Emerging Policy Discussions from

THE NATIONAL FORUM FOR SUSTAINABLE URBANISATION IN SUPPORT OF EDPRS2

Kigali, Rwanda

Rwanda: Urbanisation and Economic Growth

Rwanda has an opportunity that may be unique in Africa – to harness urbanization to its full potential.

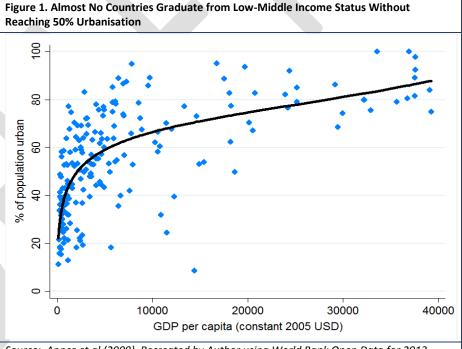
Just 18 percent of Rwanda's residents currently live in cities, but the government intends that by 2020 Rwanda will be 35 percent urbanised (MINECOFIN, 2000). To achieve this efficiently, the government is now investing heavily in urban planning and development, with the intention that Kigali and six secondary cities become green, habitable, and vibrant centres of economic activity.

Why is successful urbanisation important to economic growth in Rwanda? In cities, the close proximity of citizens and firms can create stepchanges in productivity growth: people with unique specialisations, experiences, and passions, interact regularly, to accelerate the creation

and spread of ideas. Well-educated people are particularly able to generate and learn from new innovations and knowledge, meaning that with high education levels, 'knowledge spill-overs' in cities can drive exponential and sustained gains in productivity and growth (Lucas 1988). Firms can take advantage of specialisations that emerge with urbanization – such as clusters of skilled labour, or tailored institutions –

FUNDED BY

Introduction: This paper, written by Sally Murray of the IGC, summarises the policy discussions emerging from Rwanda's National Forum for Sustainable Urbanisation in Support of EDPRS2 (March 2014). It outlines the role that urbanisation could play in Rwanda's development, before presenting policy options from international best practice that may help to realise Rwanda's goals for urban housing, transport, and finance.



Source: Annez et al (2009), Recreated by Author using World Bank Open Data for 2013

as well opportunities to buy more efficiently-made inputs.

Because of these virtuous *economies of agglomeration*, urban workers in cities around the world have historically benefitted from wage rates far out-stripping those in rural areas. Few countries have graduated to middle income status without at least half of their population living in dense urban spaces (Figure 1).





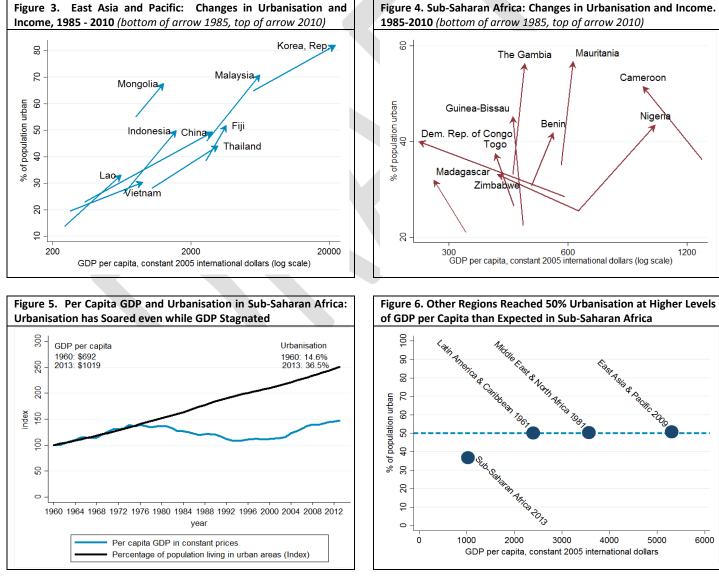
Rwanda, too, will need to urbanise as it strives to attain middle income status and meet its other ambitious goals for human and economic development. The working-age population is projected to increase by two million before 2022, and these adults will not all be able to sustain their families by working the land: the median plot size in Rwanda is already 0.33 hectares, against a fertility ratio of approximately four children per mother, making it difficult for families to meet subsistence needs. Agricultural productivity should improve as Rwanda adopts new technologies, but nonetheless, population statistics suggest that movement to cities will accelerate considerably. Because of agglomeration economies, cities also offer one of

employment for its new labour; with the right education policies, infrastructure, and agricultural developments, the urban migration of citizens might deliver enhanced productivity and growth, with benefits for the whole country.

