

## **Beyond Paper Policies: Planning Practice in Kigali**

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### **Introduction**

Recent planning practice in Rwanda is embedded in a changing political and legal setting. The results of urban development often depend more on opinions and priorities of political leaders than law and policy. Although Rwanda accedes to international agreements such as the Millennium Development Goals and has established pro-poor planning policies, these policies can be applied in a manner contrary to the original intent and instead promote other goals not established through participatory methods. This paper chronicles planning in Kigali between the middle of 2005 and February 2008 and demonstrates progress in reducing urban poverty and including the poor in urban development, while detailing unintended consequences due to competing interests of the stakeholders and the unforeseen ‘flexibility’ of urban planning tools.

### **Background conditions in Kigali**

Rwanda is the most densely populated country in Africa, and its capital Kigali is growing at a rate of about 6% per annum<sup>1</sup>. Until recently, there was no national law or policy relevant to construction, housing, or urbanization, apart from a national program to cluster rural housing in *Imidugudu*<sup>2</sup>. A new land policy draft was finished in January 2004, and the land law for its application was published in September 2005. The land law acknowledged individual rights to existing plots and all plot transfers, but it still lacked proper detail and the missing decrees - in the context of the abolished past laws - caused a legal vacuum.



Photo 1 – Typical traditional housing in Kigali.

1 MINECOFIN, 2006

2 An Umudugudu (Plural: Imidugudu, Kinyarwanda) is a linearly ordered new rural neighborhood, meant to replace traditional rural housing scattered among the small fields and which evolved with subsistence cultivation.

Tenure insecurity for Kigali's residents was and still is high. Most land in Rwanda is individual land holdings, and evicting people to create space for new development or private investment is common in Kigali. *Urban upgrading* and *low-cost housing* were themes widely ignored or even opposed in Kigali before 2006, though national policy statements did admit the need.

There was no building code until 2007<sup>3</sup>. Residents were obligated to construct their houses with 'durable' materials, but this term was undefined. For the purpose of receiving building permit, construction with traditional materials, *adobe* blocks or *wattle-and-daub*<sup>4</sup>, was not accepted. As a result, almost every house in Kigali is informal (Photo 1).

In late 2005 and early 2006, territorial and administrative reform in Rwanda moved many responsibilities to lower administrative levels, and about half of Kigali's current area comprises rural zones incorporated through the process. In practice, the Kigali city government retained major influence on politicians and planners at the district level<sup>5</sup>, and without technical experience, staff, or equipment, they welcomed this support. Development foci were unclear due to the administrative changes which caused three different city governments including an intermediary administration during this period.

In 2002, a cadastre was started for Kigali City, and a small number of individual plots were regularized after formal request. However, a typical resident on an unplanned plot had very little chance to register, because most plots did not fulfill the requirements of direct access from a road or path, proximity to basic infrastructure, rectilinear shape, and minimum size. Apart from unreasonably large plot size standards for different house categories (*low-*, *medium-*, and *high-standing*, designated for the different economic strata of the citizenry)<sup>6</sup>, these criteria were not written into any law or planning policy, but were decided by personnel in the Kigali City administration, which was responsible for land management in Kigali until the end of 2005.

This problematically interwove ownership rights with planning standards, and these standards were non-existing. Most plot titles were therefore available only to newly created estates and subdivisions for the wealthy population. Apart from a few house donations to vulnerable groups, there were no low-standing plots allocated. About 2.500 total plots are registered in the cadastre<sup>7</sup>, amounting to about 10% of Kigali's land.

A pilot Land Tenure Regularization (LTR) project started in 2007 in four sectors around Rwanda, three rural and one urban. The project used satellite photographs, GIS, and personal interviews to establish plot boundaries, ownership, and existing disputes. It was administered through the Rwandan Ministry of Lands, Environment, Forestry, Water and Mines (MINITERE)<sup>8</sup> and assisted by the British Department for International Development (DFID) after a year of ambivalent consideration at city level. One pilot sector in Kigali, *Gatsata*, was chosen for exploring LTR in the urban context.

