Policy Brief

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Optimal construction permit fees for Rwanda

In brief:

- To successfully manage rapid urban growth and its attendant challenges, and to implement effective development control, municipal authorities need to increase revenue from construction permits and other sources.
- Rwanda's ranking in the Dealing with Construction Permits subcomponent of the World Bank's Doing Business index is rising, but the Government is keen to see improvement, including in the cost sub-element.
- The researchers recommend that construction permit fees should be set as a percentage of development cost as a solution for both municipal revenue to increase and Rwanda to improve its Doing Business ranking. For the City of Kigali, a rate of 0.1% to 0.2% of warehouse cost would increase revenue between six- and seventy-fold without increasing building permit costs according to Doing Business methodology.
- The researchers advise against a fee per square metre, as it would increase the cost of the warehouse significantly according to Doing Business methodology and disregard significant differences in construction quality that exist.

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Background

Construction permit fees matter for three reasons. First, the process of issuing permits constitutes development control; the principal way to enforce urban planning and safety regulations. Second, since the construction sector is an important part of most economies, permits constitute a transaction cost in terms of time and money; a report commissioned by the American Institute of Architects found that permit delays raise tenant costs in new and existing buildings and that reduced permit times in one location attracts investment from other locations with less efficient permit processes. The report also found that this increased investment in construction can catalyse broader multi-sectoral economic benefits.

Third, construction permit fees are the primary source of income for local government councils to resource their urban planning and development management departments that handle construction permits and development control. This income is especially important where there are scarce municipal revenues. However, Rwanda has a flat construction permit fee of RWF 60,000, regardless of the cost of the construction project for which the permit is sought. This may not be not high enough to cover administrative costs.

The Government of Rwanda, including the City of Kigali and Rwanda Development Board, is keen to improve Rwanda's score and ranking in the construction subcomponent of the Doing Business index. This policy brief lays out a win-win scenario in which Rwanda can both increase revenue from construction permit fees, and increase its Doing Business ranking.

Rwanda's construction permit fees in regional and global context

The City of Kigali charges a flat fee of RWF 60,000 for construction permits, and at the district level, the fee is RWF 40,000. This is for any development regardless of scale. Thus a 20,000m^2 project costing RWF 20 billion to build would pay the same fee for a construction permit as a 250m^2 single family house costing RWF 150 million to build.

In the World Bank's Doing Business rankings for 2020, Rwanda ranks 38th globally out of 190 and 2nd in Sub Saharan Africa out of 48. The rankings include a Dealing with Construction Permits subcomponent in which Rwanda ranks 81st globally, up from 106th in 2019 and 7th in Sub Saharan Africa in 2020 up from 15th in 2019. Clearly, Rwanda Development Board-led reforms in 2019 made a difference, but the ranking of 81st is the second-lowest ranking Rwanda scores in any of the ten criteria considered in the rankings, and there is still scope for improvement.

The Doing Business index measures the ease of dealing with construction permits by recording the procedures, time and cost required for a small to medium-size business to obtain all the necessary approvals to build a hypothetical simple commercial warehouse with 1300 square metres of floor space and connect it to water, sewerage and a fixed telephone line. The subcomponent includes inspections and certificates required before, during and after the construction of the warehouse, and assumes that the warehouse is in the peri-urban area of the largest business city, is not in a special economic or industrial zone, and will be used for general storage activities.

Table 1 compares Rwanda with the top ten scoring countries for the Doing Business index. Rwanda scores higher in the quality control index than 7 of the top 10 countries in dealing with construction permits. The reason for Rwanda's low ranking when compared to the ten top-ranking countries globally, is the number of procedures, the high cost as a percentage of the assumed warehouse value, and the length of time taken to execute these processes.

There are four elements within the Dealing with Construction Permits subcomponent: Building Quality Control Index for which Rwanda scores 100%; Time for which Rwanda scores 79.5%, Procedures for which Rwanda scores 60%, and Cost for which Rwanda scores 43%. The average of these four scores gives Rwanda's overall score of 70.6% for the subcomponent. It is thus clear why the Government does not want to increase costs. Whilst we do not aim here to recommend specific reforms to increase the Doing Business score, we would like to emphasise that the core recommendation of this paper does not increase costs from the perspective of Doing Business; indeed, it is compatible with a reduction in costs.

