle income status in 1992.<sup>102</sup> Ghana alone had a higher share of the population living in urban areas in 2015 and achieved rapid economic growth relative to the other African countries in this analysis.

In most of these countries, over 30% of the urban population live in the primary city. The exceptions are Addis Ababa (Ethiopia), Accra (Ghana), and Hanoi (Vietnam), which respectively house only 16.7%, 17.5% and 23.7% of the urban population.<sup>103</sup> The proportion of the urban population living in so-called "slums"<sup>104</sup> similarly varies more across these country case studies. Ethiopia performs the most poorly by this metric, with 73% of its urban population living in overcrowded, under-served or insecure settlements. The East African countries of Kenya, Tanzania, Uganda, and Zambia all perform comparably, with 51–56% of urban residents living in slums. Ghana and Vietnam perform better, which is a function of both higher incomes and specific land use policies.

# ECONOMIC PERFORMANCE

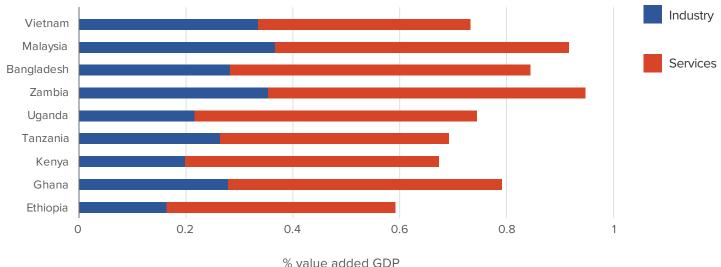
In 2015, Tanzania had per capita GDP of US\$842.40. This compared favourably with US\$672.80 in Uganda and US\$486.30 in Ethiopia. Tanzania's northern neighbour, Kenya, is a lower-middle-income country with a GDP per capita of US\$1,133.50.<sup>105</sup>

The relative economic share of agriculture, industry, and services (see Figure 9) can be used as a very approximate indicator for urban economic performance, given the concentration of secondary and tertiary activities in urban centres. But this is not necessarily reliable. The shortfalls become apparent when comparing the prevalence of higher-value activities with the size of the urban population. For example, Uganda has the smallest proportion of its population living in urban areas, but still possesses a larger services sector than Tanzania, Kenya, and Ethiopia; similarly, the prevalence of "industry" in Zambia likely indicates the value of copper mining rather than large-scale manufacturing in Lusaka.

### **COALITION FOR URBAN TRANSITIONS**

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Source: WDI, 2016.

% value added GDP

# Table 3 Urban trends across selected countries in 2015 (or latest available year)

	Country income group	GDP per capita (constant 2010 US\$)	Urban population (% total)	Urban population growth (annual %)	Population in the largest city (% urban population)	Urban population living in slums (% urban population)
Africa						
Ethiopia	LIC	486	19.5%	4.8%	16.7%	73.9%
Ghana	LMIC	1,697	54.0%	3.5%	17.5%	37.9% (2014)
Kenya	LMIC	1,134	25.6%	4.3%	33.2%	56.0% (2014)
Tanzania	LIC	842	31.6%	5.4%	30.3%	50.7% (2014)
Uganda	LIC	673	16.1%	5.4%	30.8%	53.6% (2014)
Zambia	LMIC	1,607	40.9%	4.2%	32.9%	54.0% (2014)
Asia						
Bangladesh	LMIC	973	34.3%	3.4%	31.9%	55.1%
Malaysia	UMIC	1,0878	74.7%	2.4%	30.2%	-
Vietnam	LMIC	1,685	33.6% (2012)	3.0%	23.7%	27.2% (2014)

Source: WDI, 2016. LIC = low-income country. LMIC = lower-middle-income country. UMIC = upper-income country.

### **COALITION FOR URBAN TRANSITIONS**

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City-level data on GVA shows the economic importance of industrial development (see Table 4). Industry is the dominant contributor to GVA across all the comparator cities with the exception of Addis Ababa and Kampala, where the highest contributor is consumer services, and Nairobi, which is a renowned centre for financial and business services.<sup>106</sup> The Tanzanian cities outperform those in neighbouring countries in terms of the industrial contribution to GVA, and compare favourably with the middle-income countries of Bangladesh and Ghana. Malaysia, Vietnam, and Zambia generate a significantly larger fraction of GVA from industry, although in the case of Zambia this may be attributed to resource processing (particularly of copper) rather than light manufacturing. This is capital intensive, and therefore creates little direct employment.

#### Table 4

# GVA (% of total US\$) and employment (% of total employment) in primary and secondary cities of selected countries in 2012

	City			GVA (% of total US\$)						Employment (% population)					
	Туре	Name	Agriculture	Industry	Transport, Storage, Info, Comms	F&BS	Consumer services	Public services	Agriculture	Industry	Transport, Storage, Info, Comms	F&BS	Consumer services	Public services	
Ethiopia	1	Addis Ababa	2.5	14.2	8.0	25.5	29.4	20.4	8.0	13.2	3.3	3.4	62.7	9.4	
Ghana	1	Accra	1.1	24.5	15.4	22.0	19.0	18.0	4.8	22.8	5.2	6.5	42.1	18.6	
GHalla	2	Kumasi	4.5	41.6	11.8	15.4	14.5	12.1	9.5	30.6	4.5	5.5	36.0	13.9	
	1	Nairobi	0.6	28.9	13.5	31.2	15.9	9.9	3.2	24.8	5.7	2.6	49.8	13.9	
Kenya	2	Mombasa	0.7	28.3	23.6	16.7	20.0	10.7	3.3	21.3	8.0	1.2	54.1	12.0	
	1	Dar es Salaam	1.3	29.8	13.0	21.8	20.6	13.5	9.7	11.5	11.6	2.5	52.4	12.2	
Tanzania	2	Arusha, Dodoma, Mwanza	3.1	31.5	11.1	11.7	22.3	20.2	16.7	12.4	6.7	1.1	48.8	14.3	
Uganda	1	Kampala	0.7	28.5	14.7	9.7	37.0	9.4	5.5	15.9	8.5	6.7	52.0	11.5	
Zambia	1	Lusaka	0.8	42.0	4.3	20.6	20.9	11.4	7.8	14.2	8.1	2.2	38.2	29.5	
Zampia	2	Kitwe, Ndola	1.1	42.4	4.6	21.3	19.9	10.6	10.0	17.3	7.9	2.1	37.5	25.1	
	1	Dhaka	0.5	31.0	14.3	23.9	18.8	11.6	3.3	26.2	15.6	1.4	29.0	24.6	
Bangladesh	2	Chittagong, Khulna, Rajshahi	0.6	30.3	13.9	24.2	18.4	12.6	3.3	26.2	15.6	1.4	29.0	24.6	
	1	Kuala Lumpur	1.2	31.2	10.0	24.0	25.3	8.3	1.4	27.7	10.6	16.1	29.9	14.3	
Malaysia	2	Johor Bahru, Kuala Muda, Kota Bharu, Seremban, Malacca, Kuantan, Ipoh, Georgetown, Kota Kinabalu, Kuching	5.2	42.1	6.2	10.3	24.3	11.8	4.7	28.5	5.8	9.3	32.6	19.0	
	1	Ha Noi	5.9	44.0	14.8	9.3	18.0	7.9	20.8	31.7	5.0	5.5	25.3	11.8	
Vietnam	2	Ho Chi Minh City, Hai Phong, Da Nang, Can Tho	3.3	47.1	7.4	12.4	22.7	7.2	10.3	34.7	7.5	5.8	32.1	9.6	

Source: Data (2016) from Oxford Economics database. Values in green show the dominant GVA or employment sector by city type across the countries.

City-level data on employment suggests that the development of industry is not effectively translating into local manufacturing jobs—particularly in Tanzania. While agricultural contributions to employment remain important across many cities in the sample (including those in the Asian countries), Arusha, Dodoma, and Mwanza have the highest proportion of agricultural GVA contribution to GDP among the African secondary cities, at 3.1% in 2012, with the exception of Kumasi, Ghana (at 4.5%).<sup>107</sup> Dar es Salaam also has the highest proportion of employment in agriculture among the African primary cities, at 9.7% of the urban population, compared with its neighbours at 3.2% (Nairobi), 5.5% (Kampala), and 8% (Addis Ababa).<sup>108</sup> This may partially be explained by the inclusion of fishing activities within agriculture.

Consumer services employ the greatest number of urban residents in Tanzania and across the sample, apart from in Vietnam.<sup>109</sup> Industry is the second largest urban employer in all cities, except for Tanzania's and Zambia's cities where public services are the second largest employer. The transport and logistics sector is also a large employer in Dar es Salaam. The small share of industrial employment in Tanzania jeopardises the prospects for sustained economic and human development. The potential for agglomeration economies is more significant in manufacturing and tradeable services than non-tradeable services, and there is less investment in human capital. Where urbanisation is fuelled by export income rather than industrial development, cities may also have weaker institutions.<sup>110</sup> This can hinder the emergence of competitive firms because of poor control of corruption, inefficient public service delivery, weak rule of law, and other difficulties doing business.

# SOCIAL PERFORMANCE

Recent data gathered for evaluation of the FYDP I shows that the proportion of Tanzanians accessing water in district and small towns reached 60%, with 86% of the population in regional centres and 68% in Dar es Salaam.<sup>111</sup> However, as outlined in section 3.2, many measures considered "improved" water sources or sanitation facilities do not necessarily provide safe drinking water and reliably prevent faecal contamination in urban contexts. The proportion of the urban population with access to piped water and either piped sewer systems or septic tanks is presented in Table 5.

Table 5 reveals considerable variation among countries. Tanzania's performance in delivering access to drinking water and safe sanitation facilities is average within the sample. Relative to income, Uganda performs very well in terms of access to water, and Zambia in terms of access to sanitation.

# Table 5

-							
	Electricity	Drinking water		Sanitation (including share	Year of		
	(2012)	Piped into dwelling/yard plot	Piped to neighbour	Flush/pour flush to piped sewer system	Flush/pour flush to septic tank	DHS	
Bangladesh	90.2	22.3	N/A	10.8	24.0	2014	
Ethiopia	91.0	46.8	N/A	2.4	2.0	2011	
Ghana	85.0	16.9	N/A	12.9	21.0	2014	
Kenya	58.2	43.2	N/A	18.1	13.1	2014	
Malaysia	100	Data not available.					
Tanzania	46.4	25.6	23.7	1.7	7.4	2016	
Uganda	71.2	28.4	34.9	11.4	N/A	2011	
Vietnam	100	61.1	N/A	80.4	N/A	2005	
Zambia	46.9	41.4	N/A	24.8	10.1	2014	

# Percentage of urban population with access to electricity, water (by source) and sanitation (by type) facilities

Source: WDI, 2016 (for access to electricity); Central Statistics Agency and ICF (2012), Central Statistics Office et al. (2014), Ghana Statistical Service et al. (2015), Kenya National Bureau of Statistics et al. (2015), Ministry of Health, Community Development, Gender, Elderly and Children et al., 2016, National Institute of Population Research and Training et al. (2016) and Uganda Bureau of Statistics and ICF International Inc (2012) (for access to water and sanitation).

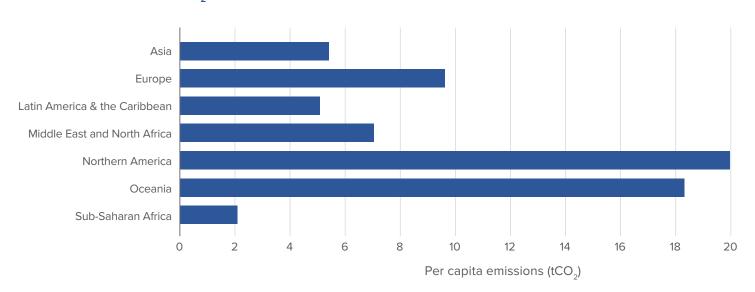
The fact that income and access to basic services do not correlate closely is critically important. Provision of core infrastructure to low-income and other marginalised populations is very much a function of enabling urban policies. Some national and municipal governments have prioritised these issues in urban planning and investment, while others have successfully facilitated service delivery by utilities, small and medium-sized enterprises (SMEs), and community-based organisations. These approaches have enhanced the social performance of cities, compared with interventions that have focused narrowly on economic growth metrics or use inadequate measures of urban poverty.

# ENVIRONMENTAL PERFORMANCE

African countries have very low per capita greenhouse gas emissions, and a large proportion of these emissions come from land use change and forestry (see Figure 10). This means that emissions from urban areas are likely to be very low, and to be primarily attributable to consumption by high-income urban residents.<sup>112</sup>

There are limited data on the carbon footprints of sub-Saharan African cities (excluding South Africa), although emission inventories have been completed for Addis Ababa (Ethiopia),<sup>113</sup> Dakar (Senegal),<sup>114</sup> Kampala (Uganda),<sup>115</sup> Kigali (Rwanda),<sup>116</sup> Lagos (Nigeria),<sup>117</sup> and a handful of other large cities. Although not all of these analyses comply with the Global Protocol for Community-Scale Greenhouse Gas Emission Inventories (GPC), they provide a useful indication of major emission sources and trends. These analyses typically find that waste accounts for a very large share of emissions because urban residents in low-income and lower-middle-income countries consume much less energy than their counterparts in upper middle-income and high-income cities. Emissions from transport are projected to increase very rapidly with economic growth.

Urban resilience metrics are missing. Annex C provides an overview of the performance of urban planning in terms of climate resilience across the comparator countries. Kenya is the only country for which the national urban policy extensively considers climate resilience according to analysis by UN-Habitat. This is followed by moderate consideration of climate resilience in Malaysia, Uganda, and Vietnam's national urban frameworks. However, the consideration of climate resilience in the national frameworks of Tanzania and the other countries is considered low (see Annex C).<sup>118</sup>



# Figure 10 Per capita emissions (tCO<sub>2</sub>) excluding land-use change and forestry, 2013

# 4. Well-managed urban growth: policies and principles

National policy-makers in Tanzania—working hand-in-hand with municipal governments and other urban actors—will have a critical role to play in delivering the urban dividend. In all contexts, cities are more likely to be successful where national governments recognise their economic and social importance. However, the role of national economic decision-makers is particularly central in Africa where well-resourced municipal governments, with a good level of capacity, are rare.<sup>119</sup> There is often political resistance to such vertical collaboration, particularly where urban areas are controlled by opposition parties.<sup>120</sup> Yet effective multi-level governance will be essential to harness the limited resources and capacities of the state effectively.

In partnership with other public, private, and civil society actors, national governments can achieve the following:

- establish enabling policy frameworks at the national level;
- foster the development of accountable and transparent institutions;
- facilitate effective and inclusive land use planning;
- mobilise the financial resources needed to crowd in funding for core urban infrastructure; and
- empower city governments, businesses, and civil society with the information, resources, and capacities to proactively plan for and invest in better urban development.

Some success stories from Africa, Asia, and Latin America are presented in Annex A, as examples for the following urban policies and principles.

# 4.1 ENABLING NATIONAL URBAN POLICY FRAMEWORKS

National urban policies (NUPs) include both the formal policies that guide urban development and the broader discourse about urbanisation and urban areas. Individual policies within NUPs may pertain to land use planning, energy, health, housing, industry, transport, environment, and waste, among others. However, viewing the suite of policies as a package—NUPs—can enhance coordination among different sectors, ensuring that the collective impact of these interventions enables cities to pursue more productive and sustainable development paths. In short, NUPs can be seen as the overarching or umbrella policy framework to deliver 3C urban growth.

Governance of African cities tends to be determined over time without alignment or coordination.<sup>121</sup> Traditional institutions and leaders often continue to play an important role in managing natural and human resources, particularly at smaller scales, while emerging actors such as community-based organisations have increasing importance in cities. Political leaders and businesses will often play a key shaping role for the development of urban centres. This leads to ambiguity, fragmentation, and contestation. These complex institutional arrangements are typically navigated by individual actors, so that decisions within and about cities are effectively driven by informal networks within and beyond government.<sup>122</sup>

NUPs demonstrate a basic commitment from national governments to the prosperity of cities. Well-defined NUPs articulate the responsibilities of different levels and departments of government, and can therefore establish the effective multi-level, cross-sectoral institutional arrangements necessary to govern urban development. NUPs can also create spaces for other actors from the private and civic sectors to contribute to service and infrastructure delivery: for example, by encouraging the development of businesses selling decentralised renewables, or the work of community-based organisations supporting upgrading of informal settlements. These partnerships with different stakeholders are particularly important where the state lacks the necessary resources or capacities to shape urban form or deliver essential services and infrastructure.

Key elements of NUPs may include:

- 1. A clear delineation of the responsibilities and authorities of key government institutions. NUPs should support functional subsidiarity, whereby issues are the responsibility of the most local level that is capable of resolving them. This requires cooperation between national, state, and city counterparts. Where municipal authorities lack essential institutional and technical capacities, NUPs can establish the framework and pathway for devolution (based on appropriate capacity development in sub-national government).
- 2. A spatial and tenure strategy that enables the pursuit of a compact and coherent urban form. NUPs need to recognise the importance of connecting people with economic opportunities and avoiding spatial exclusion. Linking spatial planning to tenure reform can help to integrate informal settlements into formal property and land markets, which can facilitate densification and incremental upgrading. Participatory approaches to developing this strategy can also avoid the evictions and dispossession commonly associated with enforcement of spatial plans.<sup>123</sup>
- 3. A national urban infrastructure plan to ensure that planned infrastructure investments reinforce the spatial plan. For example, mass transit infrastructure should effectively connect housing to services and employment. The infrastructure plan should delineate service levels and technology infrastructure options across sectors, with an emphasis on sustainable and inclusive infrastructure design. Recognising resource constraints in low-income and lower-middle-income countries, the urban infrastructure plan should be developed interactively with the investment framework (see section 4.4) to ensure affordability. Where governments lack the necessary resources and capacities, the infrastructure plan should detail the ways that non-state actors can contribute to infrastructure and service provision.
- 4. A finance plan that outlines processes and mechanisms by which national governments can raise, steer, and blend finance to deliver the 3C model. Public resources will not be sufficient to finance sustainable infrastructure at the scale required, so national governments need to establish mechanisms that can guide and mobilise other sources of finance. This includes support to city governments to improve local revenue collection, develop pipelines of bankable projects, and access capital markets. While finance strategies can be developed at city scale, they will nonetheless require national-level support for implementation.
- 5. Effective regulation of state-owned enterprises (SOEs) to align their activities with the infrastructure and finance plans. In many cities, SOEs provide a range of core infrastructure and services, often including electricity, water supply, wastewater management, and transport systems. Achieving cost recovery and universal service provision has historically proven a major challenge, but reform to the regulatory environment can create the policy certainty and transparency needed to unlock essential capital investment.