3 Draft Building Code 2007 needs to be officially adopted but is in use.

4 Adobe: mud blocks; wattle-and-daub: structural wooden framework with mud infill.

5 Kigali City now contains three districts.

6 Plot sizes prior to the new building code: Low-standing, 300-600m<sup>2</sup>; Medium-standing, 600m<sup>2</sup>-1,000m<sup>2</sup>; High-standing, 1,000-1,500m<sup>2</sup>. The smallest plot size is now reduced to 30m<sup>2</sup> with the new building code.

7 Status at the end of 2005; no significant progress was made until 2008 due to land reform implementation.

8 Now called Ministry of Natural Resources (MINIRENA).

The LTR project was initiated to provide tenure security for the city's overwhelming number of poor residents, but this approach was not universally accepted by city officials; some perceived it, however, as providing survey data expedient for taxation and expropriation. The ultimate legal outcome of the pilot regularization was unclear by early 2008, but the issuance of lease-titles is now established<sup>9</sup>. Full implementation of the LTR throughout Rwanda is planned to start in 2009 and is expected to take up to 10 years.

*Gatsata* recorded different problems and types of disputes than the rural sectors. In the urban context, people squatted more often on public land, specifically in the wetlands and on forest land in the hills surrounding Kigali. There is, however, no documentation on the boundaries of public land, and the surveys rely on resident's information. These boundaries appear to be respected over time in the rural areas, but not in the urban context.

Some critical voices in international urban research question the principle of individual land titles for informal plots, on grounds that it facilitates taxation and may require unachievable property improvements which may actually increase tenure insecurity<sup>10</sup>. However, Rwandan land has been individually used and concessions passed on for over five centuries<sup>11</sup>. In fact, a city wide survey from 2007 shows that 63% of land owners have at least one document to prove ownership and another 16% claim to have them but they are misplaced or lost<sup>12</sup>. Thus titling is a justifiable approach in Rwanda, but one which will need time to implement efficiently. Intermediate steps of communal titling, especially in the urban areas, are proposed by consultants to the LTR process<sup>13</sup>.

The Master Plan for Kigali was completed in 2007 after two years of study. Its recently adopted policy conforms to national and international goals: it proposes urban upgrading in existing neighborhoods, the use of alternative energies, better community level social infrastructure, and improved pedestrian accessibility, among other goals. Neighborhood clearance is discouraged by this new planning document.

### **Expropriation in Kigali**

In Kigali, expropriation is conceived as a tool for city renewal despite official policies to the contrary. In some cases, the new Master Plan is used for blanket justification of city planning decisions and actions regardless of actual details in the plan. The lack of land decrees and a then pending law to protect occupant's rights in expropriation proceedings boosted expropriation for commercial development in late 2005 and early 2006. This continued into 2007, with the improvement of houses offered as compensation. These expropriations were carried out even though the 2005 land law acknowledges *de facto* ownership rights for land users, and the clearance of residential neighborhoods for commercial interests is not legally 'in the public interest.' Despite the revised expropriation law defining the public interest adopted in 2007, the pilot Land Tenure Regularization of 2007/08, and national lobbying for urban upgrading, evictions even appear to be accelerating (Photo 2).

9 MINIRENA, 2008

10 For example: Payne/Durand-Lasserve/Rakodi, 2007

11 Mugesera, 2004

12 Ilberg et al., 2008 The respective document may be property title, cadastral plan, lease title, transfer contract or sales contract, a receipt for purchase, proof of inheritance, or documents from the District, Sector, Cell or Village level administrative entities. The field surveyors were not permitted to ask to view the documents, so there is no verification of these claims.

13 Geoffrey Payne Associates

The Rwandan people often seem complacent with expropriation. Some use expropriation as opportunity for repeated small-scale speculation in their neighborhood. Participatory urban development meetings in Kigali's sectors found that *resettlement with compensation* is often positively perceived<sup>14</sup>. This may be due to the longstanding experience of expropriation by Kigali's residents, often with deficient or no compensation. It may also be due to a longstanding agitation by the press and local authorities to modernize the city; expropriation as a modernization approach was never questioned until recently. Also, a number of inhabitants prefer a new home in an area with adequate infrastructure instead of living in their existing unsanitary conditions.