Table 1: Dealing with Construction Permits - Comparison of Rwanda with top 10 countries

Country	Number of procedures	Time (days)	Costs (RWF)	Costs (USD)	Cost (% of warehouse value)	Quality Control Index* (0-15)	Ranking /190	Score %
Rwanda	**15**	**97**	**3,744,000**	**4,021**	**11.6**	**15.0**	**81**	**71**
Hong Kong	8	69	7,140,454	7,670	0.3	15.0	1	94
Malaysia	9	41	6,413,761	6,889	1.3	13.0	2	90
UAE	11	48	44,282,635	47,565	2.2	15.0	3	90
Denmark	7	64	16,262,566	17,468	0.6	11.0	4	88
Singapore	9	36	91,744,934	98,545	3.3	13.0	5	88
Taiwan	10	82	4,854,603	5,214	0.4	13.0	6	87
New Zealand	11	93	38,425,599	41,273	2.2	15.0	7	87
Mauritius	12	96	2,146,710	2,306	0.4	14.0	8	86
Serbia	11	100	4,236,253	4,550	1.4	14.0	9	85
Lithuania	13	74	2,426,777	2,607	0.3	13.0	10	85

*The quality control index is the sum of the scores on the quality of building regulations, quality control before construction, quality control during construction, quality control after construction, liability and insurance regimes, and professional certifications indices.
An exchange rate of 931 RWF per US$ is used, which is the rate on XE Currency, as on 5th November 2019

The reason that the Doing Business index scores Rwanda low on cost is that unlike for many countries ranked highly in Doing Business, it includes private sector costs such as inspections, surveys and studies legislated to be carried out by private firms and companies. These include:

- Geotechnical study – RWF 2,000,000
- Topography survey – RWF 465,500
- Environmental Impact Assessment Report – RWF 570,000
- Hiring a private firm to conduct construction inspections – RWF 648,179

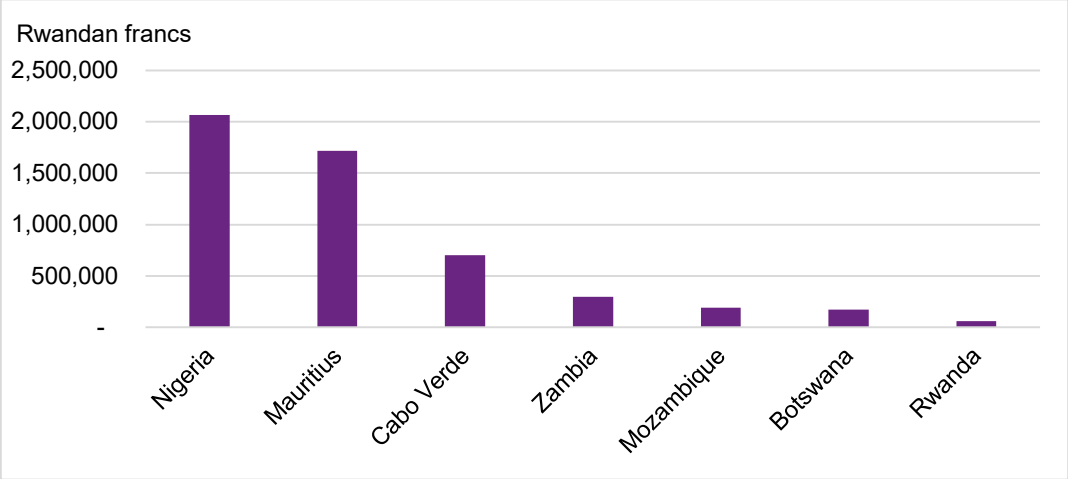
These costs are much higher than the sole government-related cost which is RWF 60,000 for obtaining an online building permit, Environmental Impact Assessment certificate and water connection. There may be a case that these costs should not be listed as part of the cost the government incurs for construction permit approval in Rwanda, because a geotechnical study and topography survey are architecturally necessary, and are private sector costs. Doing so significantly skews upwards the actual fee cost, but these are not government permit fees. More research on this and dialogue with the Doing Business team may be worthwhile[1]. Moreover, the City of Kigali and RDB have stated that the Doing Business 2020 data does not capture some construction permit-related reforms[2].