Rwanda's best opportunities to create productive

Urbanisation can fall short of its potential

The virtuous economies of agglomeration that can drive economic growth do not develop *automatically* in cities, however. Much of Sub-Saharan Africa has suffered a phenomenon that some have dubbed *'premature urbanisation'*: desperate rural poverty causes a large migration to cities, before the urban infrastructure, economic intensity, and human capital



Source: Author's own, using World Bank Open Data, based on The Economist's (2012) graph entitled, "The Urbanisation Trap". (Figures 3-4) Author's replication of Annez, Buckley, & Spence (2009), using World Bank Open Data (Figures 5-6).



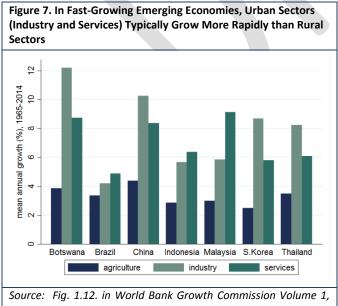




necessary for urban agglomeration economies have been developed (see, e.g., UN, 2003). In these cases, underemployment and informal, low-productivity, jobs such as street corner services tend to predominate. Cities become a sink for rural poverty, but no strong catalyst for growth.

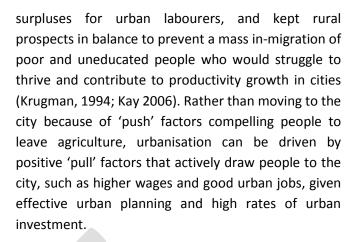
We can see this in Figures 3-6. Whereas recent urbanisation in the developing and emerging economies of East Asia and the Pacific was accompanied by strong per capita income growth (Figure 3), many countries in Sub-Saharan Africa urbanised during this period despite very low or even negative income growth (Figures 4-5). Sub-Saharan Africa is now on track to reach 50% urbanisation at an unprecedentedly low level of GDP per capita (Figure 6); for example, by the time China reached 50% urbanisation, it had a per capita income of \$5,500likely to be more than three times that of Sub-Saharan Africa when it reaches the same urbanisation level. This represents a serious risk to the region's ability to finance effective, liveable, growth-enhancing cities.

Another model is possible in Sub-Saharan Africa, however. Cities in East Asia that achieved high productivity, rapid investment, and strong employment growth achieved this largely through, firstly, almost unprecedented government investment and planning in urban areas, and secondly, huge agrarian reforms that both created agricultural



Recreated by Author using World Bank Open Data

FUNDED BY



Rwanda is well positioned to urbanise efficiently and obtain the productivity stimulus that urbanisation can bring. The government is committed to rapid, inclusive, development, and its national planning document- the EDPRS2- recognizes the role urbanisation should play in realising these ambitions. Rwanda has already developed modern master plans, housing policies, land registries, and green urbanisation strategies, which it continues to refine according to national needs and feedback, as well as lessons from other countries. Programmes to upgrade urban transit and low-income neighbourhood are already underway. Rwanda. though financeconstrained, has considerable potential to raise more revenues and has begun formulating and trialling policies to capture the rapidly rising value of urban land. Finance can also be directed more effectively, and the Ministry of Finance and Economic Planning and Rwanda Social Security Board have begun taking important steps to improve the prioritisation and cost-effectiveness of national investments.

Rwanda has a tremendous opportunity to benefit from *agglomeration economies*, which with wise policy-making could succeed in making its cities sources of shared growth and improved welfare.

Policies to Promote Urban-Led Growth

To realize the full promise of efficient urbanization, Rwanda has to coordinate three separate investment processes – public investment in infrastructure, private investment in housing, and business investments in efficient firms. It also has to mobilize finance for the government's share of investment. As





a relatively late urbaniser, Rwanda can learn from other countries in addressing its own needs. Some of the most important lessons for Rwanda from international experience pertain to *urban transport* infrastructure, *housing*, raising the *productivity of private urban* firms, and *financing urban infrastructure*, each discussed below.