# 4.2 ACCOUNTABLE AND TRANSPARENT INSTITUTIONS

While NUPs may clearly delineate the responsibilities of different government agencies, implementation will ultimately depend on the effectiveness of these institutions. Delivering the 3C model will require institutions that can transcend the political cycle, cooperate across different levels and sectors of government, and use resources efficiently and appropriately to achieve a shared vision.

Among other things, this requires:

- 1. **Building the capacities of sub-national governments.** State, city, and local governments often do not have the technical and financial capacities required for integrated urban planning, project design and management, or effective engagement with stakeholders. Providing training and encouraging knowledge sharing can help individuals and teams to develop these essential competencies.
- 2. **Devolving specified powers and resources as sub-national governments acquire the necessary capacities.** This should be backed by a national political acceptance and appropriate fiscal powers for local authorities. In legislating these responsibilities, this should preferably occur within the national constitution. A capacity-sensitive approach is also important, so that decentralisation to larger and more capable local authorities can be accelerated.

- 3. Clear lines and mechanisms of upwards accountability. Ideally, the Ministry of Finance or the executive branch of government will have oversight of the NUP, with the ability to monitor and evaluate the performance of the individual agencies that are responsible for implementing its different elements. Independent regulators and performance benchmarking can also improve the functioning of the national departments and SOEs.
- 4. Clear lines and mechanisms of downwards accountability. Structured forums for engagement between national departments and municipalities can ensure that the needs and interests of individual cities are effectively represented. Representatives from local civil society and SMEs should also have regular and transparent access to national decision-makers.
- 5. **Platforms for meaningful participation by non-state actors** in urban planning and implementation processes. The formal private sector is important for large-scale infrastructure and property development, including through concessions (e.g. toll roads), leases (e.g. electricity distribution), project contracts (e.g. water and wastewater treatment), and construction (e.g. mixed-income housing). Involving local civil society organisations can ensure that the interests of low-income and other marginalised groups are safeguarded, as well as helping to bridge formal and informal service delivery systems.

# 4.3 EFFECTIVE AND INCLUSIVE LAND USE PLANNING

The presence of an appropriate and well-functioning land use planning policy and legislative framework helps to support NUPs, and particularly compact and connected urban centres. Shaping urban form and function in this way effectively requires the harnessing of market forces through regulations, infrastructure investment, and public acceptance of designated land uses. However, widespread informality in African cities precludes many conventional planning tools so that formal urban development is too often governed by projects rather than planning,<sup>124</sup> and by the interests of the rich rather than the needs of the poor.

Effective land use planning and management therefore needs to encompass the following elements:

- 1. **Spatial planning**, to determine land use within different parts of the city with the goal of promoting mixed land use and high but liveable density. Participatory approaches to spatial planning can ensure that the interests of diverse urban stakeholders are effectively mediated. Spatial plans should also safeguard high-value urban ecosystems, such as rivers, wetlands, and coastlines. Key tools to govern formal development include zoning ordinances and regulation of formal land and property markets. Governing informal development may depend more on establishing constructive relationships with residents through, for example, regularisation of plots and co-production of infrastructure.
- 2. Land tenure, which aims to guarantee land rights or use for urban populations, particularly those living in informal settlements. Regularisation of informal settlements can improve the legal and political security of households and communities, both creating an asset that can be bequeathed and enabling further asset accumulation.<sup>125</sup> The provision of collective tenure can be an important strategy to manage ethnic concepts and minimise displacement of low-income households, although provisions may need to be made to protect particularly vulnerable subsets of a community, such as women and tenants.<sup>126</sup> Reducing ambiguity around tenure can also facilitate large-scale infrastructure investment (such as mass transit) by reducing financial and reputational risks to private firms, and are a precondition for land use levies and land value capture, important sources of revenue for local authorities.<sup>127</sup>
- 3. Anchoring investments in transport and public amenities can attract and shape private investment in urban infrastructure. The construction of mass transit and pedestrian pathways can promote densification around transport nodes before "lock in" to sprawling forms or vehicle-based transit networks.<sup>128</sup> Regularisation or tenure accompanied by the provision of sewers, piped water, and drains can increase private investment in housing, including by low-income households. Often there is little political will to invest in under-served parts of the city because residents are not seen as legitimate citizens or because governments want to discourage rural to urban migration.<sup>129</sup> In these contexts, supporting co-production of basic infrastructure by communities and municipal governments can be an important strategy to build effective state–community relationships and thereby permit more ambitious spatial planning and upgrading.<sup>130</sup>

# 4.4 FINANCING FOR SUSTAINABLE URBAN INFRASTRUCTURE

Substantial investments across multiple sectors will be required to deliver core infrastructure, including mass transit, energy networks, affordable and resource-efficient housing, water supply, waste water management, and sanitation. The upfront investment needs of financing sustainable infrastructure may be higher than the costs of business-as-usual options, although these may be recovered through scale economies (so less construction materials are required) and lower operating costs from improved resource efficiency.<sup>131</sup> Many of these investments will need to be supported by new business models and finance structures.

The urban finance and investment framework should support the NUP in raising, steering, and blending the finance necessary to deliver the 3C model of urban growth.<sup>132</sup> It should include a wide-range of financing options for urban centres and be composed of:

- 1. **National municipal infrastructure investment framework,** tied to a clear infrastructure plan. This should provide information on likely capital costs, capital finance mix, operating costs, and revenue requirements, as well as possible business models or financing mechanisms. It should also provide for different categories of local authorities, each of which has specific service levels, costs, and revenue arrangements.
- 2. Transfers and tax-sharing policy, which includes transfers for both capital and operating expenditure. Investment needs in the region far exceed municipal budgets: even local governments in lower middle-income countries such as Kenya have less than US\$20 to spend per person per year,<sup>133</sup> most of which is needed for recurrent expenditure such as salaries. Funding must therefore be built into the national budget with full political commitment by the national government. The alternative option is increased tax sharing with the local authority level, provided the municipality is sufficiently capable and accountable.
- 3. Legislation to support gradual devolution, particularly of financial powers, to local authority level. This should include the ability to raise land taxes and apply tariff rates for services (depending on utility ownership structures), as well as to issue bonds and receive loans with central government oversight. Devolution of financial powers should be contingent on improved financial management capacities within municipal authorities, including the development of multiple revenue generation sources, budgeting and accounting skills and pipelines of bankable infrastructure projects.
- 4. **Ringfenced funding for SOEs** to support capital investment in urban areas, particularly with the objective of extending services to un-served parts of the city. SOEs have an essential role to play, as their government backing enables them to reduce financial risk and thereby leverage private investment. Accordingly, SOEs often account for the majority of investment in African cities. Funding for SOEs can include fiscal transfers, debt finance, and equity instruments.
- 5. Land-based financing options can be adopted, focused on national policy provisions for development charges and "in kind" contributions by developers.

# 4.5 MONITORING, EVALUATION, AND RELATED DATA MANAGEMENT

Monitoring, evaluation, and data management are essential to determine the performance of institutions, policies, and investments. The review process can enable iterative policy changes to allow for adjustments to urban policies and programmes according to emerging opportunities and challenges. Indicators should allow decision-makers to assess the economic, social, and environmental impacts of these interventions.

- 1. National statistics collected and presented by a dedicated entity. This agency should hold the leadership role in conducting regular population censuses and collecting other urban data, and presenting and interpreting that data to inform urban policy and programming. If population censuses occur at ten-year intervals, for example, it is important to have five-year sample surveys. For each sector there also needs to be an agreed set of urban performance indicators—simplified initially—with a national system for collecting and reporting on the data, such as for monitoring of urban environmental performance.
- 2. **Sub-national processes that support the collection of national statistics.** Encouraging the collection of data, and the sharing of that data, at a sub-national level can improve decision-making at all levels, by encouraging consistency and increasing granularity. Sub-national agencies may also collect different information (for example, GIS-linked cadastrals, utility customers, etc.) that may be relevant to national decision-makers. National governments or local government associations should provide templates and support to enable municipalities to collect and evaluate data in a consistent and reliable way. In order to do so, the commitment to data and information needs to be explicitly mandated.

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- 3. **Commit to open data.** 'Open data' is publicly accessible (for example, published online), available in a convenient and modifiable form, and provided under terms that permit universal re-use and redistribution. Making data such as census findings, government budgets, and meeting minutes publicly available is important because it enhances the transparency of decision-making and facilitates coordinated planning and action by a wide range of stakeholders. Community-generated data (for example, through the Know Your City campaign) can also be an important evidence base, particularly to check formal records and enhance downwards accountability to urban residents.
- 4. **Partnerships with research institutions.** Policy and investment should be guided by locally relevant evidence that helps decisionmakers to understand current trends in urbanisation and urbanism, to learn from the experiences of designing and implementing urban initiatives, and to anticipate urban development trends and policy needs. Research institutions therefore have a key role to play in collecting, analysing, and packaging the necessary data. Researchers will need to make choices about what to measure and how to measure it, and their decisions should be informed by potential users of the information. It is therefore important that researchers work closely with national and local decision-makers to determine which data, analyses, and outputs are most valuable to help cities achieve the 3C model. Without this guidance, scientific analysis may not be sufficient or appropriate to inform policy and investment. This also requires political commitment to the monitoring and evaluation of policy.

# 5. Tanzania's urban policy landscape

This section aims to map the institutional, policy, and financing landscape for urban decision-making in Tanzania, with a particular focus on identifying any challenges that are preventing effective urban planning for 3C's urban growth. The economy of urban settlements is fundamentally associated with the quality and reliability of urban services, with the most important services being water supply, sanitation, electricity, roads, and public transport. This, in turn, requires stable, sustainable, and financially viable urban services, institutions, policy environments, and governance structures.

# 5.1 NATIONAL URBAN POLICY FRAMEWORKS IN TANZANIA

In Tanzania, urban policies are captured across a variety of national and sectoral policies. Foremost among these policies and plans is the Human Settlements Development Policy (2000), which commits to: (i) promoting human developments that are sustainable, and (ii) facilitating provision of affordable, adequate housing to all income groups in Tanzania.<sup>134</sup> Tanzania's Five Year Development Plan (FYDP) II for 2016/17 to 2020/21 also contains provisions for urbanisation, and the FYDP II Implementation Strategy 2017 (currently in development by the Planning Commission) identifies urbanisation as one of five key pillars for the FYDP II.

The FYDP II acknowledges that the recent mega trends in population growth, urbanisation, and climate change risk derailing some of the gains from Tanzania's rapid economic growth. The Plan estimates that Tanzania's urbanisation is accelerating at an annual rate of 5.2%, or more than twice the world average (at 2.1%) and higher than the average for Africa (3.5%). Dar es Salaam is growing at 5.6% and the city is one the fastest growing in Africa.<sup>135</sup>

Most plans and investments are not "future proofed" against the rate of population and economic growth. Short-term planning horizons mean that new facilities may be overwhelmed by demand before the projects are even completed. As the FYDP II notes, "Urbanization is already putting intense pressure on basic services and urban infrastructure at a time when emerging cities still lack the resources and institutions to provide citizens with access to productive jobs, decent housing, and basic services. [While] Traffic congestion in large urban areas, particularly Dar es Salaam, is getting worse as it takes over 2.5 to 3 hours to make round trip by private and public transport means respectively."<sup>136</sup>

Among other things, the FYDP II commits to developing a single coherent National Urban Development Strategy that is integrated with master plans for all the largest cities. This will be an important step towards a more coherent and enabling policy framework to shape urban development. Currently, key policy functions such as housing, transport, and industry are not closely tied to spatial plans, which means that there is limited scope to pursue (for example) transit-oriented development. The Urban Planning Act II (2007) does provide some scope for integrated planning, by requiring local councils to draw on the following during the design and implementation of urban plans:<sup>137</sup>

- physical analysis of land;
- population and economic base—including density-based measurements;
- land use projections;

- maps and development models;
- communication and services (networks, e.g. roads);
- power and telephone lines; and
- renewal and re-development.

Land policy and legislation is a central component of any suite of national urban policies. The National Land Policy 1997 is the overarching policy framework in Tanzania to address land use planning.<sup>138</sup> It was developed in response to changes in land use and population growth following independence, rising demand for agricultural and livestock land, and urbanisation. It also sought to respond to the problems associated with land acquisition for private sector investment and the relocation of villages under the villagisation programme. The primary objectives of the policy included: promoting equitable access to land; recognising tenure rights; using land to promote socioeconomic and sustainable development; and streamlining land information, land management systems, and institutional arrangements. All of Tanzania's land is listed as a public asset, and the government retains the right to revoke ownership with appropriate compensation.<sup>139</sup>

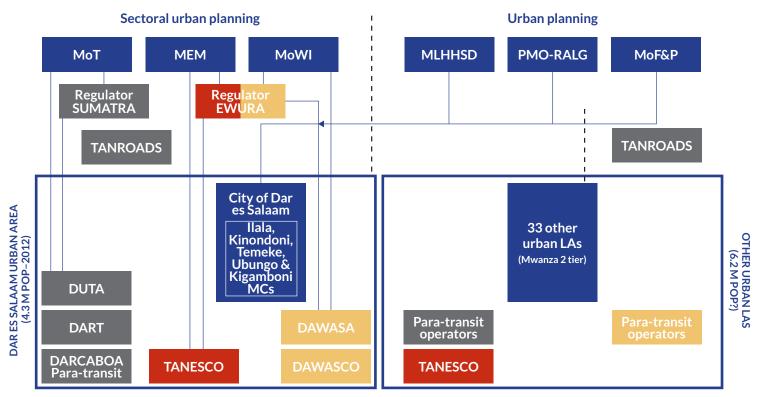
A more detailed overview of urban policies and legislation in Tanzania is provided in Annex F.

# 5.2 INSTITUTIONAL LANDSCAPE OF TANZANIA

This section provides an overview of the institutional arrangements governing urban development in Tanzania, represented in Figure 11. This figure illustrates how multiple organisations may have a mandate for urban policy and investment with limited horizontal coordination of policy functions. For example, three different national ministries have responsibilities for urban planning—and each use different definitions of "urban". The President's Office—Regional Administration and Local Government (PO-RALG) uses a politico-administrative framework; the Ministry of Lands, Housing and Human Settlements Development (MLHHSD) uses a human settlements framework; and the National Bureau of Statistics (NBS) adopts a statistical perspective.<sup>140</sup> None of these use density-based measures. Rapid urban population growth and re-drawing of administrative boundaries also mean that there are large discrepancies across different Tanzanian datasets and over time. This poses a challenge to evidence-based decision-making.

### Figure 11

# Institutions with critical urban responsibilities



Source: authors.

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While national government is largely responsible for policy formulation, local authorities ultimately have responsibility for the provision of much infrastructure and many services within urban boundaries. Table 7 summaries their key functions (see Annex D for a full list).<sup>141</sup> Formal responsibility for specific public services does not necessarily mean that local government can or will deliver. Key built environment services continue to be provided by SOEs, including energy and water, while other civil works have been financed and directly implemented by central government. Typically, ownership of the resulting assets remains local. The complexities of vertical coordination are illustrated by the water and sanitation sectors. Urban water supply and sanitation authorities are accountable upwards to the Ministry of Water and Irrigation, but not to the local authorities in their area. This means that the utilities can violate local urban plans and by-laws.<sup>142</sup>

Local governments are closely overseen by central governments. For example, PO-RALG recruits for local civil service roles, while senior positions are appointed by the Prime Minister's Office.<sup>143</sup> Similarly, while municipal authorities are responsible for preparing local urban plans, they must seek approval from two line ministries: PO-RALG and MLHHSD. Municipal authorities therefore lack a clear mandate, while poor coordination means that it is difficult for them to hold national governments accountable. These challenges are often evident with regard to donor-funded infrastructure projects. These investments often run into difficulty when local governments are handed responsibility for operating and maintenance costs without having been involved in the design and strategic planning. This can mean that the infrastructure has not been embedded in local government plans or budgets, and that municipal authorities lack the ownership or capacities to manage it. Donors can ameliorate this risk by engaging local governments in discussions and adopting incremental approaches to urban infrastructure development.