Photo 2 - Expropriation and neighborhood clearance in *Muhima Sector*, December 2005.

In recent expropriation proceedings, land is compensated and compensation levels are negotiable for the residents. Before 2005, only built structures and plants were compensated, at a value last updated in 1996. The 2005 draft expropriation law would have bolstered people's rights significantly by making the expropriation process more exacting<sup>15</sup>, but these provisions were left out of the adopted 2007 version.

### **Poverty reduction - policy and implementation**

The ministries of Rwanda are conceptually dedicated to pro-poor international and national policies. The right to shelter, right to secure tenure, and right to adequate sanitary infrastructure are concepts critical to urban planning and are acknowledged at the national level. Among the objectives of the *National Urbanization Policy* by the Ministry of Infrastructure are land supply and urban planning at the local level in reaction to the demand of the population; adaptation of plot allocation to the needs of the entire population; and affordable plots for all. The upgrading of precarious neighborhoods with basic infrastructure and securing of land tenure status in informal settlements are other objectives<sup>16</sup>.

14 Results from participatory meetings in all 35 sectors in Kigali related to the Master Planning process. Masterplan: OZ Architecture, EDAW, Tetra Tech, ERA (Denver); Meeting methodology and report of Ranking and Venn-diagram exercises by A. Ilberg

15 Proposed by advisors from Rural Development Institute, Seattle, Washington, USA

16 MININFRA, 2006

The government is also committed to the *Habitat–Declaration Istanbul 1996*, which admits that housing is a fundamental right for every citizen; to the *United Nations Millennium Development Goals and Targets*, which address the need for adequate housing and infrastructure among other goals; and the Rwandan *Economic Development and Poverty Reduction Strategy*, which envisions new low-cost neighborhoods and neighborhood upgrading. The national *Vision 2020* strives to avoid further uncontrolled growth through coordinated planning with the objective of access to basic infrastructure and shelter for all.

Practical action can differ from policy, however. Because actual construction, city renewal, and land management are a lower level administrative duty, national policies are sometimes violated in practice or interpreted in favor of accomplishing a project. There are often discrepancies between cited goals in policy, their utility on the ground, and the somehow undefined but paramount goal of modernization. New concepts and techniques - land law, land titling, GIS, and infrastructure enhancement - all comprise tools for fairer urban politics, but they also contain a potential threat for the poorest and least powerful of the population.

### **Model House Project – an exercise to catalyze policy and change**

In 2005, a ‘Model House’ project was started by the author as a vehicle to legalize earth as building material (Photo 3)<sup>17</sup>. Ultimately, it was hoped that this demonstration could also illustrate more affordable and sustainable infrastructure alternatives, facilitate affordable financing, and change common misperceptions about housing costs and quality. The project emphatically illustrated that a quality house could be built from traditional materials and that earth construction should be included in the new building code. At 36m<sup>2</sup>, with a 15m<sup>2</sup> kitchen/bath/toilet annex, the layout and size adapts to a typical Rwandan house. At roughly \$3,000 without infrastructure, the house reduced by a factor of *five* the established cost estimate for a durable ‘low-cost’ house.



Photo 3 - The Model House in Kimisange, February 2007 (1°59'19.99"S, 30°3'37.34"E).

17 Joint project of Kigali City, Engineers Without Borders USA (EWB-USA), Kigali Institute for Science and Technology (KIST), and German Development Service (DED)

Stabilized compressed earth blocks, which can achieve more strength and durability compared to traditional adobe, were chosen as the wall material. Local semi-skilled laborers produced the interlocking blocks with a manual press made in Tanzania. The blocks were stabilized with lime to increase compression strength and durability and maintain integrity when wet. Local masons achieved a very modern look with the compressed blocks compared to other local construction; this visual effect was an influential factor in the project's success. Building from compressed earth blocks is not a novelty in Africa, but it was not widely explored in Rwanda outside of educational institutions.