Transport: Enhancing connectivity through Investment, Regulations, and Planning

An efficient transport sector is key to a growthenhancing city. In Rwanda, designing cities for nonmotorised transport will allow the country to make virtue of necessity: at present, 60-70% of journeys in Kigali are walked (Bajpai 2014) -- walking is cheap for the consumer, and footpaths are far cheaper to build and maintain relative to roads; walking also reduces congestion, air pollution, and pressure on fuel imports; and investments in walking infrastructure disproportionately improve the mobility of women, children, and the elderly. Non-motorised transport is already being encouraged through the construction and renovation of walkways, and plans for transitoriented 'mixed-use' neighbourhoods where core services are within walking distance of households.¹ However, for Kigali to evade the crippling congestion seen in many other African cities, and keep lowincome earners highly mobile, these efforts must be seriously scaled up.

Although footpaths will ease demands on the roads, the number of cars and motorbike journeys will multiply rapidly as Kigali's population grows, densifies, and becomes richer. Complementary measures -'congestion charging,' increased parking fines, and road taxes- might be fruitfully trialled, and possess the virtue of both reducing demand for car and motorbike journeys while raising funds for socially efficient, green, public transport infrastructure. If the tendency to use personal cars and motorbikes is to be reduced, public transport must also be made much more efficient and affordable. The large number of journeys taken by unsafe and expensive motorbike taxis is just one indication that Kigali's bus sector is working well below capacity. As outlined in a recent IGC paper (Bajpai, 2014) commuters within Kigali urgently need a much more complete coverage of routes and times, and more reliable schedules. Integrated fares, differentiated according to journey distance, social groups' ability to pay, and service quality would also increase demand for public over private transport and possibly increase profits for private contractors. Finally, to reduce the pressure on family budgets arising from housing costs, low-cost public transport must also remain available for those commuting to Kigali from periphery areas like Kabuga, or secondary cities.

4

Although bus services in Kigali are directly provided by private sector contractors, improved regulation might deliver many of the above improvements: contracted companies can be mandated to cover strategic, but less profitable, routes and times; cooperation between different firms and drivers can be regulated to ensure that commuters who change buses midjourney pay according to distance travelled, rather than the number of buses taken; **cooperative structures should be strengthened** to allow regulators to more easily hold the cooperative (and not just individual drivers) accountable for service delivery in their area. Beyond regulation, the government may also trial subsidising bus fares for citizens who are least able to pay.

Kigali's plans for Bus Rapid Transit (BRT)² speak to the need for a more complete, regular, and reliable coverage of bus routes. However, due to complementarities across transport-related interventions, implementation of BRT should be approached with appropriate sequencing. Simpler 'stepping stone' measures should, for instance, be brought to working order as a priority and condition

² BRT is a bus system involving dedicated bus lanes, right of way for buses, and technologies to minimise stopping times, which renders buses similar to a 'surface subway'.







¹ Mixed use neighbourhoods- which host not just residents, but also amenities, markets and commercial activities, parks, and transport hubs- can reduce residents' motorised transport use by even more than road improvements or proximity to job destinations (Ewing and Cervero 2010).

for this more advanced system. As Bajpai (2014) has noted in his IGC paper concerning transport in Rwanda, "It is... an opportune time to seek *synergy* across planned interventions... Successful traffic management measures (e.g. signalization, parking controls, pedestrian and bicycle facilities, etc.) will be critical to improve the reliability and efficiency of current bus services... [and] pave the way for effective future bus priority schemes (bus lanes, BRT), transitoriented city expansion, and other travel demand management measures such as parking supply and pricing policies."

In addition to implementing institutional and infrastructural building blocks in optimal sequence, transport development projects be embarked upon only once budgets fully account for future operation and maintenance costs (a condition often not met in other African countries' urban development).

For the government to effectively plan road and footpath infrastructure, regulation must also **uphold the government's right to the compulsory purchase of land**. Without this possibility, a private land-owner whose plot is located on a planned transit route can impede infrastructure development and extract huge rents from the state by refusing to sell their land or demanding an extortionate price. At the same time, **those dwelling on or owning land must be properly compensated for any compulsory clearances**, and relocation policies must protect residents' access to employment. This is not just for the sake of equity, welfare, and labour productivity, but also to uphold public (and financier) confidence in and cooperation with the national urban development process.