The MLHHSD has oversight of land policy and the monitoring and evaluation of such policy, as well as being the custodian of land on behalf of the President. However, the Urban Planning Act II (2007) sets out that "Every city council, municipal council, town council and township authority shall each become a planning authority in respect of its area of jurisdiction." In the last decade, Tanzania has pursued this goal by launching two ambitious decentralisation programmes, called the Local Government Reform Program I and II. The first phase successfully led to devolution of some responsibilities, particularly water, sanitation, and roads, although local governments largely continued to rely on technical staff working to central ministries and fiscal transfers rather than own-source revenue.<sup>144</sup> As of 2016, the second phase had not been fully implemented and the national government had extended oversight of local government staff.<sup>145</sup> This has taken place although the central government has reaffirmed on paper the importance of empowering local governments to make planning decisions, notably in the current Five Year Development Plan.<sup>146</sup> The trend back towards centralisation may reflect the successful performance of opposition parties in local elections in

# Table 6The assignment of expenditure responsibilities in Tanzania

Type of local government function	Local government activity
Concurrent functions: locally provided "national" public services	<ul> <li>Primary education</li> <li>Local health services</li> <li>Agriculture extension and livestock development</li> <li>Water supply</li> <li>Sewerage</li> <li>Local roads and works</li> </ul>
Exclusive local government functions	<ul> <li>Street cleaning</li> <li>Local parks</li> <li>Local markets</li> <li>(etc.)</li> </ul>
Local government administration	<ul> <li>Council operations</li> <li>Local planning</li> <li>Local financial management</li> <li>Village and Mtaa administration (etc.)</li> </ul>
Delegated central government functions	<ul><li>Outbreaks of infectious diseases</li><li>(etc.)</li></ul>

urban areas, including the municipal councils of Dar es Salaam, Arusha, Kinondoni, and Lilala. Political rivalries can make working relationships between national and local governments more difficult, creating disincentives for national government to support or strengthen the capacity of municipal authorities. This creates an additional criteria for urban planning and projects, whereby both levels of government need to be able to claim credit for successes.

Commitments to devolution are further compounded by capacity deficits at the local level. Many municipal governments in Tanzania lack sufficient human resources or critical technical skills in (for example) urban planning and land administration,<sup>147</sup> problems that are compounded by high staff turnover.<sup>148</sup> There are efforts under way to strengthen key capacities, such as the World Bank-funded Dar es Salaam Metropolitan Project, which allocates US\$26 million for data analytics, own-source revenue collection, operation and maintenance systems, and integration of transport and land use planning.

While there may be evidence and capacity gaps, others argue that the main constraint is the lack of political and institutional commitment to inclusive urban development, informed by the realities of particular cities. There are significant opportunities to pursue innovative, community-centred urban planning and deploy more resource-efficient technologies at scale.<sup>149</sup> Mayors, city councillors, and municipal councillors do have scope to make decisions about which parts of the city receive funding for development projects. However, geographic allocation of this funding is fiercely contested and there is strong demand for visible physical improvements rather than (for example) strengthening education and health systems through investments in human resources.<sup>150</sup> This means that coordinating agencies (at the local or national level) have an important role to play in ensuring that strategic priorities are addressed over political imperatives.

One way to strengthen governance is through aligning the activities of non-state actors. This can particularly help to alleviate pressure on local and national government as exclusive providers of necessary infrastructure. Both formal and informal private water providers can help to expand access to water, although a fragmented approach can mean that households are left without reliable, safe, or affordable supply.<sup>151</sup> Grassroots organisations can also play an important role in extending infrastructure to informal settlements, with local ownership ensuring that community priorities are addressed, and local labour reducing the installation and maintenance costs.<sup>152</sup>

However, ultimately there are limits to private or community provision without an enabling policy environment. Private sector involvement in public utilities has a record of elite capture and corruption across sub-Saharan Africa.<sup>153</sup> Individualised or small-scale private provision cannot achieve economies of scale. Local civil society need assistance with planning permissions, regulatory reforms, and technical assistance to deliver infrastructure in a legal and sufficient way.<sup>154</sup> Various levels and departments of government in Tanzania have also created challenges for non-state actors, with uncertain rule of law, excessive bureaucracy, and corruption. This manifests in Tanzania's 2017 ranking as 135th country in the world in terms of ease of doing business (down from 127 in 2016).<sup>155</sup> There is therefore a need to prioritise effective and transparent coordination between local authorities and non-state actors, facilitated and supported by national government, to ensure reliable, safe, and affordable service delivery in Tanzanian cities.

# 5.3 LAND USE PLANNING IN TANZANIA

Although the government has a clearly articulated land policy, a national land use framework is missing. Efforts towards its development have been hampered by a missing inventory of existing land that is present in Tanzania. The uncertainty and opacity of land ownership, rights, and use is partially due to the scale of informality in Tanzanian cities.

Informal settlements range from either encroachments of so-called "slums" to informal subdivisions of land purchased legally and developed for high-income households.<sup>156</sup> It is important to note that informality is not just a product of population pressure, but also by endemic and systemic failures in land markets and processes for regularisation and titling. Much urban land is developed based on customary land rights, which are not necessarily recognised by planning authorities. This leads to disputes between holders of traditional and statutory tenure.<sup>157</sup> Although residents of informal settlements have more security than those of many other sub-Saharan African countries, enforcement is often exclusionary, with evictions of low-income households in informal settlements common, while high-income informal subdivisions become formalised even if encroaching on land earmarked for industrial development or protected ecosystems. This illustrates how political and economic incentives do not necessarily support effective implementation of urban master plans developed for wider social benefit. There are large opportunities for enrichment through rent-seeking and speculation for ordinary citizens as well as elites. This has had multiple negative impacts, including less efficient urban forms, entrenched inequality, and the erosion of public trust in decisionmakers.<sup>158</sup> Shortages in formally held plots are also contributing to rising prices: demand was 10 times supply in 2005/06,<sup>159</sup> and there has been rapid urban population growth since then.

# Box 3 **Mwanza**

#### Background

Mwanza City is strategically located on the shores of Lake Victoria, which means that it has the potential to become an industrial and logistics hub for the landlocked regions around the lake. Mwanza is one of the fastest-growing cities in Tanzania, from a population of 223,013 in 1988 to 476,646 in 2012. The population density is 134 people per square kilometre, meaning that Mwanza is the second most densely populated urban area in the country after Dar es Salaam.

#### **Conceptual development framework**

The Mwanza Master Plan was prepared in 1992, reviewed in 2008 and again in 2015. The new Master Plan for 2015 to 2035 identifies the development projects that need to be delivered in next 20 years, organised over the short term, medium term, and long term. The priorities in the short term (2016–2021) are initiating projects in pipeline and establishing the recommended institutional set-up. The new plan proposed to divide the city into "6 Planning Zones" for meeting Mwanza's anticipated growth to 2.4 million population and 1.5 million jobs. The zones include the City Centre Zone–Business and Financial Hub; the Inner City Zone–SME and Retail Hub; the East Fringe Zone–Industrial Hub and Regional Centre; the North Shore Zone; and the South Shore Zone–Knowledge Hub.

#### Challenges

Mwanza's local government authorities have had limited contribution to urban planning, policy, and project development for the city. Decision-making has largely been centralised, leading to a gap between local development priorities and the allocation of funding. The weak capacity of the two local authorities in Mwanza means that they are not able to implement projects or operate services effectively. This reflects inadequate human resources as well as institutional weaknesses, particularly time-consuming bureaucratic procedures that delay development processes or dissuade developers from going through formal procedures. This means that it is often more efficient for central government to take responsibility for urban services, but this approach also limits opportunities and incentives for civil service in Mwanza to develop its capacities.

A closely related challenge is the scale of informality in Mwanza, which is partially a product of the inadequacies of the formal procurement process and administrative decision-making. It also reflects the unaffordability of most formal services for low-income households, forcing them to seek informal or self-provisioning options, as well as often a political disinterest in reaching the poorest urban residents.

#### **Priorities**

Mwanza City envisages an efficient, safe, convenient, productive, and competitive city by re-developing unplanned parts of the city, developing an industrial park, and establishing satellite towns to absorb some of the population growth. Delivering this spatial plan will require a clear and coherent approach to granting tenure to help to bring informal land uses into line with formal plans, as well as the use of anchoring investments in sanitation, water, and transport to enable liveable density. Partnerships with businesses, community organisations, and local research institutes can help to redress capacity deficits in government, particularly where the state is willing to adopt flexible and inclusive approaches to (for example) building codes in order to mobilise investment in core infrastructure and housing.

The FYDP II aims for Tanzanian cities to be increasingly characterised by planned and serviced urban settlements.<sup>160</sup> Key targets to be achieved by 2020 include: 20% of villages with land use plans; 400,000 regularised properties in unplanned settlements; 40% rate of property tax-payers; and 25% of serviced urban settlements with functioning town planning procedures.<sup>161</sup> These and other relevant targets are listed in Table 7. The discrete outcomes documented in the FYDP II need to be delivered in conjunction: the 2.5 million (rural and urban) citizens to be provided with customary rights of occupancy need to be recorded in the 250 land registries to be constructed at district or village level, and to align with the land use plans prepared for 25 districts. If successful, this ambitious programme of surveying, regularisation, and titling could underpin asset accumulation by households and ultimately a broader tax base that can finance urban services and infrastructure.

An information-gathering exercise is vital before a spatial land use framework can be designed. Initiatives such as the Land Tenure Support Programme (funded by the UK Department for International Development (DFID), the Danish International Development Agency (DANIDA), and the Swedish International Development Cooperation Agency (SIDA)) could help to realise these goals by making information on land records publicly available, establishing transparent processes around land allocation and clarifying current constraints to protecting legitimate land claims. An important aspect of this is improving the administrative efficacy of processing titling applications and establishing suitable building codes for settlements. This can facilitate regularisation and upgrading by reducing delays and lowering the per unit costs.<sup>162</sup>

It is important that such interventions safeguard the rights of vulnerable groups during the regularisation and titling process, such as wives (who may not be protected by their husbands' ownership) or tenants (who may face significant rent increases when the landlord achieves secure tenure).<sup>163</sup> Participation is essential for inclusive land use management:<sup>164</sup> more systematic approaches to including traditional, community-based, and private organisations are also required at the ward, district, and city level to mediate different interests and ensure that legitimate interests are not bypassed by more powerful players. The use of community-generated settlement profiles and maps can be a particularly important tool for policy-makers to understand the history, demographics and levels of service provision within informal settlements, as census and satellite data often lack the granularity required to allocate tenure and develop upgrading programmes in these parts of the city.<sup>165</sup>

# Table 7FYDP II urban planning, housing and human settlements development indicator and targets

Indicator/target	2015/16	2020/21	2025/26
Number of towns with master plans	-	25	45
Number of regularised properties in unplanned settlements	380,000	480,000	670,000
Land covered by informal settlements (%)	66	50	40
Population density people per square kilometre in the central business district	20,000	40,0000	60,000
Household density (houses per hectare in peri-urban areas	20	30	50
Land surveyed (%)	11	20	50
Land demarcated for industrial use (%)	1.8	5	10
Land demarcated for commercial use (%)	2.6	4	5
Property tax-payers (%)	20	40	60

Source: Ministry of Finance and Planning, 2016a.

# Box 4 **Dodoma**

#### Background

Dodoma was established as a colonial settlement under German rule in 1890. It was chosen by the Government of the United Republic of Tanzania to be an Administrative City in 1973 based on its central location. Although Dodoma has formally been the capital of Tanzania since 1973, Dar es Salaam has remained the political, economic, and administrative centre of the country. However, the new government of President Magufuli has committed to meaningfully relocate all central government functions.

So far, 2,000 civil service staff have already been relocated to Dodoma and thousands more will follow by 2020. The aim is to support the development of multiple urban hubs in the country, particularly to reduce the dominance of Dar es Salaam. The development of Dodoma is also to encourage regional connectivity, both within Tanzania and with neighbouring countries such as the Democratic Republic of the Congo, Rwanda, and Zambia.

#### **Urban plans and policies**

The Government developed a Master Plan for Dodoma in 1976. It also established the Capital Development Authority (CDA) to prepare plans and projects for the development of Dodoma as the national capital of Tanzania. The Master Plan was revised in 1988 due to the deteriorating economic fortunes of the country and again in 2010 due to dramatic changes in urban land uses compared with those modelled in earlier master plans. It is now being further updated in light of the new commitment to the capital, although the latest version has not been made public as of April 2017. The revisions are being overseen by the Prime Minister's Office and the Regional Commissioner's Office of Dodoma.

#### Challenges

Implementation of the Dodoma Master Plan has been contingent on sufficient resources from the national fiscus, particularly to build the infrastructure required for a capital city and government ministries. Part of the national budget for the financial year 2017/18 has been carved out for the development of Dodoma, although it is not yet clear if it will be sufficient. Planning, delivering, and financing the infrastructure and services required to meet the envisaged shift to Dodoma remains a core challenge. Urban development is likely to be constrained by weak urban planning and project management capacities. Business-as-usual forms of development are likely to compound existing inequalities in the city, with investments in low-income areas being de-prioritised relative to investments for businesses, political functions, and high-income households.

Urban planning, land allocation, and tax collection and enforcement in Dodoma has—unusually—been managed by the CDA rather than local municipal councils. The CDA was an independent development authority, which enabled relatively efficient land planning and administration, but reduced accountability to urban residents. There were some tensions over land allocations and resettlements, compounded by limited involvement for civil society and the private sector in the planning process, which meant missed opportunities for public buy-in and private investment. However, the CDA has recently been dissolved and its functions moved to Dodoma municipal council. At the same time, related land laws were changed to allow for longer leases that could attract private sector investors. These changes should mean that land processes become simpler and more competitive, although it is not yet clear whether Dodoma residents who live in informal settlements and work in the informal economy will be more effectively included in decision-making processes around land and other resources.

#### **Priorities**

The vision is to develop the city as a series of independent but inter-connected satellite towns of approximately 28,000 people each. These would be connected to the central business district through mass transit infrastructure, but each satellite town is envisioned to offer the full suite of amenities to prospective residents.<sup>166</sup> This is an ambitious plan in light of current infrastructure deficits. Dodoma municipality currently has less than 500,000 inhabitants, most of whom are rural and many of whom live in informal settlements. Literacy rates, mobile phone ownership, sanitation access, and other key development indicators are below national averages, while the civil servants who have already relocated to Dodoma work primarily out of offices at the University of Dodoma. Investments in core infrastructure must be a priority, but the financing model must recognise near-term affordability constraints while meeting projected demand from population and economic growth in Dodoma.

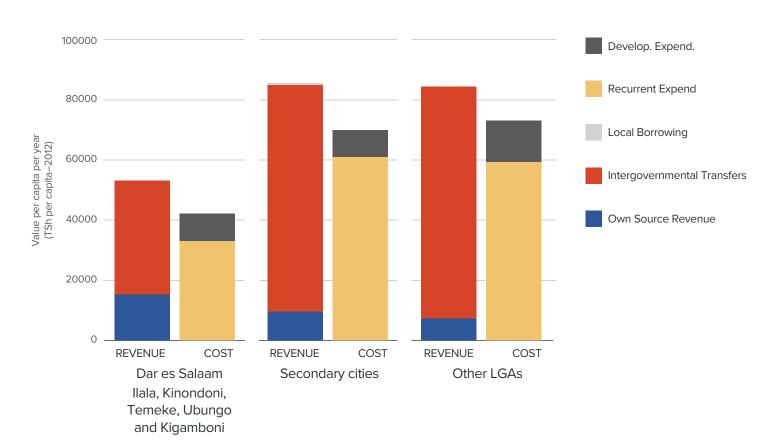
Source: Department for International Development, 2017.

# **5.4 MUNICIPAL FINANCE IN TANZANIA**

The majority of cities and municipalities in Tanzania are still financially dependent on fiscal transfers from central government for both capital and recurring expenditure.<sup>167</sup> Intergovernmental transfers account for 71%, 88%, and 91% respectively of the revenue of Dar es Salaam, secondary cities, and other local government authorities. These are often delayed so that local authorities receive funding at the end of the financial year, making it difficult for local governments to budget and deliver effectively—one reason for the discrepancy between revenues and costs in Figure 12.

The remaining revenue is primarily own source, the breakdown of which is presented in Figure 13. Local government authorities in Dar es Salaam collected more revenue than those in other urban areas, having stronger local economies. Arusha is also making significant progress in own-source revenue collection. The services levy—a levy on businesses based on turnover—is the largest source of revenue in total and most important.<sup>168</sup> One of the reasons for the low levels of own-source revenue generation is the re-centralisation of property taxes. Across East Africa, the collection of property taxes has become increasingly centralised, typically justified by the relatively well-developed capacities of revenue authorities. However, this separates functional and political responsibilities for taxation, undermining the accountability of local governments to citizens.<sup>169</sup>

Borrowing by local authorities is minimal, with only Mbeya recording a small amount of borrowing.<sup>170</sup>

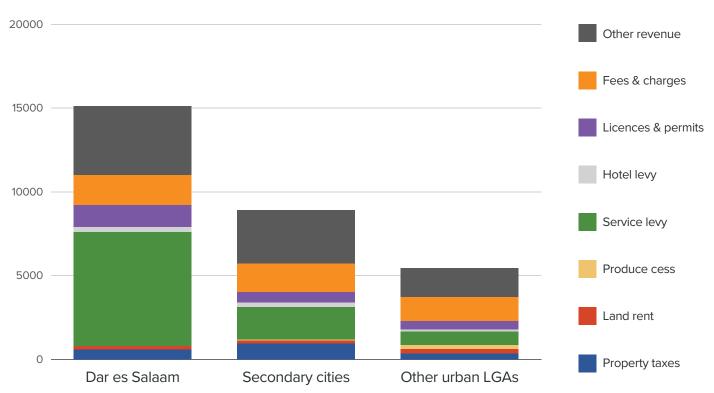


# Figure 12 Per capita revenues and costs of local government authorities in Tanzania, 2012

Source: PMO-RALG database.

#### **COALITION FOR URBAN TRANSITIONS**

A New Climate Economy Special Initiative



### Figure 13 Per capita own-source revenue of local government authorities in Tanzania, 2012

Source: PMO-RALG database.