[1] Of the global top ten countries on the construction permit subcomponent, eight do not specify a requirement for a geotechnical study, and nine do not list a requirement for a topography survey, although these are essential. Moreover, of the four African countries ranked higher than Rwanda for this subcomponent, two do not require a geotechnical study, and three do not state a requirement for a topography survey. Since both are architecturally essential for any building design, it is a mystery as to how these countries are able to not list them. It is unclear from Doing Business methodology which private costs are included – cost of building design is never included for example, but whilst topography surveys are always necessary, their cost is not included in the methodology.
[2] CNBC Africa, 2019. Accessed here on 11th November 2019 https://www.youtube.com/watch?v=Tm98fbD_qAI

When considered in a regional context, permit fees in Rwanda are significantly lower than any other regional economy. Its structure is the simplest with a single fee payable to the City Council Authority issuing the permit. The current fee is inadequate to resource the process of reviewing and assessing the merits of the permit application. Assuming the construction permit review process in its entirety takes one month for one staff member, the current charge of RWF 60,000 ends up as a de facto charge of less than RWF 3,000 per working day, an amount which is insufficient to meet the cost of administration. This effectively means that the Government of Rwanda is subsidising the cost of construction permits for developers and investors in a situation of resource scarcity.

A fairer comparison of construction permit fee costs than Doing Business in its current form compares like for like – that is, it compares the fees charged only to the public sector. Of the six economies in Sub Saharan Africa which perform above Rwanda in the Dealing with Construction Permits index on the Doing Business rankings, Rwanda's construction permit fees are the lowest: for the warehouse specified under the Doing Business Nigeria charges over RWF 2 million, Mauritius charges RWF 1.7 million and the closest to Rwanda, Botswana, charges just over RWF 170,000. Rwanda's regional neighbours Kenya, Tanzania, Uganda, Ethiopia and Burundi are ranked well below Rwanda overall and in the Construction Permit criteria and thus, not considered here.

Figure 1: Cost of construction permit in Rwanda compared to the six African countries ranked higher for Dealing with Construction Permits subcomponent



Moreover, *Table 2* shows that four representative African countries not only charge fees for a construction permit but other related procedures including a preliminary design proposal and planning application, an Environmental Impact Assessment, and approval of structural proposals.

Table 2: Regional Context Analysis – fee charging components

	Preliminary design proposal	Obtain Environmental Impact Assessment clearance	Structural proposals	Construction permit
Mauritius	Fee Charged	Fee Charged	Included in Permit Charge	Fee Charged
Botswana	Fee Charged	Fee Charged	Included in Permit Charge	Fee Charged
Zambia	Fee Charged	Fee Charged	Included in Permit Charge	Fee Charged
South Africa	Fee Charged	Fee Charged	Fee Charged	Fee Charged

Table 3 compares these charges for a notional single residential unit (a maximum of 2 units or 500m^2) and a notional 10,000m^2 multiple residential developments or non-residential development, showing that unlike for Rwanda, comparator countries charge differential permit fees. Rwanda does vary its technical requirements based on the building classification, but no fees to government.

Table 3: Construction permit fees in regional context

	2020 Doing Business Ranking	2020 Construction Permits Ranking	Fees for residential house - maximum 2 units			Fees for multiple residential units and commercial non-residential development – 10,000m^2		
			Structure	RWF	USD	Fee Structure	USD	RWF
Mauritius	12	8	0.28 USD/m^2	133,133	143	14.3/m^2 floor area	14,300	13,313,300
Botswana	87	44					1,550	1,443,050
Zambia	85	67					2,700	2,513,700
South Africa	84	98	1.18 USD/m^2 of floor area	577,220	620	1.17/m^2 floor area	11,731	10,921,561
Rwanda (current)	38	81	Flat rate fee	60,000	64	Flat rate fee	64	60,000
Rwanda (2017) *						0.22/m^2 floor area	2,149	2,001,510

Exchange rate of US$ to RWF is 931 according to xe.com accessed November 2019
* pre-2018 Rwanda Construction Permit fees were charged at RWF200/sqm of construction. This was revoked in 2018 and replaced with a flat fee of RWF60,000 per application.
* source of data – Doing Business database – World Bank

Policy recommendations

1. To manage rapid urban growth and its attendant challenges, municipal authorities should increase revenue from construction permits and other sources, to build their institutional capacity.

As mentioned, construction permit fees in their current formulation do not meet the cost of development control in the One Stop Centres. However, Rwanda is urbanising fast; Bower & Murray (2019) estimate that Kigali's population will double in the coming two decades, from 1.6 million in 2019 to 3.2 million in 2040, and National Institute of Statistics Rwanda predicts that Rwanda's urban population will grow to 4.9 million by as early as 2032. This growth will result in continually increasing real estate construction activity; moreover, Kigali and the secondary cities are adopting updates to their city Master Plans. The role of urban planning and development control officers in local government is thus ever more crucial to implement these Master Plans effectively. There need to be enough officers and those employed need to be equipped with the right skills and tools of urban planning, including regulatory procedures, design and construction trends, design and construction techniques, methods and materials, and new technology.