Affordable, liveable houses for all

Private investment in housing moulds the urban landscape, and influences the connectivity of the city, as much as public infrastructure investment. Unlike public infrastructure investment, it is one step removed from the government's control- both a weakness and a strength. At present, Rwanda's efforts to manage urban housing have included master planning and zoning regulations; land registration and titling; the encouragement of a mortgage market;





Box 1. Unaffordable housing in New Kilamba City, Angola



The government of Angola spent \$3.5 billion building Kilamba, a city with 700 high rise buildings designed to meet the housing needs of hundreds of thousands of people. But the houses were too expensive for most, and have remained largely empty. Luanda's poor continue to face a serious housing shortage (Buckley 2014).

direct investment in upper middle class housing (and in the case of Batsinda, low-income housing) through the RSSB and RHA; provision of trunk and neighbourhood infrastructure for planned neighbourhoods; the development and testing of locally-produced building materials; provision or sale of government land; the promotion of investment opportunities to developers; the development of national, city, and district level One-Stop-Centres and online building permitting; a progressive new housing policy; and support to investors in low income housing.

Despite these efforts and progress, only a few hundred homes have been constructed that are both formal and affordable for low income residents. With an estimated 230,000 new homes needed every year for residents earning under 200,000 FRW (US\$290)including 43,400 for those earning less than 35,000 RFW (US\$50) - (Planet Consortium, 2012), anything approximating 'business as usual' will not close Kigali's housing gap for the poor and middle class.

The most important challenges in closing Kigali's housing gap are: i) to satisfy the latent demand for decent urban housing that originates with the 80 percent of Rwandans that cannot afford Kigali's



expensive formal homes (including those financed by government); and ii) to densify the land use patterns of the middle and upper class.

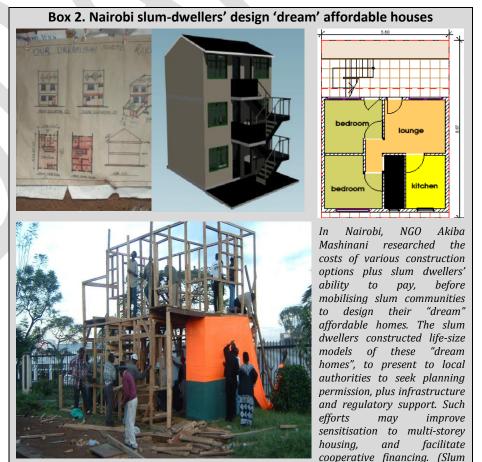
International experience - in Latin America (including Argentina, Peru, and the Dominican Republic) and Africa (e.g. Angola), Europe, and the USA - has shown that it is very difficult for governments to meet these objectives by constructing or subsidising houses directly. Already stretched authorities are insufficiently market sensitive to control and meet costs, manage risk, avoid corruption, and place houses in the locations demanded by the poor and middle class. Hundreds of thousands of government-built homes in Angola stand empty (see Box 1) and even middle-income countries have struggled to bear the costs of governmental housing construction and subsidies.

Chile provides a rare example of relatively successful direct government participation in housing construction and finance, and the government's involvement helped to halve Chile's large housing

deficit between 1985 and 2001. the Chilean However, even government houses suffered from ineffective targeting of the poor, high costs, and suboptimal locations. The Chilean government has in the last decade progressed to a system in which families -rather than the government- propose the locations and designs for new subsidised dwelling units. Groups of families present building plans to the government, and the government awards support to those that most effectively meet social, economic, and design objectives (Navarro, 2005).

The government of Peru constructed housing for the poor in the 1940s and '50s. More typically, once completed, these houses were much too expensive, and far from where poor people preferred to live. Like many countries around the world, Peru has thus now graduated to a model of self-build, slum upgrading, and government provision of public infrastructure (a 'sites and services' approach) (Tilley 2007).