Most expenditure by local governments is on recurring items such as education, health, and 'other' services, including roads, solid waste management, fire services, welfare, a range of community services, planning, and land use management (Figure 14). Although there is variation among different local governments, recurrent expenditure is on average split 65:14:21 for education, health, and other services. Much of this goes to staff salaries, over which local authorities have little control because central government determines the number and salary of local staff.<sup>171</sup> Formula-based allocations are used to allocate total finances, but were found to vary significantly, with certain local government authorities (LGAs) (e.g. Kihaba District Council) receiving up to four times as much as others (e.g. Sumbawanga District Council).<sup>172</sup> Local authorities in Dar es Salaam receive markedly fewer resources from central government than urban governments elsewhere in Tanzania, and consequently spend less per capita than other local governments.

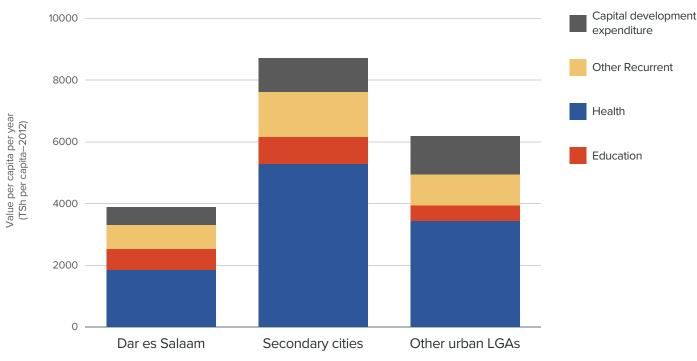
All local governments have low levels of capital or development expenditure: secondary cities spend around than TZS1,094 (US\$0.49) per person, and Dar es Salaam only TZS569 (US\$0.25). This is woefully inadequate considering their responsibilities for water supply, sewerage, local roads, health clinics, and other risk-reducing infrastructure. The way that Local Government Development Grants are spent is also heavily influenced by central government.<sup>173</sup> National ministries also often issue ad hoc directives with significant budget implications but little additional resources for delivery: notable recent examples include a drive to provide school desks and to construct laboratories in all secondary schools.<sup>174</sup> The relationship between central government and local authorities thereby limits the extent to which municipal authorities can respond to local priorities or implement locally led plans.

Most of the large-scale infrastructure in Tanzania's urban areas is provided by SOEs, which plan, construct, operate, and maintain a wide range of public works. Key agencies include Tanzania National Roads Agency (TANROADS), Tanzania Electricity Supply Company (TANESCO), Dar es Salaam Urban Transport Authority (DUTA), and the regional water and sanitation authorities. SOEs recover most of their operating costs from users of the service through tariffs (in the case of water, sanitation, and electricity) or from fuel levies and passenger fares (in the case of TANESCO and Dar es Salaam Rapid Transport (DART)). Most capital expenditure is from the national fiscus or development assistance. Publicly available evidence indicates that only TANESCO has taken out loans on its own balance sheet. However, projects financed with development assistance or by SOEs need central government approval and may not be compatible with local plans and priorities.

#### **COALITION FOR URBAN TRANSITIONS**

A New Climate Economy Special Initiative

There is limited private sector participation in large infrastructure projects in Tanzania, with the exception of independent power producers in the electricity sector. Small-scale and individual provisioning is also important; for example, the minibuses outside formal public transport networks or household and community investment in boreholes, septic tanks, generators, and solar home systems. These raise their own capital through savings or loans, but have limited scope to achieve the economies of scale of larger operators.



# Figure 14 **Per capita expenditure of local authorities by function, 2012**

Under the FYDP II, the central government has committed to support urban planning, housing and human settlements development with US\$1.6 billion in the period 2016 to 2021. This is out of a total of US\$48.8 billion allocated to the FYDP II as a whole,<sup>175</sup> and supplemented by other sectoral allocations relevant to urban priorities, such as water.

Various legislation and policies have committed to increase the capacity of LGAs to raise fiscal resources and receive direct investment—such as the Local Government Finance Act 1982. This provides for a wide-ranging scope of finance powers for urban authorities, such as: finances raised from trade, industry, and services; licence and registration fees (e.g. transport, businesses, public entertainment); taxes and levies (e.g. on corporate entities); rents or fees from public infrastructure; and fines (e.g. in relation to markets, recreational halls).<sup>176</sup> Meanwhile, the Human Settlements Development Policy 2000 had prioritised increasing the annual public budget spent on human settlements.<sup>177</sup>

The reality is, however, that many LGAs often remain financially constrained due to limited and unreliable transfers from central government, lack of capacity to raise resources, and re-centralisation of fiscal powers (such as property tax collection). The last may be motivated by political considerations: where urban areas are controlled by opposition parties, national governments are often reluctant to empower municipal authorities or relinquish control over visible public services.<sup>178</sup> Similarly, the Tanzania Revenue Authority is responsible for collecting simple local taxes (for example, those on large businesses), while local governments depend on more time-intensive and politically unpopular revenue sources such as business licences.<sup>179</sup> The annual budgets of the urban local authorities also need to be approved by central government after being vetted by the Regional Development Director, further highlighting the close management by central government.

Source: PMO-RALG database.

# Box 5 **Dar es Salaam**

#### Background

The proportion of Tanzania's urban population living in Dar es Salaam has remained at approximately one-third of the total from 1972 to 2012.<sup>180</sup> On average, these residents enjoy higher incomes and ownership of assets, including cell phones, televisions, electric/gas cookers, and fridges (see section 3.2).

However, there are pronounced inequalities in the city with a large proportion of urban residents living in considerable poverty, without adequate access to basic services and infrastructure. For example, over 75% of the population living in Dar es Salaam's informal settlements depend on unsafe pit-emptying services for sanitation.<sup>181</sup> This has significant implications for health and productivity: diarrhoeal diseases (transmitted through contaminated drinking water) are the fourth most significant cause of years of life lost in sub-Saharan Africa.<sup>182</sup>

To higher-income residents, the consequences of poorly managed economic growth are perhaps most evident in the city's growing congestion, a function of increasing levels of vehicle ownership. It can frequently take 2.5 to 3 hours for residents to make a round trip. The city is tackling this through investment in public transport systems, most notably the 21-kilometre bus rapid transit (BRT) system opened in 2016 and operated by Usafiri Dar es Salaam Rapid Transit (UDA-RT).

#### **Conceptual development framework**

Current plans are directed towards reforms of the institutional and governance arrangements of Dar es Salaam City in order to improve coordination, accountability, and service delivery. The reforms aim to guide Dar es Salaam as it transitions into an efficient metropolitan area by redefining the roles and functions of Dar es Salaam City Council and, in particular, to provide clear mandates requiring the municipal councils to coordinate services on a metropolitan-wide basis.

Urban plans for Dar es Salaam also have clear goals of improving informal settlements and investing in key infrastructure, particularly roads, power distribution, and the expansion and modernisation of the Dar es Salaam Port. This will reinforce its role as a logistics hub for the country, hopefully creating significant jobs in the process.

#### **Key challenges**

Dar es Salaam is fundamentally constrained by the lack of resources to finance trunk infrastructure. City-scale projects such as the BRT system are essential for promoting compact and connected urban form, but require significant capital investment. Dar es Salaam has limited financial resources, already constrained to meet existing infrastructure deficits in housing, water, waste management, sanitation, transport, energy, and health clinics, let alone projected demand with rapid population growth.

The district municipalities, regional secretariats, and local government authorities have overlapping mandates, which undermines regional coordination. This makes it difficult to coordinate effective planning and delivery of major services, such as transportation, land use planning, water, and waste management, and to achieve economies of scale.

#### Key objectives and implementation focus

There is a need to incentivise coordination across different levels and sectors of government. Early progress is being made in the transport sector, with opportunities to expand and improve the DART, invest in pedestrian and cycling routes, and to integrate informal providers of motorised transport options into government systems.

The five local authorities in Dar es Salaam also have relatively well-developed capacities compared with those of smaller urban areas in Tanzania. This means that they are better positioned to pursue new sources of financing, such as private-public partnerships or land value capture, or to improve the collection efficacy of existing revenue streams, such as business licensing.

# 6. Tanzania's urban action plan

This section aims to identify priority actions for managing rapid urban population growth in Tanzania in order to deliver sustained and inclusive economic growth in a low-carbon and climate-resilient way. The draft recommendations are intended to start more detailed and substantive consultation with the Planning Commission, Ministry of Finance and Planning of the Tanzanian Government, which will offer ongoing support to implement FYDP II. The recommendations are primarily for decision-makers in the national government, including ways that they can enable municipal authorities and other urban stakeholders to support better urban development.

# 6.1 ESTABLISHING A NATIONAL URBAN POLICY

Recommendation 1: Finalise the National Urban Development Strategy by drawing together relevant targets from existing policies and conducting a comprehensive consultation process to build ownership and raise ambition.

Recommendation 2: Invest in a national, integrated economic and spatial plan to manage urban growth at the country level.

# Recommendation 3: Review and revise housing, industrial, land, planning, and transport policies to ensure that they are aligned behind a 3C model of urban development.

The absence of an overarching urban policy framework in Tanzania has led to a lack of cohesion across different institutions and a lack of coherence across various policy documents. This jeopardises the effective management and steering of urban development as urbanisation in Tanzania accelerates. In its Five Year Development Plan II, the central government has committed to developing a National Urban Development Strategy. Ensuring swift completion should be a top priority for the government.

As outlined in section 4.1, the NUP should articulate a clear vision and core priorities for urban development in Tanzania. In particular, it needs to envision a network or system of towns and cities across the country. Such an urban system is necessary to absorb projected urban population growth and diversify development in Tanzania by both geographic region and economic sector. It can also reduce the pressure on infrastructure and services in Dar es Salaam. Efforts to stimulate the development of multiple urban hubs in Tanzania can complement the regional integration process under the East African Community, as towns closer to neighbouring countries can benefit from closer access to markets and consumers.

Tanzania has already identified important human and economic development goals in diverse policy documents, having established targets for new electricity grid connections, piped water connections, houses constructed, and so on. These should be compiled and reviewed by a wide range of ministries, urban experts, and non-government stakeholders such as private firms and civil society organisations. It is important that local voices as well as multinational voices are heard in this process. The purpose of this consultation is to identify interventions that could help to deliver multiple policy goals, and to map possible tensions between the objectives and mandates of different government agencies. For example, enhancing the reliability and quality of water and sanitation provision are goals in their own right, but these investments can also deliver against targets for the health sector and be used to anchor spatial form. Similarly, investments in pedestrian pathways might deliver against road safety targets while promoting compact and connected urban development.

Although the NUPs should ultimately be the responsibility of a single ministry, responsibilities and targets should be allocated to—and owned by—appropriate departments and utilities: energy, housing, land, public works, transport, water, and so on. This can help to ensure that diverse government bodies are working towards a shared urban vision. Coordination can be facilitated through inviting relevant line ministries to participate in the NUP drafting and consultation process. The NUP must also have the full support from the Ministry of Finance to ensure that sufficient public resources are allocated to deliver new infrastructure or leverage necessary co-financing.

It is important to avoid overburdening or threatening public agencies with demands for radical change. An incremental approach may be a more practical way to avoid the fatigue or collapse associated with ambitious reform programmes. The Prime Minister's Office and Ministry of Finance and Planning may therefore be wiser to focus on tangible functional improvements in a few key policy areas where there are particular conflicts. A starting point might be the review of key performance indicators to ensure that they complement the NUP; for example, transport agencies should not be evaluated according to kilometres of urban road built when the objective is to encourage more compact and connected cities.

A core element of the NUP must involve aligning spatial and economic plans. This is necessary for integrated urban planning, whereby different infrastructure investments reinforce each other to transition to more sustainable and inclusive development paths. For example, mixing residential, commercial and recreational land uses can reduce transport demand in the long-term, while early investment in public transport and infrastructure for non-motorised options can reduce demand for private vehicles. This requires coordination both horizontally (across government departments) and vertically (between central and local governments). For example, the ministries responsible for housing, industry, and transport need to work together to ensure that employment centres such as special economic zones (SEZs) are effectively connected to residential areas. These ministries also need to work with utilities to ensure that both homes and workplaces have access to reliable electricity, safe drinking water, and effective sanitation systems. Investments in networked infrastructure can support the realisation of spatial plans, provided sufficient space is created for self-help and other low-income housing.

# 6.2 BUILDING THE CAPACITIES AND ACCOUNTABILITY OF PUBLIC INSTITUTIONS

Recommendation 1: Establish coordinating structures to support urban planning at the city scale in Mwanza and Dar es Salaam, integrating the activities of councils and state-operated entities.

Recommendation 2: Invest in the capacities of local governments, particularly to improve operating processes and systems such as project planning, procurement, budgeting, and monitoring.

# Recommendation 3: Experiment with or expand mechanisms for community participation and oversight in order to improve accountability, transparency, and public buy-in.

There is scope for the central government to increase synergies in urban planning if it can move beyond the current disjointed, sectoral approach. This may require revisiting the institutional responsibilities mandated in legislation. In particular, spatial planning is currently overseen by two line ministries: the PO-RALG (under the Regional Administrative Secretaries) with final approval by the MLHHSD. This could be streamlined by granting final authority to just one of these agencies.

There are also opportunities to improve institutional coordination at the sub-national level. The management of networked infrastructure and associated finances should be undertaken at the city scale, which is difficult in Dar es Salaam (with five councils) and Mwanza (with two). There is therefore a need for a coordinating structure to reduce fragmentation. Horizontal coordination of this kind can enable the delivery of transboundary projects that offer potential economies of scale. However, realising these gains will only be possible if the coordinating structure has the authority to influence the SOEs responsible for electricity, water, and sanitation to ensure that their investments align with and reinforce urban plans.

A second urgent priority is using public sector capacities more effectively. The Tanzanian government has a very small resource envelope in terms of both human and financial resources. The central government therefore needs to use it all efficiently—including that based in local authority offices.

Municipal authorities' responsibilities include street cleaning, local planning, and local financial management, as well as public services provided by central and local governments working concurrently: for example, primary education, water supply, sewerage, local health services, and local roads. However, local governments typically lack the skills or resources to fulfil these responsibilities effectively. There is an urgent need to build the technical, institutional, and financial capacities of local authorities to oversee the local urban development process effectively. Training of individual staff is important, but it is only a small part of the solution: municipal authorities need support to improve procedures and systems such as project planning, budgeting, and monitoring. Improving the collection and management of own-source revenue is particularly important, as it increases the capacity for local public expenditure while reducing the need for fiscal transfers from central government. The capacity of local government authorities can be bolstered through domestic initiatives, such as data banks with on-demand urban data to inform urban planners, and international initiatives, such as city creditworthiness academies (see annexes for international examples).

Citizens can engage meaningfully with urban spatial planning and public expenditure at the level of local government, presuming that appropriately inclusive governance arrangements have been established. To encourage transparency and accountability, the central government of Tanzania can establish systems such as regular citizen forums and community development funds at the municipal, regional, and national level. This model has been very successful in Ghana, Mozambique, and Uganda, with the support of Cities Alliance.<sup>183</sup> Citizen scorecards provide another means for facilitating collaborative space and encouraging greater state responsiveness to communities, as documented in Malawi.<sup>184</sup> The expansion of mobile phones also creates opportunities for e-governance systems with their significant potential to enhance the responsiveness and transparency of

public service delivery.<sup>185</sup> These mechanisms for community participation and oversight can ensure that issues affecting the urban poor are reflected in the municipal development agenda, as well as building popular support for the government. It can also provide a platform by which local governments can coordinate spatial and economic development within their boundaries.

# 6.3 LAND USE FRAMEWORK

Recommendation 1: Support the collection and publication of land use data in a convenient and modifiable form. This should include evidence collected by public agencies, research institutes, grassroots organisations, and satellite imagery.

Recommendation 2: Support the development of national- and city-scale spatial plans that promote integrated neighbourhood development.

# Recommendation 3: Identify infrastructure priorities that could help to address socioeconomic needs or bottlenecks, and could effectively anchor compact and connected spatial form.

Urban planning and investment needs to be informed by locally relevant evidence. Robust and detailed data can help decisionmakers to understand current trends in urban development, to evaluate urban policies and programmes, and to anticipate economic and population needs with rapid urban growth. Currently, decision-makers in Tanzania rarely have sufficient information on land use and land use change in urban areas to develop a comprehensive national urban spatial and tenure strategy.

A national data-gathering and publishing exercise can be a helpful way to compile and categorise the data collected by different actors and to inform future usage. Some of this information is collected routinely by public agencies (for example, through the national census), but is not stored centrally. Other information is collected by non-state actors, notably research institutes and community-based organisations through the "Know Your City" programme.<sup>186</sup> However, much of the evidence collected in Tanzania is not published in convenient, modifiable, or re-usable form. In some cases, this is because the owners legitimately want to manage political and economic risks associated with the use of sensitive data. More recently, the Statistics Bill 2013 included severe penalties for anyone who published data outside approved publications by the National Bureau of Statistics.<sup>187</sup> This legislation limits the scope for non-state actors to produce and share evidence that could inform better decision-making, particularly in informal settlements for which data are scarce. It is therefore a severe constraint in designing and delivering coherent national urban policies and plans.

The data can inform the development of city-scale spatial plans. It is important that these realistically reflect the capacities and resources available to cities, and that they are informed by existing land uses. The implementation of spatial plans needs to be closely linked to tenure reform, particularly to support the formalisation of informal settlements. This is an essential precondition to more efficient land and property markets (including densification), but must be done in ways that safeguard the interests of low-income and other marginalised groups.