Critical to the project was the provision of 'off-the-grid' style infrastructure. A 5m<sup>3</sup> biogas waste system with gas cooking stove was constructed, and although the cost was high (~\$1,000), and these systems are best suited to more rural application with livestock wastes, the installation at the house brought this slowly popularizing technology even greater positive attention by the government and populace. Rainwater collection (1,000 liter, ~\$200) provides substantial water for household use and lessens storm water runoff causing erosion. An inexpensive photovoltaic system to provide evening light and charge mobile phones or run a radio was also chosen (~\$50)<sup>18</sup>.

### **Project Process**

Central to the Model House concept was the inclusion of academia, ministries, local authorities, the private sector, and residents. The Kigali Institute for Science and Technology (KIST) provided the block press and use of the school soil testing laboratory, as well as technical and organizational assistance. Communication with the Ministry of Infrastructure (MININFRA) responsible for housing ensured dialogue about standards the government wished included. Local entrepreneurs contributed advice and voluntary technical assistance on the biogas, photovoltaics, and rainwater harvesting. The banking sector was included for exploring future mortgage financing opportunities.

A *Training of Trainers* seminar for participants from all 35 Kigali sectors held in December 2007 promoted the technology and explained the legal background at the district and sector level, and also among the population. Visitors from other development organizations, from Rwandan banks and ministries, and the private sector were in steady rotation during construction and all appreciated the concept. The residents from *Kimisange*, where the Model House is located, took part both in discussing construction techniques and in actual construction.

Regardless, gaining political acceptance of the technology proved a significant hurdle. Many involved in urban planning initially doubted the feasibility of such an inexpensive dwelling to solve pressing housing needs for the poorer segments of Rwanda. Earth had not been considered as a possible construction material in previous low-cost housing research and the cheapest alternative models (made with concrete blocks) were more than \$15,000. Nevertheless, the project was pushed forward through German Embassy funding and individual volunteers from Rwanda and abroad. Ultimately, completion of the structure generated overwhelming enthusiasm in the Kigali population, and official support for the construction and infrastructure was realized.

18 The Photovoltaic system by Great Lakes Energy, Kigali, is designed specifically for use by the poorest population after surveys were conducted to determine energy needs and an acceptable price range.

### **Batsinda – the pilot community**

The Model House concept is finding practical application in the construction of some 1,000 planned homes in the *Batsinda* neighborhood. Located in Kigali's *Kinyinya* sector, where extensive development is planned for low- and medium-standing homes, by 2008 more than 250 low-cost houses were built by the National *Engineering Regiment* at a unit cost of approximately \$6,000, and most are already occupied (Photo 4). The city collaborated with the retirement fund *Caisse Sociale* and the *Rwanda Housing Bank* for financing of the construction and mortgages. The neighborhood will become a model for sustainable and affordable housing through its use of local materials and renewable energies, as defined by the Model House.



Photo 4 - *Batsinda* pilot community under construction, February 2008 (1°54'2.29"S, 30°4'36.61"E).

The first residents of *Batsinda* are a community from the *Muhima* sector in central Kigali, who were expropriated before the official adoption of the new expropriation law. Although a socio-economic survey was conducted in the expropriated community<sup>19</sup>, its results were ignored in the planning: the Model House standard did not equally meet the needs of each household.

Wealthier expropriated residents did not desire the small house available in *Batsinda*, and poor residents, on the other hand, were afraid of the high perceived cost<sup>20</sup> because about half of Kigali's households have a monthly income of less than \$40<sup>21</sup>. Though several different house alternatives were proposed during planning, other plot and house layouts and sizes were not constructed in the first phase of the *Batsinda* project.

Reasons for the expropriations of the *Rugenge*-community in *Muhima* and plans for the cleared away space were unclear at the time. Contextually, 98% of the owner-occupants had ownership rights for having acquired their plot from the local authority, as a gift, or through purchase or inheritance<sup>22</sup>. In addition to resettling the community from *Rugenge*, the original

19 Kigali City, 2006

20 Nishimwe, 2007

21 Ilberg et al., 2008

22 Kigali City, 2006

occupants in *Batsinda* were also expropriated for the new housing development. These were subsistence farmers who had to leave their fields without assistance of where to move and continue farming.