A 'sites and services' approach -in which the government prepares sites with basic infrastructure and services, around which households may finance and build homes- must be a core pillar of housing policy in a low-income country, where properlyserviced, liveable homes must be made available for hundreds of thousands of low income residents on a small government budget. Governments simply cannot subsidise enough houses to meet demand, and as above, tend to construct houses poorly. The 'sites and services' approach also brings an important additional benefit, by creating huge incentives for poor citizens to increase their saving rates (saving to invest in house construction); this boosts national savings, facilitating national investment and, in turn, economic growth and stability (Deaton, 1999).





Dwellers International, 2014)

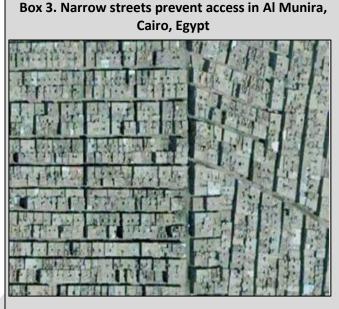




To the extent that governments must take the lead in planning urban housing, the long-term sustainability and effectiveness of their activities usually depends crucially on the involvement and support of citizens. The Government of Rwanda places strong emphasis on citizen participation and local accountability (see, e.g. Citizen Scorecards, umuganda practices, and local authority imihigo appraisals), and note in the draft housing policy (p42, MINIFRA 2014) that it is imperative that citizens continue to feel- and beinvolved throughout the planning process, especially during large, complex, or controversial changes. Box 2 provides just one positive example of how citizen involvement in low income housing design and financing can help to formalise, densify, and finance low income housing, to improve the living standards and economic participation of the poor.

The Government of Rwanda's new Housing Policy states that the Government will support residents (or residents' groups) to self-construct houses, and will primarily fund basic 'sites and services' infrastructure, rather houses themselves (p30, MININFRA, 2014). It thus reflects learning from best practices around the world. The government also intends to conduct a thorough, evidence-based revision of master planning and zoning, and this activity would very helpfully guide the implementation of this strategy.

The costs of land, building materials, and finance for the construction of housing is another core challenge in Rwanda. Slopes and bogs make much land undevelopable, and developable land expensive; Rwanda's landlocked status and hilly topography elevates input prices (cement, for example, is consistently more expensive in Kigali than Kampala, with an average price gap of 30% over the past decade) (Buckley et al, 2015); real interest rates are high, at around 14%. The IGC's recent paper by Buckley, Ilberg, and Murray (2015), outlines ways these cost and finance constraints might be addressed, particularly through: an RSSB-financed intermediary mortgage bank; facilitation of bulk input purchases; streamlined building regulations; very targeted subsidies for strategic inputs such as cost-effective **upgrading** of currently flooring; informal areas; and support for lower-income land-



In the Al Munira district of Cairo, density is over 1500 persons per hectare, yet houses (of 4-6 floors) are served only by 4m-wide access streets and 8m-wide collector streets that were at one time the village roads; the millions living in this area are almost completely cut off from essential services carried by road.

owners to **construct in modules and eventually built** *upwards*, to make more of scarce land and densify the city, while upholding affordability in a context of expensive finance.³

If the government can wisely implement its housing policy, while nurturing an **enabling financial environment, ensuring inputs and plots are affordable, and minimising building regulations** (within the bounds of safety), it may be able to close significant parts of its urban housing gap efficiently without destabilising national finances.

Attracting formal private investment for *middle-upper-income* housing is simpler than mobilizing finance for low-income homes; the key challenge for middle-income homes is densification. The government's role can be confined to neighbourhood planning (and enforcement of plans), provision of basic infrastructure, designing urban land taxes to encourage a socially-efficient use of land, optimising building regulations, provision of model architectural plans for denser units, and financial regulation to encourage an active, efficient, mortgage market.

³ Such piece-meal construction might be facilitated by the provision of model architectural plans by all urban districts







To deliver socially-efficient land use, the government will revise the Master Plan and zoning regulations to better incorporate the dense and 'mixed use' neighbourhoods of the Housing Policy and Urbanisation Strategy. It is important that in any plan or strategy for urban development, infrastructure is prioritised in areas earmarked for densification: households and firms will 'follow the infrastructure', so this strategic prioritisation is key to the challenge of reducing sprawl and managing congestion.