Conventional urban planning tools, such as zoning ordinances and building codes, are an appropriate way to govern middleand high-income housing developments, commercial and public buildings, and industrial zones. In these contexts, regulations should be enforced by municipal authorities. However, these land use management tools are often ineffective in the presence of widespread informality. Urban residents will repeatedly return to sites with proximity to employment and services.

In these circumstances, strategic infrastructure investments can provide an incentive for residents of informal settlements to comply with spatial plans. Communities are typically willing to live in more compact urban forms if they have tenure, access to affordable services, and proximity to employment. The state can therefore incentivise densification or relocation through an integrated approach to neighbourhood development, whether upgrading existing settlements or developing greenfield sites with water, sanitation, and transport infrastructure. Where the state is unwilling or unable to make such investments, it needs to establish an enabling legal and regulatory environment so that citizens can co-produce this infrastructure in partnership with municipal authorities.<sup>188</sup> Such efforts should be complemented through shelter finance initiatives, including market-led approaches to bring mortgage finance "down market" and community-driven approaches in alliance with state agencies.<sup>189</sup> This approach also helps to build social cohesion and political trust, which can facilitate voluntary resettlement where communities are at risk (e.g. around rivers) or large infrastructure projects are planned (e.g. railways).<sup>190</sup> By comparison, eviction and displacement—the conventional response to informal settlement—compound urban poverty and vulnerability.

## 6.4 NATIONAL URBAN FINANCE STRATEGY

# Recommendation 1: Develop a municipal investment framework informed by the urban infrastructure priorities identified in section 6.3.

#### Recommendation 2: Develop a pipeline of bankable projects that could secure private/development co-financing.

#### Recommendation 3: Invest in the capacities of local governments to raise, manage, and disburse own-source revenue.

National urban policies and plans will only be implemented if the government can mobilise sufficient resources. This is an immense challenge in a low-income country such as Tanzania. It is therefore important that the government develops a municipal investment framework that estimates capital costs, operating costs, and revenue for core urban infrastructure projects. This should ideally be informed by financing options: the framework should identify a diverse range of financing mechanisms and co-financing sources that the public sector can draw on, recognising the scope, limitations, and risks of each. Maintaining affordability will be a key constraint.

A comprehensive municipal investment framework of this kind can inform a targeted capacity-building programme for subnational governments. Local authorities in particular are usually cash-constrained and largely reliant on fiscal transfers from central government. Although these funding streams will remain important, it is essential to support municipal governments in collecting and managing local revenue from diverse sources. The delivery of such a programme may fall to the Ministry of Finance and Planning with technical assistance from development agencies, as the line ministry for municipal authorities—PO-RALG—does not have either the incentives or knowledge to deliver such a programme. Where municipal governments already have more sophisticated financial capacities, national governments can support municipal authorities to develop city-scale investment frameworks. This should be a priority for Dar es Salaam due to its current infrastructure deficits, and Dodoma in light of anticipated population growth.

It is also important to acknowledge the legal and regulatory constraints on local authorities in Tanzania. Although Dar es Salaam in particular has managed to increase own-source revenues (motivated by relatively small per capita intergovernmental transfers compared with other local government authorities), legislative reform may be necessary to further increase municipal financial powers. A recent tendency towards re-centralisation of, for example, property tax suggests that this may not be politically feasible. An effective financing strategy will depend on both levels of government being able to take some credit for successes.

There are limited opportunities for municipal authorities in Tanzania to access international capital markets. The national government can theoretically issue sovereign bonds to finance capital expenditure, although Tanzania has not obtained a credit rating from any of the major agencies. This means sub-national governments will not be able to issue investment-grade bonds.

The private sector in Tanzania is comprised primarily of small and medium enterprises, many of which are informal. This limits the scope to raise domestic capital. However, governments can attract private investment from domestic and international sources for bankable projects, such as mass transit and electricity/water utilities. Leveraging this capital may require strategic use of public finance or development assistance to reduce risk, for example through credit guarantees, first-loss capital or public-private partnerships. Governments should also seek to actively encourage the participation of other organisations in public service delivery. Soft loans and infrastructure subsidies for households and communities could accelerate investment, as has been seen with the Baan Mankong programme in Thailand or the Uganda Country Programme overseen by Cities Alliance.

# 6.5 CONCLUSIONS

Our preliminary analysis demonstrates the significant challenges facing national decision-makers in Tanzania. Massive investment in infrastructure and services is needed to meet near-term human development needs, and to lay the foundation for sustained and inclusive economic growth. It will be extremely difficult to mobilise resources at the necessary scale due to widespread poverty, severe capacity deficits, and political and administrative disincentives embedded in governance structures.

Nonetheless, it is clear that the rapid population growth in urban Tanzania also offers an opportunity. Urbanisation offers the potential for structural transformation, as well as scale and agglomeration economies that can accelerate human and economic development. To realise these potential gains, the national government of Tanzania needs to pursue the 3C model: compact, connected, and coordinated urban development.

The draft recommendations presented above offer a starting point for consultations with the Tanzanian Ministry of Finance and Planning. These include the development of a national urban development strategy, a clear financing plan linked to specific infrastructure priorities, an ambitious capacity development programme for local governments, and a land use plan that effectively links spatial and tenure reform. Following consultations, these recommendations can be further shaped to improve their relevance and specificity to the Planning Commission for the FYDP II implementation strategy.

That is not to say that the path ahead will be easy. Tanzania faces fundamental structural, governance, and fiscal deficits that have constrained its development for decades. Technological and institutional innovations may partially redress these gaps, but delivering a low-carbon, inclusive, and prosperous network of cities will require a level of investment and coordination that few African states have achieved.<sup>191</sup> Inevitably, there will also be trade-offs in terms of which investments to prioritise, as well as value judgements over which outcomes are most desirable. This is an immense challenge—but it is also an opportunity that Tanzania cannot afford to miss.

# ANNEXES

# ANNEX A | URBAN SUCCESS STORIES FROM AFRICA, ASIA AND LATIN AMERICA

Delivering compact, connected and coordinated urban growth requires appropriate urban planning policy and programming, as outlined in the previous section. Here we present some success stories of countries that have got this right through policies and investments at either at national or city level. The success stories come from Africa, Asia and Latin America, and aim to help key economic decision-makers in Tanzania to appreciate the range of policy and financing instruments available to them.

These success stories were taken from NCE and IGC emerging evidence.

#### National examples

#### SPATIAL PLANNING FOR ECONOMIC PROSPERITY

In the case of Vietnam, an overarching national urban policy was used to guide national economic growth. The national urban development vision, 'Master Plan Orientation for Vietnam's Urban System Development to 2025 with Vision to 2050', has helped to guide urban growth priorities in the country. This focused on the development of secondary cities in the north, centre and south of the country to balance economic growth with the primary city, and the development of small urban centres near major cities. Specific government legislation was enacted to support the introduction of classifications to guide cities on their respective socioeconomic functions—this in turn has had implications for the city's administrative functions, tax collection powers and state funding allocations. The legislation promoted vertical devolution of urban responsibilities and the empowerment of city policy-makers. A major challenge has however been in the upward exploitation of classifications by local authorities, requiring new thinking on innovative planning solutions for delivering the devolution process in an accountable manner.<sup>192</sup>

In South Korea, economic planning provided the foundation of national urban planning, with the aim of improving multipolar growth. Essentially, urban planners and policy-makers applied the 'growth poles' concept to encourage competition between secondary cities and the primary city of Seoul. National policy elaborated on 'Integrated Regional Settlement Areas' that designated cities as regional capitals (or secondary cities) and were specialised in various sectors—from manufacturing and trading to administrative services. Inter-city rail networks were constructed to connect these cities and improve national-scale network effects. A key implementation challenge has however been the use of 'green belt' policies in secondary cities, which were ultimately ineffective in curbing urban sprawl—demonstrating that alternative options should be explored for promoting the compact growth of secondary cities.<sup>193</sup>

Integrating national urban planning with economic plans has been a fundamental step for developing an appropriate legal and political landscape for multipolar growth in these Asian countries. From these examples, Tanzania should seek to ensure that its national economic plans, and industrialisation strategy envisioned under the FYDP II, are integrated with national urban planning processes.

#### LAND USE MANAGEMENT

In Rwanda, the Organic Land Law was passed in 2005 under which the Government formally registered all the country's land under freehold or leasehold tenure. In addition, administrative reforms helped facilitate the ease of property transfers. Overall this has encouraged both domestic and foreign investment in urban centres. Rwanda is ranked by the World Bank as the second best country in Africa to do business. However more remains to be done to increase the inclusion of urban development, given strict planning regulations have also resulted in formal housing being beyond the reach of many low income households.

In Ghana, reforms to land administration were undertaken, and have greatly improved the functioning of land markets. In particular, the computerisation of land records, combined with a decentralisation of deed registries to 10 regional centres, has decreased the average time to register property transfers from 169 days in 2005 to 34 days in 2011.<sup>194</sup> This greatly improves the efficiency of property sector investments.

Effectively functioning land markets can increase the efficiency of land markets and private sector investment, as demonstrated in Rwanda and Ghana. Conducive land use planning laws will act as a vital foundation to compact urban planning and private sector participation in Tanzania also.

### TECHNICAL CAPACITY BUILDING

In Indonesia, a City Planning Lab was developed to provide demand-driven data for cities. As domestic technical capacity increases, there are plans to phase out international support to the lab.<sup>195</sup>

The Sierra Leone Urban Research Centre was jointly established by University College London and the Institute of Geography and Development Studies, Njala University in 2015 in Freetown. It conducts research across a range of areas, including urban health, vulnerability, land, housing, firm development in cities and employment. The Centre aims to use and analyse new urban data to tackle issues of urban development seen across Sierra Leone. At the same time, the research unit provides domestic capacity building through training programmes and collaboration with universities.

Adequate investment in data is necessary for urban centres effectively track their progress against urban targets, and ensure policy processes are iterative in responding to implementation realities. Fulfilling Tanzania's urban ambitions requires investment in data collection to monitor progress against set policy targets, including those envisioned under the FYDP II (this is explored further in subsequent sections). This also support iterative policy processes, where policies can become reactive to the realities of implementation.

### **City examples**

These success stories are focused at the city level, however many of the below examples also demonstrate the vital role of conducive national urban policy in incentivising positive actions at the city level—such as through financial or technical empowerment of city authorities in national legislation.

#### URBAN FINANCING AT CITY-SCALE

There are an increasing examples of city-scale financing options in use in Africa. In Uganda, the Kampala government set out to improve the creditworthiness of the city with assistance from the Public-Private Infrastructure Advisory Facility—which was enabled through legislative change at the national level. A strategic plan was developed to improve its governance and financial management—and within a year, the city achieved an "A" rating for creditworthiness, and increasing locally generated revenue by 83%.<sup>196</sup>

In Johannesburg, green municipal bonds have been issued with a target value of US \$136 million. The bond scheme ended up being oversubscribed and investors are predicted to receive an 185-basis point return above sovereign bonds.<sup>197</sup>

Institutional reforms can also help to improve the capacity of local authorities, including in raising finances. In Uganda, for example, an Act of Parliament in 2010 replaced the Kampala City Council with the current Kampala Capital City Authority. This resulted in a number of associated governance changes. In particular, the Kampala Capital City Authority was headed both by a chief accounting officer, the Executive Director, appointed directly by the president, as well as a political head, the Lord Mayor, elected by the people. The reform helped to improve the institutional and procedural capacity of the local government akin to developed country revenue administrations. Through this process Kampala has managed to increase its own source revenue by over 100%. The Act also meant that instead of running Kampala like another district, it became managed by central government, via a dedicated Ministry, to which the Executive Director reports. These changes both increased the funds allocated by the central government to Uganda's largest city, and more importantly, curbed corruption by instituting more checks and balances.

Minor reforms to land administration were instilled in Hargeisa, Somaliland, and significantly expanded the tax base for property taxation. After years of conflict, land ownership registration in 2005 was seriously incomplete, and municipal revenues were insufficient to cover essential municipal services. With assistance from UN-Habitat, municipal government in Hargeisa was able to develop a basic physical cadaster of properties and their occupants using satellite data and surveying techniques. The use of satellite data allowed cadastering to be done at a far quicker pace than traditional site visits alone, and by identifying property occupiers local government officials were able to avoid a long and costly process of identifying property ownership. Over the course of eight months between 2004 and 2005, registered taxable properties increased from 15,850 to 59,000. Alongside further reforms to property valuation and tax collection, this allowed local government to increase revenues by 248 percent.<sup>198</sup>

Land and property tax reforms were carried out in Lagos under governors Tinubu and Fashola since 1999, which have helped Lagos State to raise public revenues by from \$190 million to over \$1 billion in 2011<sup>199</sup>. By investing in the expansion of a property inventory that expanded the tax registry fourteen-fold between 2007 and 2010, alongside strong political will to enforce taxes even on political elites, the government was able to source the necessary finances to invest in public infrastructure and services. These investments were in turn vital to gaining the public support necessary for widespread tax compliance.<sup>200</sup>

These examples demonstrate the role of institutional and policy reform to increase the financial capacity of urban authorities. In order for Tanzania to plug the urban finance gaps, a major step will be in ensuring local authorities are capacitated to raise their own private and public financial resources, including through the use of innovative solutions.

#### TECHNICAL CAPACITY BUILDING

In Colombia, city planners are seeking external advice in order to fill urban planning capacity gaps and inform urban planning using international expertise. This is to guide the development of sustainable urban development strategies and their implementation, and includes the city participation in the New York University's Urban Expansion Initiative.<sup>201</sup>

Tanzanian national urban planning should not only seek to increase the number of urban plans developed by urban authorities, but should also seek to enable urban authorities to access technical urban expertise in the development of these plans (whether domestic or international).

#### PUBLIC TRANSPORT

Efficient public transport systems are vital for reducing emissions from personal vehicles, expanding economic networking opportunities and promoting equitable transport access.

In 2014, the government of Ghana collaborated with the Korea International Cooperation Agency in developing an urban transport masterplan for the Greater Accra Metropolitan Area—which aims to tackle growing traffic congestion through coordinated intervention in bus, tram and subway transport. As part of these reforms, a BRT system was launched in Accra (September 2016) to provide citizens with faster, safer and more cost-effective transportation in the city. Political resistance by existing private tro tro minibus operators has been mitigated to some extent through incremental introductions of BRT buses to allow time for acceptance as well as discussion with transport unions. However, more needs to be done to legally enforce prevent private vehicles from using the dedicated BRT lanes, a significant barrier to the efficiency of the system.

In Johannesburg, meanwhile, the net present value of the Rea Vaya BRT has been estimated at US \$143 million and increases to \$900 million when improved road safety and mobility benefits are included. Whilst for the Lagos BRT, commuter cost savings generated by the BRT were estimated at 50% of costs.<sup>202</sup>

A light rail train (LRT) system made operational in Addis Ababa in 2015, had a total capacity of approximately 60,000 passengers per hour across two lines.<sup>203</sup> It enabled environmentally clean mass urban transport for the city without further congesting the city's roads. The system is estimated to save every passenger 63 hours per year in travel time—resulting in approximately US\$39.5 million worth of time savings in 2020.<sup>204</sup> The LRT has yet to be used at full capacity, but is already used by about 120,000 people every day and earns approximately 400,000 birr in daily revenues from ticket sales.<sup>205</sup>

The above African examples demonstrate the significant economic gains of public transport infrastructure in avoided social costs and financial costs. Tanzania's sub-national urban and infrastructure plans should seek to prioritise public transport infrastructure in Dar es Salaam and its secondary cities—as well as ongoing expansion of existing infrastructure, such as under the Dar es Salaam BRT. The cost recovery options also help to improve the attractiveness in the longer term, compared with other conflicting priorities.

#### PUBLIC SERVICE DELIVERY

In Kibera, Nairobi's largest informal settlement, over 50 'biocentres' were installed to collate human slurry. These were converted into biomass for energy purposes. Whilst in Kampala, the under-provision of waste collection to an estimated 40% of residents resulted in the government engaging the local community in solid waste collection and recycling activities. This converted a public infrastructure service failure into an employment opportunity.<sup>206</sup>

In Durban, 2,500 'community ablution block' public washrooms have been installed in nearly 500 informal settlements. These are low-cost sanitation solutions, made from refitted marine cargo containers, refitted with toilets, showers and running toilets.<sup>207</sup>

In the capital of Burkina Faso, Ouagadougou, a successful sequence of investments, efficiency improvements and revenue collection drives has resulted in the widespread expansion of improved water resources. This has resulted in 94% of Ouagadogou's total population with access to a clean, piped water service 23 hours per day, including 90% of the poorest 40% of the population.<sup>208</sup>

Further public service delivery requires coordination across governmental levels. For example, in Uganda, the Kampala Capital City Authority has worked with the National Water and Sewage Corporation on providing low-cost public water taps in low-income areas—and these now serve 78% of the urban poor.<sup>209</sup>

Public service delivery gaps can also be viewed as an opportunity for Tanzania—including in adopting innovative solutions—such as employment for informal dwellers or energy access solutions.

#### HOUSING

Kigali has been facing a housing shortage for low-income residents and has developed innovative 'incremental housing' methods—which are being piloted—and help to lower construction costs. Incremental housing schemes provide incomplete but liveable houses for individuals who can improve and "complete" them over time. This enables low-income household to avoid unaffordable upfront costs for housing, allows them to improve the quality of their housing as and when they are able to afford it, and gives households a greater sense of ownership over their lived environment.

This 'support-based' approach was also successfully implemented in Sri Lanka's 'Million Houses Programme', which achieved a ten-fold increase in the number of low-income families reached compared to traditional 'supply-based' approaches.<sup>210</sup>

In Ethiopia, the Integrated Housing Development Programme has built 110,000 housing units in the last decade<sup>211</sup>, mostly in Addis Ababa where demand for affordable housing is particularly acute. New houses have been fitted with water and sewage infrastructure for the new houses. Both the housing and the accompanying infrastructure will be funded by selling off the lower floors of some of the newly built units for commercial purposes.