Fees provide the resources for local government to invest in sufficient numbers of staff, their skills and continuous professional development of its staff. As the existing team comes under increasing strain, if it becomes too under-resourced, the local government will face challenges in retaining the best talent, skills and resource its teams to effectively manage development control. Thus, priority should be placed on sufficient municipal revenue, which will play a vital role in realising the economic benefits from Rwanda's forthcoming urbanisation.

2. To increase revenue six- to seventy-fold without affecting Doing Business scores, construction permit fees should be set as a percentage of development cost, and not a rate per square metre; a rate of 0.1% to 0.2% of the Bill of Quantities total should be adopted for Kigali.

The Dealing with Construction Permits subcomponent measures costs as a percentage of the total value of the warehouse, which in Rwanda's case is assumed to be RWF 32.4 million, calculated as 50 times per capita income for each country. Construction permits are currently set at RWF 60,000. We recommend that consideration is given to a rate of between 0.1% and 0.2% of the estimated cost (total of the Bill of Quantities) of the construction project. For the RWF 32.4 million warehouses assumed in the Doing Business rankings, this would result in fees of between RWF 32,408 and RWF 64,817. Thus, compared to the current 60,000 RWF level, our recommendation would either leave the cost as measured by Doing Business almost unchanged or slightly reduce it. However, government reforms to other, far larger, aspects of the cost, may reduce them, or discussions with Doing Business about whether some of the private sector costs are included may also reduce the stated cost.

The Doing Business assessment methodology as written does not explicitly distinguish between flat fees and fees set as a percentage of building cost, and the structure by which fees are set is not explicitly requested, so the percentage of value approach would not be penalised[3].

Part of the reason that Doing Business gives Rwanda a low score for the cost is that the warehouse value itself is assumed to be extremely low at 32.4 million. With total costs estimated to be 3.7 million for the 2020 round of Doing Business, this represents around 12% of the total warehouse cost. However, the reality is very different: a 1300 square metre warehouse would cost around 350 million RWF[4]. If total costs were 3.7 million, this represents less than 1% of the total cost. It is also worth noting that a policy of 0.1% or 0.2% would yield permit fee revenue of RWF 350,000 to RWF 700,000 respectively instead of RWF 32,408 to RWF 64,817 as would be assumed by Doing Business. In this way, the use of a percentage of value can both increase revenue and leave the Doing Business cost score unaffected.

We now calculate the potential increase in permit fee revenue if this policy is adopted, using data provided by the City of Kigali from the Building Permit Management Information System. *Table 4* shows, with simulations that use 2016 and 2017 data, that a permit policy of 0.1% of BoQ value would increase permit revenue by between six and 35 times and a policy of 0.2% would increase revenue by between 12 and 70 times. It also strongly illustrates the reasoning behind a percentage policy rather than a flat fee: the top ten highest values of developments in the BPMIS system for 2016 and 2017 were extraordinarily high and make a huge difference to permit revenue with a percentage policy; not so with a flat fee. Out of over 1500 permits issued for 2017, the top 10 permits would account for about three fifths of revenue. However, excluding them, or including only the 5th to 95th percentile in case the high values were entered into the system in error, would still bring about an impressive increase in revenue from the percentage policy compared to the flat fee policy.

[3] IGC has verified this with World Bank staff who work on the Doing Business index

[4] City of Kigali staff and private sector architects say that cost would be above 300 dollars per square metre

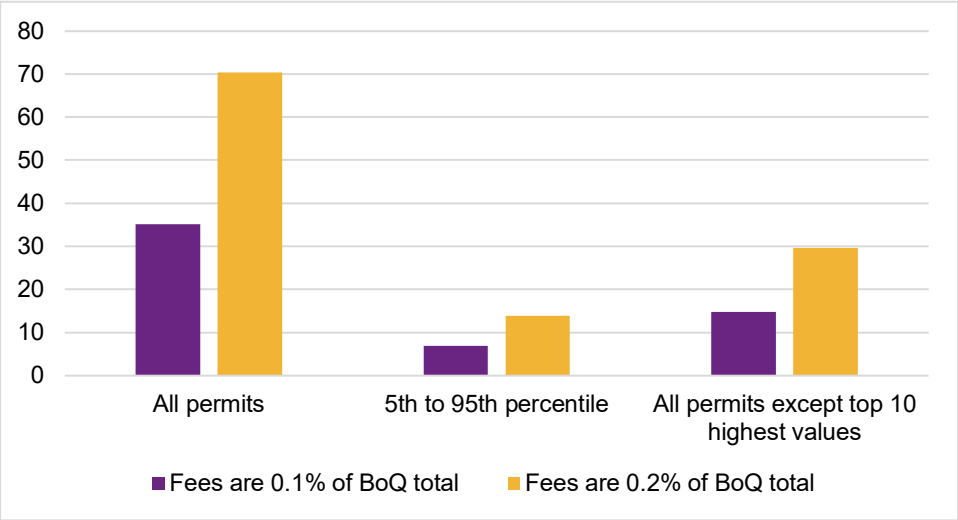
Table 4: Permit revenue under current policy compared to proposed policies of 0.1% and 0.2%, for Kigali in 2016 and 2017