Firms' Investment in Production

Coordinating firms' investment in enterprises is as important as households' investment in housing. Rwanda has made great strides toward achieving one of the most business-friendly regulatory environments in Africa (World Bank, 2014). Already, services are beginning to emerge as an economic strength for Rwanda to develop, and manufacturing revenues have been increasing, largely through exploitation of Rwanda's proximity to the Democratic Republic of Congo, membership in the East African Community (Gathani and Stoelinga, 2012), and more recently through forward linkages in agro-processing.⁴

However, high energy prices, unreliable water supplies, elevated input and transport costs (Rwanda is 1,000km from any port), and the relatively lowskilled workforce still compound weak existing agglomeration economies and a narrow consumer base to deter firms from locating in Rwanda's cities. To address the infrastructural challenges, new industrial parks have been developed near each major city in Rwanda; although apparently based on a thoughtful and informed policy, implementation has been challenging, and in practice power and inputs in the parks remain expensive, core services like water unreliable, and locations not favoured bv manufacturers (Farole and Spray, 2014). Improving the reliability and affordability of firms' power and water supplies, reducing freight costs and preventing

congestion, and educating the workforce to a high quality with relevant, flexible, skills, should be at the forefront of any economic plan for Kigali.

The Ministry of Education is making considerable efforts to improve educational access and quality, and the work-readiness of its labour force; these efforts should be intensified where possible. As well as countering the deterrence of high input prices, high quality education will enable crucial home-grown innovation: a well-educated person can learn from others more easily, and has more to teach others in return; thus, when many educated people interact in the dense urban environment, they tend to create virtuous chains of innovation and learning ("knowledge spill-overs"), which some economists believe are uniquely capable of driving exponential productivity growth (Lucas 1988). Constituting just one example, Moretti (2004) finds that a 1% increase in the supply of college graduates in a US city raises the productivity of people at *all* levels of education: high school drop-outs improve their productivity by 2.3%, high school graduates by 1.4%, and college graduates by 1.2%).

Financing Urbanisation

Certain investments -to improve institutions and regulatory frameworks- could transform Kigali at relatively little cost. However, full preparation for effective urban development will require a substantial investment of public funds - for transport, water, sewerage, and power infrastructure, and for citizens' education.

It is not uncommon, internationally, for the combined effects of infrastructure investment and in-migration to appreciate urban land values twenty to thirty fold over the space of less than a decade (p28, Kopanyi, 2014). The expected rise in Kigali's own land prices is a risk to housing and infrastructure affordability -but is also a crucial asset. Rising land values create an 'urban growth dividend', which can be captured by the public sector and re-invested in key public infrastructure, creating a 'self-financing' urbanisation. As Buckley highlighted in his IGC conference paper (Buckley, 2014), "China's highly successful urbanisation strategy







⁴ Food, beverage, and tobacco processing account for approximately 70% of manufacturing revues, and have more than doubled since 2006/7 (MINECOFIN 2014).

was built on a centrepiece of exploiting rising land values" to invest in urban development.

Land and property taxes, real estate transaction taxes, and licensing fees for construction or renovation are the main instruments for capturing the appreciating value of urban land. Increasing some of these taxes and fees is reasonably safe in Rwanda: large investors generally value a clear and reliable legal framework, fast low-cost transactions, and economic growth, at least as much as marginally lower taxes; a rapid and large increase in land and property values of the kind that can be expected in Kigali means private developers can quite comfortably contribute to government revenue while still making large profits; increased municipal tax receipts will allow the government to lower tax rates in other priority sectors; and with growth good communication, the government can demonstrate to taxpayers that increased local taxes bring favourable returns in the form of improved local public goods.

Some principles for capturing rising land values through property-based taxes in Kigali include:

- Gains that stem not from the landlord's own effort but from that of 'society' or the captured by the government should be government and re-invested for social benefit. This is partially reflected in the new Housing Policy, which states that, "if a private developer benefitted from government support... mechanisms shall ... capture ... the value addition to recover the partial or full cost of the public investment". Capital gains tax rates of 20-30% are provided land internationally, typical or structures are sold within ten years of purchase.
- **Property tax rates can easily rise by 1-2 percent.** The international average property tax rate is approximately 1% the value of the property and land; in Rwanda, the rate is 0.1%.
- However, it may be advisable to first expand the tax base by revising eligibility requirements and stepping up registration and enforcement. The expansion of the tax base (from less than 4,000 property tax-payers at present) would raise more government revenue, and would improve the

FUNDED BY

DIRECTED BY

fairness and sustainability of the tax burden. Implementing both an expansion of registration and a rate increase together may be politically difficult.