Given the significant urban population boom predicted to occur in Tanzania in the coming decades (see following section), innovative support-based housing solutions will be essential to ensure equity in access to housing—including to youth, women and minority groups—whilst ensuring sufficient availability will be equally pressing concern.

### Conclusions: Key ingredients for good urban growth

In conclusion, this section presented some success story examples of well-planned urban growth across national and city levels, which on the whole support the theoretical framework in section 3. Here we summarise the main findings of relevance for urban planning in Tanzania.

National urban policies should adequately consider the spatial dynamics of urban planning, including the geography of economic planning to promote multipolar economic growth. This should include consideration of:

- A national urban policy framework to guide the national urbanisation vision, including economic planning, priority cities and infrastructure
- National financing strategy
- A focal government to carry the urban vision forward, with devolution of responsibilities across Ministries and to local authorities
- Multi-level governance with effective coordination between national ministries, regional government and local government authorities, as well as non-government actors
- National land management policies that support efficient land markets
- Technical capacity building for national government departments responsible for urban planning, as well as data availability, for monitoring and evaluation of progress

There is also a need to capacitate local authorities for urban planning at the national level—in order to become financially, technically and institutionally empowered. This should include:

- Legislation supporting city leadership in urban planning, including a wide range of public, private and civil society actors
- Capacity building initiatives for local authorities—including in innovative urban solutions
- Initiatives leverage international expertise in the shorter-term for local urban planning, and also improve domestic technical capacity in the longer-term<sup>212</sup>
- Transparency and accountability measures to improve the delivery of urban services and infrastructure
- Strategic city-level financing strategies with a wide range of financing options
- Ensuring city authorities have powers to raise public and private financial resources locally

This section has outlined some select examples of what well managed urban growth can look like for Tanzania—in being compact, connected and coordinated.

## ANNEX B | GENDER AND URBANISATION

Tanzania is at the beginning of an urban transition, however its urban population remains relatively low compared with international standards. The urbanisation trends seems to have encouraged a roughly equal participation of female and male urban migrants to date—and whilst 39.5% of women aged 15+ reside in urban areas (including in Dar es Salaam), 37.9% of men are urban (2014 data).<sup>213</sup>

#### Table B1

# Number of Persons in Private Households by Area and Sex, Tanzania Mainland, 2014

	0-14			15+			
Area	Males	Females	Total	Males	Females	Total	Total
Dar es Salaam	770,200	788,127	1,558,327	1,538,596	1,686,349	3,224,946	4,783,273
Other Urban	2,274,751	2,289,717	4,564,468	3,143,382	3,609,016	6,752,398	11,316,865
Rural	7,020,317	6,400,590	13,420,907	7,677,459	8,095,313	15,772,772	29,193,679
Total	10,065,268	9,478,434	19,543,702	12,359,437	13,390,678	25,750,116	45,293,817

#### Source: Tanzania Labour Force Survey (2014)

Cities can provide opportunities for non-agricultural higher value employment, and hence contribute to Tanzania's structural transformation process. The below analysis uses labour force survey data (2014) disaggregated by sex<sup>214</sup>—and excludes agriculture, forestry, fishing, mining and quarrying as a proxy for urban employment (adopting the methodological approach of African Centre for Cities).

Female urban employment in 2014 was dominated by wholesale and retail trade, followed by accommodation and food services—and the contributions of these sectors (in proportional terms) has been increasing during 2006–2014. Male urban employment was similarly dominated by wholesale and retail trade, but was followed by transportation and storage in 2014—with both sectors also showing strong employment increases (in proportional terms) during 2006–2014.<sup>215</sup> From this analysis, wholesale and retail trade is an important sector for increasing the labour force participation of men and women in urban centres—whilst accommodation and food services provide important opportunities for women's labour force participation in particular.

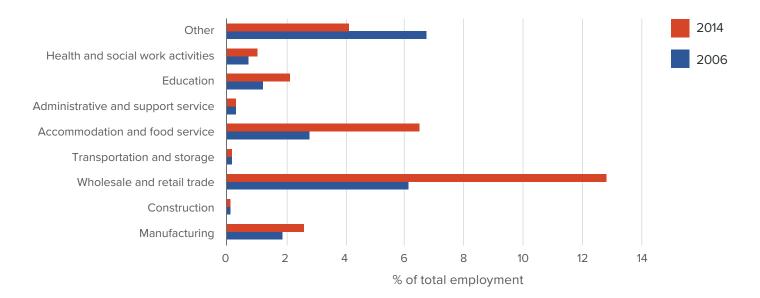
Tanzania's laws and regulations rank it amongst the most proactive countries for gender equality and female empowerment. The World Economic Forum (Global Gender Gap report) ranked Tanzania as the best performer of 115 countries in terms of women's economic participation in 2006.<sup>216</sup> Tanzania's gender inclusion policy includes:<sup>217</sup>

- The National Development Vision 2025 aims to attain "gender equality and the empowerment of women in all socioeconomic and political relations and cultures."
- The 2005 National Strategy for Gender Development specifies how gender mainstreaming
- Tanzania has ratified most major international human rights instruments
- Constitutional amendment in 2000, prohibited discrimination on the basis of gender
- Parliament has enacted a number of laws in support of women's economic and social well-being
- Gender budgeting processes are being institutionalized in all ministries
- Affirmative action for women's political participation

In reality, however, there are still a number of sociocultural factors that hinder women's economic participation. The urbanisation process itself may also create opportunities for women's empowerment—including in increasing female access land and finance. For example, it is noted that *"customary norms in rural areas are still biased against women—as wives, widows, sisters, daughters, divorced and separated women—limiting their ownership of and control over land"*.<sup>218</sup> Meanwhile, there is also evidence for an urban advantage in access to finance—with urban inhabitants that are more likely to use formal and semi-formal financial services, while rural inhabitants are more likely to use informal financial services.<sup>219</sup>

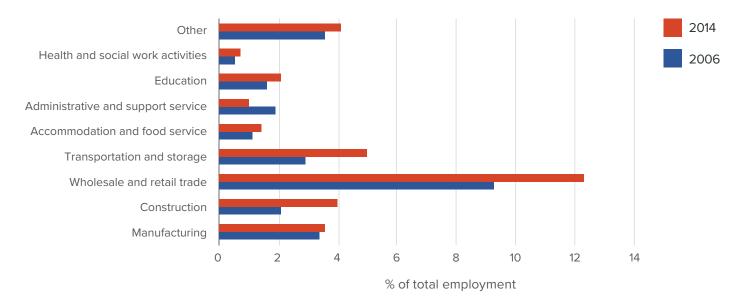
In taking advantage of the urbanisation process, policy-makers should therefore look to the provision of fundamentals in urban centres—such as health, education, finance and land—to help contribute to the socioeconomic empowerment of women.

# Figure B1 Female urban employment by sector, in 2006 and 2014 (% total employment)



Source: Tanzania Labour Force Survey (2014) in Fox (2016).

# Figure B2 Male urban employment by sector, in 2006 and 2014 (% total employment)



Source: Tanzania Labour Force Survey (2014) in Fox (2016).

# ANNEX C | ASSESSMENT OF COMPARATOR COUNTRIES' NATIONAL URBAN POLICY FRAMEWORKS

This Annex provides an overview of the comparator countries' national urban policy frameworks, the responsible government agency, and its economic, spatial, human development and environmental performance.

## Table C1

# Urban governance, policy and thematic considerations in Tanzania and comparator countries

	Urban gov	vernance and policy	ygovernance and	policy	Urban	themat	ic consi	deratior	าร
	Type of govern- mental authority	Government Agency	National urban policy	Status	Eco- nomic devel- opment	Spatial struc- ture	Human devel- opment	Envi- ron- mental sustain- ability	Climate resil- ience
Bangladesh	Specialised national ur- ban agency	Department of Urban development; Ministry of Local Government	National Urban Policy 2011	Formulation / Drafting	**	***	***	***	*
Ghana	General national planning authority	Ministry of Local Development and Rural Development	National Urban Policy: Action Plan 2012	Implementa- tion	***	*	***	*	*
Kenya	Specialised national ur- ban agency	Ministry of Land and Urban Development	National Urban Development 2012	Formulation	***	**	***	***	***
Malaysia	Specialised national ur- ban agency	Federal Department of Town and Country planning and Minis- try of Housing and Local Govern- ment	National Physical Plan 2010	Monitoring and evaluation	***	***	**	**	**
Tanzania	General national planning authority	Ministry of Lands, Housing and Human Settlements Development	Tanzania Master Plan 2012-2032	Feasibility / Diagnostic (currently underway)	***	***	*	**	*
Uganda	Specialised national ur- ban agency	Ministry of Housing and Urban Develop- ment	National Urban Policy 2013	Drafting - For- mulation	*	***	*	*	**
Vietnam	General national planning authority	Ministry of Con- struction	National Urban Development Programme 2012- 2020	Implementa- tion	***	*	**	**	**
Zambia	General national planning authority	Ministry of Local Government	(Diagnostic Stud- ies, regional and local plans)	Feasibility	0	**	*	0	*

Note: o = missing information, \* = low, \*\* = moderate, \*\*\* = extensive Source: UN-Habitat (unpublished)

# ANNEX D | TANZANIA LGA FULL LIST OF FUNCTIONS

### Table D1

# Detailed list of LGA functions with sharing between national and local government

Tanzania 2009–2010	Central Government	LPS Level/Type 1 Regions	LPS Level/Type 2 Distrist/Urban Authorities
Responsibility for performing functions and delivering pu	blic services		
General Public Services (701)			
Civil administration			Main
Public order and safety (703)		*	
Police services (7031)	Main		
Fire protection (7032)			Main
Economic Affairs (704)		* 	
Agricultural extension services			Main
Irrigation			Main
Livestock promotion			Main
Development and operation of markets			Main
Roads and infrastructure			Main
Traffic and urban transportation			Main
Local economic development			Main
Environmental Protection (705)		•	•
Waste management (7051)			Main
Waste water management (7052)			Main
Protection of biodiversity and landscape			Main
Housing and Community Amentities (706)		•	•
Housing development (7061)			Main
Community development (7062)			Main
Water supply (7063)			Main
Street lighting (7064)			Main
Health (707)	•	•	•
Public health and outpatient services (7072, 7074)	Shared		Main
Hospital services (7073)	Shared		Shared
Recreation, culture, and religion (708)	•	•	•
Recreation and sporting services (7081) –include parks			Main
Cultural, religious and other community services (7082, 7084)			Main
Education (709)	•	•	•
Pre-primary education (70911)			Main
Primary education (70912)			Main
Secondary education (70913)			Main
Vocational (postsecondary, nontertiary) education (7093)			
Tertiary education (7094)	Main		
Social Protection (710)		•	•
Social Protection (710)			
		İ	
Authority to regulate and plan physical space			
Land use planning, acquisition and transfer	Shared		Shared
Land assignment, acquisition and transfer	Shared		Shared
Land conservancy; environmental protection	Main		Limited
Traffic and parking			Main
Local tourism promotion; regulation of hotels and guest houses			Main
Billboards and the display of advertisements in public places			Main
Cemeteries, funeral parlors and crematoria			Main
Regulation of local markets and street vendors		· ····	Main
Regulation of local businesses		····	Main

Source: (Anon).

# ANNEX E | TANZANIA'S SECTORAL INSTITUTIONS WITH URBAN FUNCTIONS

#### ROADS

The capital funding and implementation of roads falls directly under the Ministry of Works, with the operation and maintenance of these roads the responsibility of the Tanzania National Roads Agency (TANROADS), a semi-autonomous national SOE.

Roads in Tanzania are broadly subdivided into national and local roads. National roads—trunk and regional roads—are under the authority of the Ministry of Works, and provided by TANROADS, with a total length of 34,000 km. The percentage of national roads in good condition has increased from 14% to 58% from 2002-2010.<sup>220</sup> Local roads (district, feeder and urban roads) are the responsibility of local government, under the oversight of the Prime Minister's Office Regional Administration and Local Government (PMO-RALG, which now sits within the President's Office instead). 'PMORALG has an oversight function of preparing policies and strategies in consultation with stakeholders as well as coordinating, monitoring, and providing support to LGAs in road works implementation activities'. Of the total of 58,000 km of local roads, 6,000 km are classified as urban roads, whilst only 1% of local roads (756 km) are paved. Overall, the condition of local roads is improving but 44% were in poor condition in 2011.<sup>221</sup>

The AfDB report raises a concern over the lack of separation between urban and rural roads: 'At the PMO-RALG, local roads are dealt with by the Infrastructure Development Unit with no separation between rural and urban roads. These two categories of road should be split into two separate units because they are different from each. While rural roads will focus on spot maintenance, urban roads will concentrate on upgrading to paved roads with a bitumen surface. Also, the technical problems are significantly different between the two programs as are the costs. While the urban road program component covers a small proportion of all local roads it consumes a large share of the available funding. Dealing with the issues separately is likely to introduce efficiencies into the management of the program.'<sup>222</sup>

In Dar es Salaam, the AfDB also notes that the split institutional responsibility for roads between the City Council and three municipal councils is problematic. In addition, TANROADS is responsible for providing most of the distributor roads in urban areas, Dar es Salaam most notably. At national level, there is a strong argument for a separate unit in PO-RALG dealing with urban roads.<sup>223</sup>

#### PUBLIC TRANSPORT

The transport sector is overseen nationally by the Ministry of Transport. The Ministry has established an independent regulator for the road transport industry, the Surface and Marine Transport Regulatory Authority (SUMATRA), which is primarily responsible for licencing public transport operators and regulating passenger fares.<sup>224</sup>

The planning and operational issues relating to public transport in Tanzania are dominated by those in Dar es Salaam, primarily as its size and growth rates have caused by far the greatest degree of congestion, and motorised passenger numbers are high relatively. There has been a major focus on the planning and roll-out of the bus rapid transit (BRT) system in the city which, after years of delay, has finally had its first phase commissioned, in 2015, operated by a public company, Dar es Salaam Rapid Transit (DART). At the same time, public transport in Dar es Salaam has also been placed under the authority of a new organisation, the Dar es Salaam Urban Transport Authority (DUTA).

The BRT system has the potential to bring major economic and social benefits for the city, its citizens and enterprises, with 160,000 people already using the service.<sup>225</sup> However, Mfingana and Madinda warn of the impact this will have on the *daladala* (minibus taxi) operators, with an estimated 5,000 of these vehicles active in Dar es Salaam.<sup>226</sup> The operators are represented by an owners' association, Dar es Salaam Association of Commuter Owners (DARCOBOA). While the plan is to integrate these operators into the DART system the operators are short of capital required to buy the vehicles required under the new integrated system. Meanwhile, efforts to prevent the displacement of informal settlements has resulted in BRT construction occurring in areas prone to flooding, raising questions on its future climate resilience.

The situation in Dar es Salaam is illustrative of excessive institutional complexity, with eight agencies are responsible for various aspects of transportation in Dar es Salaam.<sup>227</sup> In terms of sector performance, there is still a long way to go to get a fully integrated public transport systems working in Dar es Salaam and, while passengers will benefit there is likely to be job losses in the transport sector as the *daladala* operators are phased out.

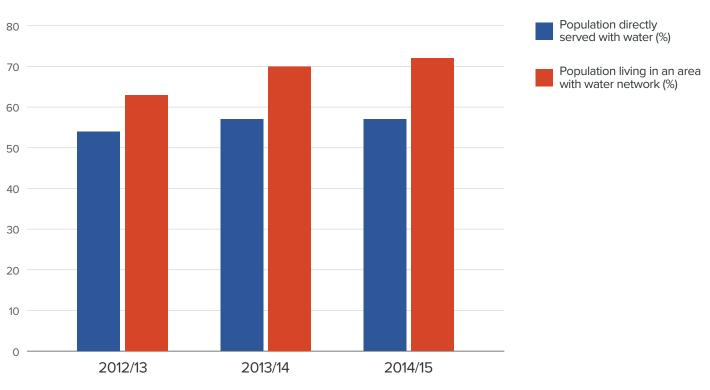
#### WATER SUPPLY AND SANITATION

Urban water supply falls under the oversight of the Ministry of Water and Irrigation (MoWI) which has an Urban Water Supply and Sanitation Division.<sup>228</sup> While this implies a single line of responsibility for both water and sanitation and there is a single act covering water and sanitation, African Ministers' Council on Water (AMCOW) and Ekane et al, raise the concern that there are overlapping responsibilities for sanitation between MOWI, the Ministry of Health and Social Welfare (MoHSW) and others. This may be in process of being resolved in 2016 an approved sanitation policy was not in place.<sup>229</sup>

At local level, urban water supply authorities (UWSAs) have been established for all urban LGAs responsibility for water supply, regulated by an independent regulator, the Energy and Water Utilities Regulatory Authority (EWURA).<sup>230</sup> UWSAs are theoretically autonomous entities being strengthened for privatisation, though the majority remain highly dependent on operational subsidies from central or local government.<sup>231</sup> EWURA covers performance of 33 'urban' utilities which are, in fact, responsible for water supply and 'sanitation' in urban areas.<sup>232</sup> There is some ambiguity regarding the extent to which these water utilities cover the whole sanitation service with the likelihood that they focus only on 'sewerage' which implies sewered waterborne sanitation only.

Dar es Salaam, has a different institutional structure to other areas which can be considered a relic of the time when a private operator was running the system: a Dar es Salaam Water and Sewerage Authority (DAWASA) was established as the owner of the assets for water supply and sewerage services covering Dar es Salaam region and part of Kibaha and Bagamoyo Districts. It is responsible for planning, procurement and implementation of strategic capital works. DAWASCO is a public corporation responsible for providing water supply and sewerage services in the DAWASA designated area through a lease contract with DAWASA.<sup>233</sup> AMCOW point out the unnecessary complexity of this structure and raise the option of them being merged.