In other African countries such as Kenya, the need for affordable housing is addressed by informal developers. This is in fact the case in every developing country with predominately private land and where access to public housing is difficult, unaffordable, or nonexistent. Although plots in Rwanda are currently very small due to the custom of inheritance divided among large families, with the new land law allowing private ownership, private land holdings are likely to enlarge due to market forces. The new land law might ease big-scale informal land development also in Rwanda, if conditions for land title and zoning are not clearly defined and enforced, and if the new housing scheme does not increase the cumulative number of affordable housing units because the same number are demolished elsewhere.

Additionally problematic, an average of 57% of Kigali's residents are tenants and are not assisted in case of neighborhood clearance. In the central city areas, the average of tenant occupants is even higher, up to 83% in the *Nyamirambo* sector<sup>23</sup>. Some attention is needed for legal rental scenarios within a successful housing scheme, or informal estates are even more likely to evolve to serve tenants in need of housing in the future.

### **Project Outcomes**

The intention of legalizing earth as a construction material was to enable every citizen to build their house legally. Regarding acceptance of earth as a building material, the project is a conclusive success. *Gasabo* district in Kigali is now mass producing compressed earth blocks and continues constructing low-cost houses, and more organizations and individuals now build with compressed earth blocks. Regarding the Model House's application in expropriations, the program achieved a utility unintended by outside advisors.

Kigali's current housing program is administered by the city, and Kigali's residents are presently required to buy a house in a subdivision. They cannot legally construct by themselves in a location of their choice; this extinguishes the personal drive of most inhabitants to pursue private solutions to the pressing housing need of the city. The promotion of legal and affordable private construction should lead to even more numerous, adequate housing units at lower sales and rent costs based on private financing and an independent housing market.

The initial idea of making available a construction scheme at minimal standards is endangered by the intense publicity and political support for low-cost housing *in connection* with the contrary resettlement program. Even though the scheme is by definition low-cost and is meant to facilitate better living conditions for Kigali's poorest using the practicalities of earth construction, simplicity, and self-contained infrastructure, it currently serves to house those displaced for other developments. The *Batsinda* development starkly illustrates an altogether different utility of the Model House: the ease with which a popular housing concept can justify expropriation for private land development in existing neighborhoods. *Batsinda* is now regularly promoted on Rwandan television using computer animations of the neighborhood with a car on every plot (Photo 5).



Photo 5 - Rendering used by Kigali City for popularization of the *Batsinda* project, October 2007.

## Conclusion

Every project has unintended consequences. The model house, and by extension *Batsinda*, were initiated through technical advisement provided by outsiders to a complex society undergoing profound change. The project was anticipated to expedite provision of adequate housing to those in need.

Along with the new land law, the Land Tenure Regularization process, the rights of the expropriated, and the draft building code, the Model House set the stage for considering the poor majority in Kigali and their housing needs. It is progress when expropriated residents receive fair compensation and a new house. But the newly available low-cost housing scheme, in connection with expropriations in the city center and relocation of the residents, does not conform to the legal conditions and does not increase the number of housing units available.

With so many stakeholders, priorities and goals differ and often contradict. In the case of Kigali's housing program, the goal of allowing local materials for individual construction is superseded by the city's focus on estate development. A combination of balanced development of new neighborhoods and permitted construction within the existing urban fabric, together with the upgrading of existing neighborhoods, is optimal in urban planning theory for promoting suitable housing for everybody.

The newly available laws, policies and planning schemes are not yet followed inclusively to respond to the priorities and needs of the residents. While civil society does not enforce its rights and provides no check on government or private development, the trend in Rwanda may in the end go toward larger developments owned by wealthy landholders and rented to the poorer populace with little or no formal processes.

Perhaps in the future, Kigali's residents will grasp their new chance to construct affordable houses within a legal framework. It is the duty of all stakeholders to achieve a workable compromise and build their future city based on a shared vision.

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