- The current flat fee on property transfers suffers from being both regressive (and thus harmful to, and often evaded by, the poor), and also too low to seriously boost revenue. A transfer tax of 1-2 percent of contracted sale value, combined with a capital gains tax, should improve equity, market incentives, and overall revenue, while also delivering a lower fee for the very poor which could help tremendously in keeping the land cadastre up to date (Kairaba 2014).
- To facilitate property taxation, the Government should develop reliable and semi-complete digital fiscal cadastres, which include data on real estate values. This can build on Rwanda's land registries (see Deigninger, Duponchel, and Murray 2014), which are quite comprehensive, but imperfectly digitalised and lacking certain key information. In addition, incentives must be devised to encourage accurate reporting of property prices, and information must be provided to help property owners assess values accurately.⁵ A 'mass valuation' could estimate the values of all plots in Rwanda relatively cheaply and accurately. The merits, drawbacks, and options for mass valuation in Rwanda are discussed in a recent IGC paper (Kopanyi, 2014); amongst other methods, Kopanyi outlines how property values can be proxied for, according to their size, materials, and location, and that such estimates can approximate market values relatively well. As well as creating reference numbers for calculations land of value appreciations, such a mass valuation would importantly improve targeting the and transparency of property tax audits.

Fixed asset (property and land-based) taxes are extremely important in the context of rapidly rising land prices in Kigali. But of course, many other

⁵ At present, people estimate and declare their own property value for tax purposes, with few audits.



9

financing options are available to support urban development. Others important measures include central government grants, user fees, development and betterment fees, the selling and leasing of government land and special development rights,⁶ commercial loans, regional development bank lending, donor grants, and broader efforts to improve registration and compliance. Many of these mechanisms would be much better supported by the development of strong rolling Capital Improvement Plans (CIPs) by and for each urban district.

Conclusion

Rwanda has bold ambitions to harness urbanisation to improve the productivity and welfare of its population, and drive economic growth.

Within Africa, it is unusually well equipped to succeed. It has a national cadastre of land ownership, sound framework policies for housing and urbanisation, and is emphasizing thorough and evidence-based planning for all urban areas with the goal of sustainably boosting economic growth and citizens' welfare.

To realize the full potential of these efforts, the Government of Rwanda must continue refining urban strategies, plans, and regulations according to local needs and data, and international best practices; focus attention and resources even more to achieve priority infrastructure and education goals; ensure its promising housing policy is implemented, to uphold the economic participation and welfare of the majority low income earners; and recast municipal tax policies to greatly augment the extent to which infrastructure is financed by appreciating land values. If the government succeeds on these policy fronts, Rwanda's urbanisation may provide a model for Africa, and hundreds of thousands of Rwandans may enjoy improved economic security and opportunities.

About the IGC

⁶ In Teheran city, two thirds of municipal revenue derives from payments for permits to build above the city's four-storey limit.





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).

Contact the IGC in Rwanda

For enquiries about this note and general enquiries about the IGC, please contact rwanda@theigc.org, or +250 (0)783-109-437. The country team include:

Country Director – Richard Newfarmer Lead Academic – Andrew Zeitlin Country Economists – Sally Murray and John Spray Office Manager – Charity Karungi

Contact the IGC in London

International Growth Centre The London School of Economics and Political Science 32 Lincoln's Inn Fields Houghton Street London WC2A 2AE

Tel: +44(0)203 486 2911



African Development Bank, 2012. "Rwanda Transport Sector Review and Action Plan." African Development Bank.

Angel. S. et al. 2011. "Making Room for a Planet of Cities." *Policy Focus Reports*. The Lincoln Land Institute, Cambridge.

Annez, P., Buckley, R., & Spence, M., 2009. "Urbanization and Growth." *Commission on Growth and Development*. The World Bank, Washington D.C.

Bajpai, J., Ottelenghi, R., & Berlanda, T., 2012. "Sustainable Urbanization in Support of Economic Transformation – A Rwanda Study." The International Growth Centre, London.