In assessing the performance of the utilities in managing the water and sanitation service, EWURA provides easy-to-access and relatively updated statistics for 25 'Regional' Water Supply and Sanitation Authorities (WSSAs) and eight 'National Project' WSSAs<sup>234</sup> (NP WSSAs). With regard to access to water supply figures for the 25 'regional' WSSAs (excluding the 8 NP WSSAs) are as follows).<sup>235</sup> The reliability of these figures in relation to NBS reported figures—given below—has not been questioned but the advantage of the EWURA figures is that they are monitored on a regular basis and the figure for 'direct access' relates to customers actually connected and, in most cases, metered.)



# Figure E1 shows the service coverage of water in 2012–2015. Source: EWURA (2015a, 2015b)

# Table E1shows time to obtain drinking water (round trip). Source NBS (2013)

	Time to obtain drinking water (round trip)					
	Urban		Rural		Tanzania mainland	
Date and type of survey	2010 TDHS	2011 THMIS	2010 TDHS	2011 THMIS	2010 TDHS	2011 THMIS
Water on premises	19.4	33.4	4.8	6.9	8.5	13.7
Less than 30 minutes	54.5	48.5	43.2	38.1	46.1	40.8
30 minutes or longer	25.7	17.4	51.9	54.3	45.2	44.9
Don't know/missing	0.4	0.5	0.1	0.3	0.2	0.3
Total	100	100	100	100	100	100

Note: The differences in the two sets of figures for 2010 and 2011 is clearly problematic and is not explained in the NBS report. Based on the 2011 figures, and assuming a 30 minute trip to fetch water is acceptable, 82% of urban residents have access to an 'adequate' water supply in urban areas.

There are a range of other performance parameters which could be included here, with non-revenue water being one, with high levels of 43% been recorded over the past three years. Regarding financial performance, the working ratio is important, reflecting revenue divided by cost. On average WSSAs have had a figure of 1,0 over the past three years which means they are not generating surpluses. There are implications of this for capital finance delivery for urban water and sanitation.

## Table E2

# shows access to sanitation as reported by NBS. Source: NBS (2013)

Type of toilet/latrine facility	Urban	Rural	Total
Improved, not shared facility			
Flush/pour flush to piped sewer system	0.9	0.0	0.2
Flush/pour flush to septic tank	4.2	0.1	1.1
Flush/pour flush to pit latrine	10.2	1.5	3.8
Ventilated improved pit (VIP) latrine	1.9	0.6	0.9
Pit latrine with slab	4.4	6.3	5.8
Non-improved facility			
Any facility shared with other households	24.4	2.0	7.8
Flush/pour flush not to sewer/septic tank/pit latrine	2.1	0.1	0.6
Pit latrine without slab/open pit	49.8	71.4	65.8
No facility/bush/field	2.0	17.8	13.7
Other	0.0	0.2	0.1
Missing	0.1	0.0	0.0
Total	100.0	100.0	100.0

The situation with sanitation in urban areas is poor, with only 21% of households having an adequate service and only 1% connected to a sewered system. 11 of the regional WSSAs provide waterborne sewered sanitation to households in their service areas. EWURA report that connections to sewered systems are increasing at a rate of about 45,000 a year.<sup>236</sup> Assuming there are an estimated two million households in the regional WSSA areas this is a rate of increase of 2.2%, well below urban population growth rates. While sewered waterborne sanitation cannot be seen as the panacea for urban households, having a sewered system serving commercial and industrial areas in urban areas is an important contributor to economic development. But at present the biggest concern must be the poor state of sanitation in informal areas where most households use unimproved pits with inadequate arrangements for pit emptying.<sup>237</sup>

Water supply coverage in Tanzania's urban areas is improving but urban areas have insufficient access to water resources, do not produce enough water and do not manage the water supply service effectively. The lack of a reliable water supply has obvious consequences for social and economic development. In the case of sanitation the institutional complexity of sanitation provision arrangements and the lack of support for communities in providing their own sanitation facility and having this regularly and effectively de-sludged leads to unnecessary hardship and health risks for urban families.

#### ENERGY

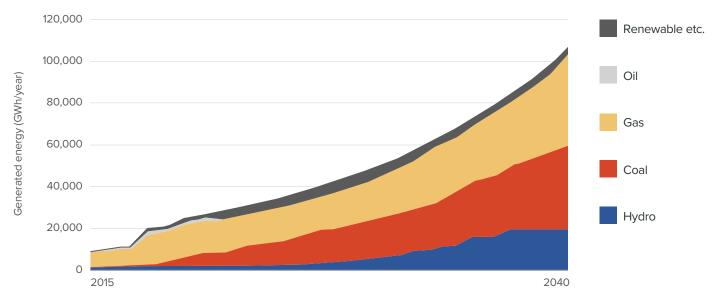
At national level, energy is the responsibility of the Ministry of Energy and Minerals (MEM) which is responsible for policy, legislation and macro-planning. EWURA is a regulatory authority responsible for electricity, water and mid-downstream petroleum and natural gas sectors. The Tanzania Eletricity Supply Company (TANESCO) is responsible for electricity generation, transmission, distribution, sales in Tanzania mainland and bulk supply of electricity to Tanzania Zanzibar through ZECO.<sup>238</sup>

There are plans to unbundle TANESCO into separate generation, transmission and distribution units.<sup>239</sup> And statements have been made that: 'The Tanzanian government has recently announced that a stake of up to 49% in Tanzania Electric Supply Company (TANESCO) will be offered to the public in 2016 through a sale of shares to support the power industry's split into separated generation, transmission and distribution units. The announcement, made by Tanzania's Minister of Energy and Minerals Sospeter Muhongo, follows a plan undertaken by the government in December, 2015, which seeks to replace TANESCO with six private companies by 2022 to ensure competition and tariffs' efficiency in the industry'.<sup>240</sup>

With regards to power demand, it is difficult to assess the figures as there are two contradictory sets of numbers. The power sector master plan gives the split for 2015 as 38% industrial, 31% residential, and 7% commercial and services with the remainder being for gold mining, supply to Zanzibar and system losses (17%).<sup>241</sup> The MEM energy quarterly report gives demand split as residential (72.5%); industry (14.4%); transport (5.8%); agriculture (4.2%) and others (3.1%).<sup>242</sup> Growth in power demand is 10%–15% per annum.<sup>243</sup>

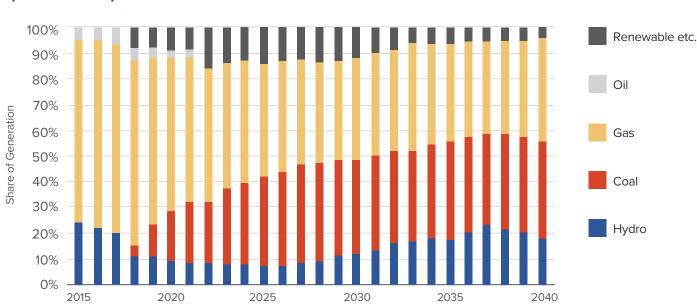
With regards to generation and resource use, the power system master plan indicates a preference for what the plan terms 'Scenario 2' with projections shown below.<sup>244</sup> All but one of the scenarios have the same profile for hydro use. All include substantial use of coal-based power, with Scenario 2 having a moderate proportion of coal-based power compared to the others. All scenarios have a similar provision for renewables with a low percentage allocated to this source. Natural gas dominates as a primary energy source in all scenarios over the period 2015 to 2022 when it is displaced by coal to varying degrees.

# Figure E2 Energy generated in Tanzania by type of power plant (Scenario 2) under the power system master plan



Source: MEM (2016).

## Figure E3



# Share of generation by type of power plant for Tanzania (Scenario 2) under the power system master plan

Source: MEM (2016).

In terms of sector performance, EWURA evidently does not report on electricity utility performance in the same way that it does for water and sanitation. However, MEM have a set of statistics in their quarterly report, included here as an Annex D<sup>245</sup>, which indicates that there are 1.4 million electricity connections, presumably for mainland Tanzania which gives an electricity connection level of 30% and electricity 'access' level of 40%. However in NBS it is reported that in 2011 only 14% of households used electricity for lighting (46% in urban areas).<sup>246</sup> This data is included below.

# Table E3 Household access to electricity

Energy Source	Urban	Rural	Total
Energy for Cooking			
Electricity	0.7	0.0	0.2
Bottled gas	1.7	0.1	0.5
Biogas	0.4	0.1	0.2
Paraffin/Kerosene	7.0	0.5	2.1
Charcoal	69.2	8.5	24.0
Firewood	18.8	90.1	71.9
Straw/shrubs/grass	0.0	0.2	0.1
Agricultural crop	0.1	0.1	0.1
Other	0.4	0.2	0.2
No food cooked in household	1.7	0.2	0.6
Total	100.0	100.0	100.0
Percentage using solid fuel for	88.2	98.8	96.1
Lighting Energy			
Electricity	46.1	3.3	14.2
Solar	2.0	2.3	2.2
Gas	0.2	0.0	0.1
Paraffin-hurricane lamp	28.7	19.7	22.0
Paraffin-pressure lamp	1.2	1.4	1.4
Paraffin-wick lamp	15.3	46.2	38.3
Firewood	0.0	2.9	2.1
Candles	1.6	0.5	0.8
Lantern, Chinese battery lamp	4.9	23.6	18.8
Other	0.0	0.1	0.1
Total	100.0	100.0	100.0

Source: NBS (2013)

#### Table E4

# Tanzania electricity sector statistics: installed capacity, type of capacity, population access and financial indicators. Source: MEM (2015)

Total On-grid Installed Capacity	1,246.24 MW
Total Off- grid Installed Capacity	76.43 MW
Generation mix (% Hydro/thermal/Liquid fuel)	45/33/22
Imported Electricity	14MW
Total IPPs Installed Capacity	517 MW
Total EPPs Installed Capacity	70MW
TANESCO Total Capacity	929.24MW
Maximum Power Demand	934.62MW
Electricity Connection level	30%
Electricity Access level	40%
Total Customers Connected with electricity services	1,409,966
Ration of No. of customers per employee	229
No. of Customers Connected in Q1 of 2015	26,698
Electricity Consumption per Capita per annum	108kWh
No. of Districts Electrified	120
% of Districts not Electrified	10%
No. of Villages in the Country	15,209
No. of Villages Electrified	4,718
%. of Villages not Electrified	68.98%
Max. Transmission Voltage	220kV
Total losses – Technical and None - Technical	18%
Total Commercial losses - %	8%
Average Electricty Tariff per Kwh (US\$ Cents)	16
TANESCO Revenue Collection Efficiency	96%
Renewable Energy installed Capacity (on/off grid)	78MW
Solar Installed Capacity	5.3 MWp
Co-Generation Installed Capacity	37MW

With a current (2015) number of connections of 1.4 million<sup>247</sup> and a maximum rate of connections of 90,000 per annum<sup>248</sup>, the indication is that the rate of increase in connections is 6.5%. This is well below what is required to give the large majority of urban households' access to grid electricity in the coming decade and to meet the goal of having 75% of households connected.

Key to the success of the urban energy sector is the performance of TANESCO. This has not been good enough as implied by the lower than necessary rate of new connections and the poor financial performance of the national utility (discussed in urban services finance section). The fact that the President of Tanzania, has just refused to grant a tariff increase of 8.5% and fired the TANESCO CEO can't have helped matters.<sup>249</sup>

In conclusion, the power sector in Tanzania is clearly in trouble with an underperforming national power utility being one factor influencing the low rate of access to electricity. Reforms are proposed to restructure the power supply sector but these are likely to take a long time. More research needs to be conducted for small scale off-grid supplies.

# ANNEX F | NATIONAL URBAN POLICY AND PROGRAMMES

This Annex provides an overview of urban policy programmes, as a supplement to the analysis in section 6.

### NATIONAL URBAN POLICY

There are a variety of other national policies that have been important in influencing urbanisation. In 1969, soon after attainment of the country's independence from colonial rule, the Government of Tanzania adopted a "slum clearance" policy, which saw replacement of informally built housing with decent constructed by the National Housing Cooperation (NHC).<sup>250</sup> Between 1972 and 1990 the government, with support from the World Bank, also implemented the National Sites and Services and Squatter Up-grading Programme as an alternative to the slum clearance. The programme was implemented in three phases covering seven major regions. In the first phase, urban settlements in three regions were upgraded and 8,800 houses improved. In the second phase, four additional regions were covered and 15,811 houses upgraded. The third phase was entirely financed by the government and covered Dar es Salaam Region (Tanzania's commercial capital) where a total of 7,000 plots were surveyed and 8,103 houses mapped for upgrading.<sup>251</sup>

The Human Settlements Development Policy (2000) is the overarching policy for human settlements, with the overarching goals of (i) promoting development of human developments which are sustainable, and (ii) facilitates provisions of affordable, adequate housing to all income groups in Tanzania.<sup>252</sup> The secondary objectives focus on the provision of public services, employment creation, poverty reduction, and the role of community-based organisations in the planning, development and management of settlements. It also sets out the problem statement for Tanzania, including with the proliferation of informal housing and settlements, and the shift in housing trends, such as the increase in women headed households to over 30% of all housing in the late 1990s. Financial commitments within include the need to increase the public budget allocations spent on human settlements. However, as the document goes on to note "Urban authorities are facing financial problems thus limiting their capacity to serve their inhabitants ...", including "over-dependence on central government subventions ... lack of capacity to collect and manage revenue [and] lack of internal control and accountability leading to misuse of funds". The Policy also has provisions to restrict ongoing construction in hazardous areas.<sup>253</sup>

The Policy also identified urban development issues and policies covering: Physical growth ("Control over physical growth of urban areas is necessary in order to reduce urban sprawl"); Rural to Urban migration ("The rate of urban population growth ... is so high that urban authorities cannot cope ..."); Township boundaries ("Villages engulfed in urban areas as a result of the expansion of township boundaries shall cease to be villages whether or not they are registered and their administration shall come under the respective urban local authorities."); Urban renewal ("The government shall encourage optimum utilisation of the land in urban areas ..."); Urban economy ("Issue: Inadequate, unreliable or lack of services and infrastructure, weak municipal institutions, poor financial services and an inappropriate regulatory framework inhibit urban productivity."); Urban transport ("The government shall facilitate the establishment and operation of swift, safe and efficient transport systems in urban areas."); Urban agriculture ("The government shall ... review existing laws to facilitate planned urban agriculture").<sup>254</sup>

There are also urban programmes that have been important. In 1992, Sustainable Cities Programme was launched and became operational in 1993. The main objective of the programme was to build capacity of the Dar es Salaam City Council to plan, coordinate and manage urban development and growth, with emphasis on improved multi-sectoral coordination and participation. Based on the successes of the programme, its implementation was rolled out to seven other regions countrywide.

The Community Infrastructure Upgrading Programme (CIUP) came into force in 2003 with the objective of improving living conditions of low income residents of unplanned settlements by upgrading the existing infrastructure and services, and facilitating their participation in the planning, provision and management of infrastructure services in their respective areas. The project was implemented in two phases. The first phase (2003–2008) was funded by Government and the second phase (2008-2012) by the World Bank. However, the CIUP did not include a regularisation scheme and there was no enhance of security of tenure. Consequently, the Ministry of Lands, Housing and Human Settlements Development (MLHHSD) introduced urban formalisation and regularisation of unplanned settlements in 2004, in collaboration with local government authorities.

The Unplanned Urban Settlement Regularisation Programme was conceived in 2004 soon after implementation of the CIUP began. The program primarily focused on identifying and adjudicating properties in unplanned areas and issuing residential licences. The licences were accepted by financial institutions and helped some owners to access credit though limited loan amounts due to the short period of the residential licence (2 years). However, the need for more secure and accessible property rights remained largely unmet.

#### NATIONAL LEGISLATION

Legislation has imposed various mandates on the roles of national, regional and local government authorities in urban planning (which were described in the Institutions section). For example, regional Administrations act as a deconcentrated administrative level with responsibilities to oversee the public service delivery of local district and urban authorities.<sup>255</sup> Under legislation, these regional Administrations themselves are not responsible for service delivery, except for regional hospital services.

The colonial system of indirect rule by small numbers of colonial officials through chiefs and native authorities was dropped soon after Independence.<sup>256</sup> The mandated role of local authorities has also changed, with local authorities having been abolished between 1972 and 1982—as local government officials were replaced by local representatives of the ruling party.<sup>257</sup> With mounting economic difficulties in the early 1980s, far-reaching economic and political reforms were adopted. This was followed by decentralisation reforms from 1982, which reinstated locally elected LGAs, whilst further devolution reforms from 1999 aimed to improve the delivery of government services.<sup>258</sup> Administration at local level then received considerable attention leading to new legislation in 1982, which reinstated local authorities. Continuing weaknesses led to the 1998 Policy Paper on Local Government Reform.<sup>259</sup> Under the LGA legislations enacted, powers are devolved to LGAs were to provide various public services, such as maintain peace and regulate land development, with urban LGAs also having the authority to prepare urban plans, manage land use, allocate building land, alongside enforcement powers, amongst others (see section above).<sup>260</sup>

The Local Government (Urban Authorities) Act of 1982 defines an 'urban authority' as any urban town council, municipal council or city council.<sup>261</sup> It provides for the categorisation of councils based on 'the size of the area, the population and the level of social and economic development'. The Act further allows for the further division of local councils into a number wards, provided the Minister receives approval from the President. Each council is composed of a Mayor, Deputy Mayor (or Chairman and Vice-Chairman in town councils), as well as an elected official from each ward, the Member of Parliament representing the constituency, (if present in the authority) the national Member of Parliament representing the region and 5 other members appointed by the Minister (or 6 in the case of city councils). This results in a mix of elected and centrally appointed staff within LGAs, with a mix of national and subnational priorities.<sup>262</sup> Meanwhile, the Act also establishes a number of committees for each authority, which respectively address: finance and administration, urban planning, public health, education and culture, works, and trade and economic affairs.<sup>263</sup>

The Local Government (District Authorities) Act of 1982 for rural LGAs sets out similar provisions though precise provisions do vary, such as in the composition of district authorities.<sup>264</sup> Rapid urbanisation in traditionally rural areas has also created problems of oversight. Rural district councils with oversight of newly developed human settlements do not have the appropriate administrative structures.<sup>265</sup> For example, the powers to develop an urban plan.