Building permits included in analysis (from BPMIS data)		Revenue under current policy (RWF)	Revenue under 0.1% policy (RWF)	Multiple of revenue under current policy	Revenue under 0.2% policy (RWF)	Multiple of revenue under current policy
2017	All permits	91,620,000	3,226,604,748	**35.2**	6,453,209,496	**70.4**
	5th to 95th percentile based on value	82,500,000	571,826,464	**6.9**	1,143,652,929	**13.9**
	All permits except top 10 highest values	91,020,000	1,347,459,109	**14.8**	2,694,918,218	**29.6**
2016	All permits	113,340,000	2,705,832,079	**23.9**	5,411,664,158	**47.7**
	5th to 95th percentile based on value	102,000,000	618,297,664	**6.1**	1,236,595,327	**12.1**
	All permits except top 10 highest values	112,740,000	1,271,248,234	**11.3**	2,542,496,468	**22.6**

A caveat is due that *Table* 4 is based only on data for the City of Kigali and not for Districts, which charge a flat fee of 40,000 RWF. We recommend that estimated revenue figures for the District are calculated when BPMIS data becomes available. Average BoQ values would be lower, but, likely, a percentage policy would still generate more revenue, more equitably, than the current flat fee.

Figure 2 illustrates the multiple of revenue that would be received for Kigali under a policy that fees are 0.1% and 0.2% of the submitted BoQ total, compared to the revenue currently received. If all permits are included, our proposed policy would generate between 35 and 70 times more revenue; if we include only the 5th to 95th percentile of submissions by BoQ total value, the multiple is between 7 and 14, and if we exclude only the top 10 highest values, the multiple would be between 15 and 30.

Figure 2: Multiple of revenue under current construction permit fee policy, for Kigali in 2017



One objection to a percentage policy would be that it would represent a significant increase in cost for higher value developments. To this, we would reply that the increase would be extremely small compared to the total value – a tenth or two tenths of a percentage point. An intuitive perspective, a 1 million-dollar development would pay 1,000 dollars or 2,000 dollars instead of 64 dollars as is currently the case. Moreover, as noted above, firms pay far higher construction permit fees in most other countries in Africa. Finally, other costs such as geotechnical surveys that are mandated by the government, are far higher than permit fees; work can be done to reduce these costs, which are also high compared to some peer countries.

A second objection to a percentage policy would be that a fee per square metre would be preferable, as it has been done in Rwanda before; but there are two counter-arguments to this. First, and most importantly, a rate per square metre would be harmful to the Doing Business cost scoring; our calculations show that to gain the same revenue as a 0.1% percentage policy, a rate per square metre would have to be employed that would significantly increase the cost as measured by Doing Business. To get to the same revenue level as a 0.1% or 0.2% policy, the fee per square metre would have to be RWF 279 or RWF 558, which Doing Business would multiply by 1300 square metres to get their calculated cost of a construction permit, of RWF 363,090 or RWF 726,180 respectively. This compares with the rate under a percentage policy of RWF 32,408 or RWF 64,817 under our proposed policy. Second, it would not act as a price and take into account differential costs of construction for different building types– for example cost per square metre is higher for high rise buildings compared to one story or lower quality buildings.

A third objection to a percentage policy may be that construction firms would be incentivised to understate the cost of construction, to pay lower permit fees. However, even if costs are understated at an average undetected rate of ten percent, the overall increase in revenue under a percentage scheme would still be far higher. Moreover, one solution may be that the final cost could be checked by the City of Kigali on completion of the larger developments, and the permit fee adjusted if the final cost is excessively different from the cost according to the initial Bill of Quantity submitted to BPMIS.

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