Bertaud, A., and Renaud, B., 1997. "Socialist Cities Without Land Markets." *The Journal of Urban Economics*.

Buckley, R., Ilberg, A., and Murray, S., 2015. "Rwanda's Urban Housing Policy." The International Growth Centre.

Buckley, R., and Kalarickal, J., (eds), 2006. "Thirty Years of Shelter Lending: What Have We Learned?" *Directions in Development*. The World Bank, Washington D.C.

Buckley, R., and Kallergis, A., 2014. "A Review of the Asian Coalition for Community Action Approach to Slum Upgrading." East Asia and the Pacific Sustainable Infrastructure Unit. The World Bank, Washington D.C.

City of Kigali, 2013. "Master Plan Report."

City of Kigali 2012. "Development Plan."

Deaton, A., 1999. "Saving and Growth." *The Economics of Savings and Growth.* Cambridge University Press, Cambridge, UK.

The Economist, April 29 2014. "Special Report on China: Building the Dream."

Ewing, R., and Cervero, R., 2010. "Travel and the Built Environment", *Journal of the American Planning Association*.

Farole, T., and Spray, J., "Special Economic Zones in Rwanda." The International Growth Centre.

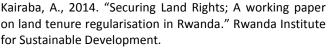
Gathani, S., & Stoelinga, D., 2013. "Understanding Rwanda's Agribusiness & Manufacturing Sectors." The International Growth Centre.

Gibson, W.E., 1973. "Protecting Housing from Restrictive Credit Condition." *Brookings Papers on Economic Activity*, Brookings Institute, Washington, D.C.

Gomez-Ibanez, J., 1999. "Regulating Infrastructure." Harvard University Press.

Housing Finance Company (HFC) Bank Ghana, 2014. "Annual Report".

Kay, C., 2006. "Why East Asia Overtook Latin America: Agrarian Reform, Industrialisation, and Development." *Third World Quarterly.*



Kopanyi, M., 2014 (1). "Financing Expansion and Delivery of Urban Services." The International Growth Centre.

Kopanyi, M., 2014 (2). "Enhancing Own Revenues of Decentralised Entities in Rwanda." The International Growth Centre.

Krugman, P., 1994. "The Myth of Asia's Miracle." Foreign Affairs.

Lucas, R. E., 1988. "On the Mechanisms of Economic Development." Chicago.

Ministry Finance and Economic Planning, July 2000. "Vision 2020." Rwanda.

MINECOFIN, June 2014. MacroFramework Public Dataset.

Ministry of Infrastructure, October 2012. "Public Transport Policy and Strategy for Rwanda." Rwanda.

Ministry of Infrastructure, 2013-18, 2012. "Urbanization and Rural Settlement Sector Strategic Plan." Rwanda.

Ministry of Infrastructure, Jan. 2013. "National Human Settlement Policy." Rwanda.

Ministry of Infrastructure, 2014. "National Housing Policy." Rwanda.

Moretti, E., 2004. "Workers' Education, Spillovers, and Productivity: Evidence from Plant-Level Production Functions." *American Economic Review*.

Navarro, M., 2005. "Housing Finance Policy in Chile: The Last 30 Years." *Land Lines Journal* 17.3.

Planet Consortium, 2012. "Housing Market Demand, Housing Finance, and Housing Preferences for the City of Kigali." EU Aid.

Republic of Rwanda, 2013-2017 & 2012. "Shaping Our Development: Economic Development and Poverty Reduction Strategy." Rwanda.

Rwanda Utilities Regulatory Authority (RURA), June 2013. "Strategic Plan 2013-2018." Rwanda.

Rwanda Utilities Regulation Authority, 2013. "Annual Report 2012-13." Rwanda.

The World Bank, 2006. "Partnering with Slum Communities for Sustainable Sanitation in a Megalopolis." The Water and Sanitation Program. World Bank.

The World Bank, 2014. "Doing Business 2015; Going Beyond Efficiency."

Tilley, A.J., 2007. "Freedom and Housing Rights for Low-Income Groups: a Case Study of Peru."

United Nations Human Settlement Programme, 2003. "The Challenge of Slums: Global Report on Human Settlements 2003." Earthscan Publications Limited, London and Sterling.