A new policy is also currently in development that will streamline LGA roles in managing sustainable urban development, and establishing eight zonal offices to oversee urban planning and approval processes.<sup>266</sup>

The Local Government Finances Act 1982 sets out the financial powers of LGAs: it makes 'provision[s] for sources of revenue and the management of funds and resources of Local Government Authorities and for matters connected or incidental to securing the proper collection and sound management of finances in the local government system<sup>267</sup>. This is discussed further in the urban financing section below.

The Urban Planning Act (2007), meanwhile, provides guidelines and planning standards for urban development and land use planning.<sup>268</sup> It sets out to guide 'the orderly and sustainable development of land in urban areas, to preserve and improve amenities; to provide for the grant of consent to develop land and powers of control over the use of land and to provide for other related matters'. This focuses on various topics related to human settlements development and land use planning that serves women, youth and disadvantaged, improving infrastructure and services provision, creating employment and reducing poverty, and protecting the environment from pollution an destruction. Of interest, it also aims to promote the participation of the private sector, non-government organisations and community-based organisations to support land use planning. The responsibility for ensuring consistency between the development of all land in Tanzania falls to the Minister.<sup>269</sup>

#### SECTORAL NATIONAL POLICIES

This section provides some examples on sectoral policies with urban priorities, such as energy and environmental policies with urban provisions.

The 2003 National Energy Policy replaces the 1992 policy document to guide the energy priorities in Tanzania. In particular it aims to improve consideration of affordable and reliable energy supply, an adequate institutional framework, the utilisation of

indigenous and renewable energy technologies, energy efficiency and energy education with gender-balances capacity building. The Policy describes the reliance of biomass fuels in urban (as well as rural) areas and inferior energy practices (particularly among poor households in semi-urban areas) that result in female time poverty and exposure to health risks from emissions resulting from wood and charcoal usage. It prioritises the role of women in the contributing to the commercial energy sector. It also further notes the high prevalence of poverty in urban areas, alongside rural areas, as a major barrier to energy sector development.<sup>270</sup>

The 2012 Power System Master Plan was developed to support the Vision 2025 strategy. The overarching aim is 'to attain stable power supply in order to achieve Economic Growth, Energy Security and Environmental Protection' and support poverty reduction efforts. It prioritises short term (2013–2017), medium term (2018-2023) and long term (2024–2035) energy sector requirements— across generation, transmission and connection—including regional connectivity with Kenya, Ethiopia, Zambia, Uganda, Rwanda, Burundi and Mozambique. Urban related targets include clearing the backlog of electricity connection applications within peri-urban and urban areas, and connecting 250,000 customers every year in urban, peri-urban and rural areas.<sup>271</sup>

For water and sanitation, one of the major three areas of focus of the 2002 National Water Policy is 'Urban Water Supply and Sewerage'. The problem statement demonstrates that inadequate water supply and quality persists in urban areas, with poor revenue collection and a lack of private sector participation. It identifies several objectives: '(i) to guide the development and management of efficient, effective and sustainable water supply and waste water disposal systems in urban centres; (ii) to create an enabling environment and appropriate incentives for the delivery of reliable, sustainable and affordable urban water supply and sewerage services; (iii) to develop an effective institutional framework and ensuring that the water supply and sewerage entities are financially autonomous; (iv) to enhance an efficient and effective system of income generation from sale of water and wastewater removal; (v) to enhance water disposal'.<sup>272</sup>

The National Water Sector Development Strategy 2006–2015. The Strategy develops short term priorities to assist in achieving national targets (in line with the NSGRP / MKUKUTA framework) and inform the national financial planning process. It, for example, notes the importance of water supply in urban areas to prevent future health disasters, the role of the informal sector in services provisioning in urban areas.<sup>273</sup>

With regards to national transport infrastructure—the Tanzania's National Transport Policy 2003 and National Transport Master Plan 2013 provide the overarching policy framework (not discussed further here).

From an environmental perspective, the 1997 National Environmental Policy provides the objectives of guiding the sustainable development of Tanzania. This includes policy objectives related to: sustainability in the use of domestic resources; prevent and control the degradation of land, water, air and vegetation; conserve the natural environment; improve the productivity of degraded areas (e.g. in urban areas); raise public awareness of the linkages between development and the environment; and, promote international cooperation in relation to the environment agenda. With regards to land tenure, it acknowledges the importance of land tenure for sustainable management of land and equitable development of land, ensuring 'integrated land use planning, secure access to land resources, and the right to participate in decisions relating to their management'.<sup>274</sup>

The most recent climate mitigation and adaptation policy is Tanzania's Nationally Determined Contribution to the 2015 Paris Agreement—and follows on from the 2012 National Climate Change Strategy and 2006 National Adaptation Programme of Action. This estimates that the costs of climate change could cost 1-2% of GDP per year to 2030. It 'implies that Tanzania is a net sink' because of Tanzania's negligible emissions (at 0.2 tonnes of CO<sub>2</sub> equivalent) alongside a high proportion of forested land, equivalent to 48 million hectares of land. The Contribution aims to reduce greenhouse gas emissions by 10-20% by 2030 relative to a business as usual scenario<sup>275</sup>—including through the energy sector and the promotion of public transport systems.<sup>276</sup>

Meanwhile, the adaptation contributions of the Nationally Determined Contribution aim to decrease climate related disasters from 70% to 50% and increase access to clean and safe water from 60 to 75%. Targeted adaptation interventions in energy and water, amongst other sectors, are accompanied by human settlements development targets—these include '(a) Promoting sustainable land management systems and climate sensitive human settlements developments; (b) Facilitating provision of, and access to adequate, affordable and climate sensitive shelter to all income groups. (c) Enhancing awareness on the impacts of climate change in the context of human settlements. (d) Construction and rehabilitation of drainage systems in respond to frequent and high intensity floods'.<sup>277</sup>

Other national policies also help to address the environmental sustainability of national objectives, but these are not comprehensively addressed here. For example, the Strategic Development Plan 1992 helps to support urban management in flood prone areas.

# ANNEX G | TANZANIA'S SECTORAL URBAN FINANCING

#### **Electricity sector financing**

**TANESCO.** Electricity is not a local government function and grid electricity is provided in all urban areas by the national SOE, TANESCO (see previous section on institutions). (Note that the below analysis is to be validated through stakeholder consultation, as it is simply based on external literature.)

The most recently available TANESCO financial statements are from 2012 and indicate that they were running at a loss—whilst recent press articles confirm that this is situation has likely continued. For example, CNB Africa, in an article concerning the TANESCO 2017 tariff application state, describes: 'The power firm had initially sought an 18.19 percent tariff increase to snap a loss-making trend and clear debts to independent power producers and fuel suppliers. The tariff hike, which would have taken effect from Jan. 1, was approved by the Energy and Water Utilities Regulatory Authority (EWURA). Loss-making TANESCO has warned that its "financial capacity will be paralysed" if the power tariff hike is not implemented. TANESCO has been unsuccessfully seeking loans from the World Bank, the African Development Bank (AfDB) and commercial lenders to turn the company round.<sup>'278</sup> In fact, TANESCO has adjusted their tariff increase down to 8.5%, which was then refused by the President. The President also took steps to fire the CEO of TANESCO, accusing the company of harming the economy through not providing enough electricity.

With regards to capital financing to fund the ambitious sector expansion plans, recent information is not readily available.<sup>279</sup> The annual report by the regulator, EWURA, also has little information on this (EWURA, 2015b). However, TANESCO's financial statements for 2012 indicate that 2012 borrowing amounted to 611 billion TSh, while total equity stood at 1,020 billion TSh, giving a debt equity ratio of 60% (up from 33% in 2011). Grants were recorded at 816 billion TSh at the end of 2012 with the majority (77%) from the national fiscus.<sup>280</sup>

It is evident that TANESCO has been able to borrow on the international finance market in the past but, with its poor financial performance recently, this is becoming difficult.

**Independent power producers, small power and solar home systems.** Tanzania is committed to involving the private sector in power generation and has the structures in place to do this. For example, Tsakhara lists 10 small power projects (SPP) developers and lists 25 SPPs in place, most based on hydro, with some solar PV and biomass systems.<sup>281</sup> No assessment is done on the relative scale of investment here.

The Government is committed to a solar home system programme, announcing in February 2015 that one million households will get access to this source of electricity by end 2017. 'The International Finance Corporation (IFC) is providing \$7 million for Phase 1 of the initiative, which is expected to reach 100,000 households and small businesses in Northern Tanzania. Financial contributions have also been made by the Overseas Private Investment Corporation (OPIC), USAID Development Innovation Ventures Program, SNV Netherlands Development Organisation and SunFunder'.<sup>282</sup> This is aimed mainly at rural areas and actual progress has not been researched.

#### Water and sanitation sector financing

Water and Sanitation Authorities—financial perspective. Water and sanitation services are the responsibility of water and sanitation supply authorities (WSSAs) which are SOEs with supply boundaries more-or-less aligned with urban local government boundaries (see sectoral institutions annex). Dar es Salaam there is a four tier structure: The Dar es Salaam City Council responsible for city-wide planning; the three municipal councils within the city which have legislated responsibility for water and sanitation and receive grants from the national fiscus; Dar es Salaam Water and Sewerage Authority (DAWASA) which holds the assets; and Dar es Salaam Water and Sewerage Corporation (DAWASCO) which operates the system, including interface with customers. The problems with this institutional complexity were discussed in the institutions section above.

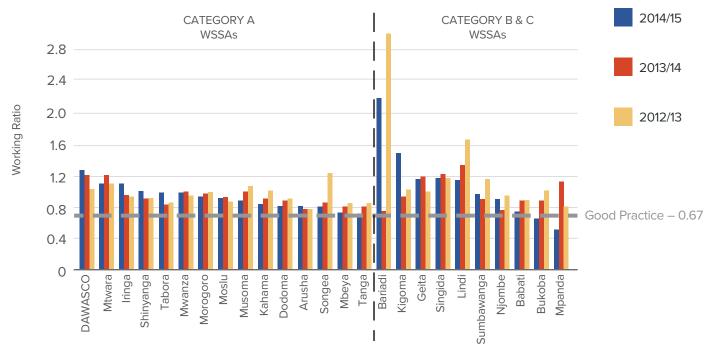
The regulator, EWURA's report on the performance of WSSAs provides comparative data, including summary operating accounts, for all WSSAs.<sup>283</sup> Looking at the operating account figures, the most useful figure is the working ratio (total annual expenses—excluding depreciation and debt related expenses—divided by annual revenue). This is plotted below for the top 25 urban (referred to as 'regional' in the report) WSSAs.

There are clearly shortcomings with respect to the cost to revenue ratio for most WSSAs, with DAWASCO being the most extreme, unable to cover operating costs with revenue and with the situation worsening. At the same time DAWASCO has very high non-revenue water figures (57%) and only an average of 8 service hours per day (Mwanza has 22).<sup>284</sup>

The EWURA 2015 annual report does not deal with capital finance but it is evident that with low surpluses on operating accounts most WSSAs will not be able to borrow, if indeed this is permitted by national government.<sup>285</sup> In the case of Dar es Salaam the operator (DAWASCO) is, in any event, not responsible for capital investment: this falls to DAWASA which is responsible for the assets and associated investments.

# Figure G1

# Working ratio (total annual expenses, excluding depreciation and debt related expenses, divided by annual revenue) for the top 25 urban WSSAs



Source: EWURA (2015b)

**Capital finance from national and international sources.** The transition in funding arrangements is described by AMCOW: 'In 2007, as the culmination of several years of sector reforms, a comprehensive sector-wide plan, the Water Sector Development Program (WSDP), was launched for investing in water supply and sanitation infrastructure, with almost US\$1 billion finance over five years from the World Bank, AfDB, German and Dutch governments, and the Government of Tanzania. The scale of finance available for the sector is vastly greater than the funding that was previously available, giving reason to hope that coverage trends will soon improve'.<sup>286</sup> For the purposes of this section it has not been possible to check whether this funding through the SWaP continued beyond the five year period. But recently the World Bank has made a loan to the Government of US\$225 million for water supply to Dar es Salaam.<sup>287</sup>

It is evident that the water and sanitation sector is still largely dependent on grants from development partners and loans to Government, primarily from development finance institutions. The Government contribution from the national budget to projects funded from external source appears to be of the order of 10% on average.<sup>288</sup> In addition some of the money transferred to LGAs as part of the 'development grant' may be used for water and sanitation, likely to be a small amount.

# Roads and transport sector financing

**Trunk and regional roads—financial assessment**. Although trunk and reginal roads are primarily national in scale, these roads also run through within urban areas (see end of Annex F for the Dar es Salaam example). Therefore their funding arrangements are relevant to this brief urban services finance review. The capital funding and implementation of roads falls directly under the Ministry of Works, with the operation and maintenance of these roads the responsibility of TANROADS, a national SOE.

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It has been difficult to find useful information national roads funding. It is presumed that capital finance is raised primarily through grants from international partners and loans from development finance institutions, with some contribution from the national fiscus. Roads maintenance is funded from the Roads Fund which raises revenue through a fuel levy and disburses this to the Ministry of Works, TANROADS and to LGAs, the latter under the auspices of PO-RALG. 70% of the funding from the Roads Fund must be allocated to trunk and regional roads.<sup>289</sup>

**Local roads.** It has not been possible to separate out the funding arrangements for urban roads. For all local roads there is a summary position in the table below.

# Table G1 Budget for local roads development (Tshs billion)

Funding Source	Fiscal Year				
	2009/10	2010/11	2010/12		
Local government programme (Denmark)	7.00	3.46	0.00		
Government budget	9.90	15.72	14.48		
Roads Fund (development)	8.45	8.45	9.40		
Total	25.35	27.82	23.88		

#### Source: AFDB (2013).

Funding for roads is the primary constraint preventing more rapid improvement in local road conditions, with figures of funding for local roads as follows, indicating a large funding gap. While investment in local roads is relatively small proportion (6.2%) in relation to the total transport sector budget, this is increasing, albeit at a slow rate, and has the potential to make a big impact. The Road Fund should be a major source of funds for the development of roads but currently is intended primarily for maintenance. It gets 96% of its funding from a national fuel levy. But a substantial funding gap remains.<sup>290</sup>

The extent to which LGAs use their own funds for road maintenance is uncertain but it is likely to be a small amount in relation to the need.

**Public transport financing.** The Dar es Salaam BRT system is by far the most important public transport intervention in the country, although, in terms of numbers of passengers served, the informal paratransit operators (daladala's) are way more significant. The BRT system, branded as DART, has been financed through grants from international partners and loans from development finance institutions.

In conclusion, the roads and public transport sector is heavily dependent on capital finance from international development partners and development finance institutions. Maintenance funds are raised primarily through fuel levies which are distributed by the Roads Fund Board.

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# ABOUT THE COALITION FOR URBAN TRANSITIONS

The Coalition for Urban Transitions is a special initiative of the New Climate Economy, hosted by the WRI Ross Center for Sustainable Cities, and jointly managed with the C40 Climate Leadership Group. The partnership is made up of over 20 major institutions who share a common purpose: delivering a better urban future for all. It does so by supporting decision makers to unlock the power of cities for enhanced national economic, social, and environmental performance, including reducing the risk of climate change.

# About the Economic and Social Research Foundation

The Economic and Social Research Foundation (ESRF) is an independent policy research institution based in Dar es Salaam, Tanzania. ESRF was established in 1994 to respond to the growing need for a research think tank with a mandate to conduct research for policy analysis and capacity building. The Foundation's primary objectives are therefore to undertake policy-enhancing research, strengthen capabilities in policy analysis and decision making, as well as articulate and improve the understanding of policy options in government, the public sector, the donor community, and the growing private sector, and civil society.

# About the African Centre for Cities

The African Centre for Cities (ACC) is an interdisciplinary research and teaching programme at the University of Cape Town. ACC is focused on quality scholarship regarding the dynamics of unsustainable urbanisation processes in Africa, with an eye on identifying systemic responses.

# About the Overseas Development Institute

ODI is the UK's leading independent think tank on international development and humanitarian policy. Founded in 1960, it has made major contributions to research, dissemination and policy change, on all aspects of development and humanitarian policy. ODI's mission is to inspire and inform policy and practice which lead to the reduction of poverty, the alleviation of suffering and the achievement of sustainable livelihoods in developing countries. This is done by locking together high-quality applied research, practical policy advice, and policyfocused dissemination and debate. ODI works with partners in the public and private sectors, in both developing and developed countries.

# About the International Growth Centre

The International Growth Centre (IGC) aims to promote sustainable growth in developing countries by providing demand-led policy advice based on frontier research. The IGC directs a global network of world-leading researchers and in-country teams in Africa and South Asia and works closely with partner governments to generate high quality research and policy advice on key growth challenges. Based at LSE and in partnership with the University of Oxford, the IGC is funded by the UK Department for International Development (DFID).

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