

The Impact of Land Reform on Land Market Activity in Rwanda and Suggestions in Support of Sustainable Urban Development

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Abstract: After a trial period between 2008 and 2010, the LTRP (Land Tenure Regularization Program) was implemented in Rwanda. The program is the consequent implementation of the National Land Policy (2004), which initiated the reform of the administration of land. With the LTRP, titles to land were registered in the name of every landholder to unlock the potentialities for sustainable growth based on a clear framework, equally valid to all landholders. This paper describes the changes in land and property market activity after the reforms and comments on increasing development pressure on land which can be observed. It recalls that this new market activity is intended and policy-made as a result of the Land Policy with the land tenure regularization and changed land tenure principles, the EDPRS2 which clearly focuses on enabling the private sector to participate in and drive economic development, and the new urbanization agenda coming with the Vision 2020 and the EDPRS2. Identified factors are also discussed which contribute to the new market values of land and a case study in Kigali is referenced which identified accessibility to an area as the most influencing factor, besides access to services and levels of investment on the land. The importance is now, to keep ensuring and enhancing the positive impact of the policy directions in a sustainable manner for their maximum positive impact on socio-economic progress. Provided are recommendations of how to strategically guide public policies and investment in support of sustainable land market activity and using geospatial technologies. The supportive application of technologies is explored.

Key words: GIS, land reform, land market, urbanization, Rwanda.

1. Introduction

Rwanda successfully follows an ambitious vision for development outlined by its Economic Development and Poverty Reduction Strategy (EDPRS2). The EDPRS2 identified land regularization as a critical element in improving the productivity of the use of land and the functioning of land markets by helping in reduce conflicts and empower women and vulnerable groups as a strategy for food security and good governance.

The land reform has paved the way toward policies which target economic development through

well-planned urbanisation and the enhancement of the private sector including the real estate market, which is aligned to recommendations from the World Bank from 1993 [1]. It was recommended to establish clear and secured property rights to enable a free market. With the Rwanda LTRP (Land Tenure Regularization Program), titles to land were registered in the name of every landholder to unlock the potentialities for sustainable growth based on a clear framework, equally valid to all landholders. A number of 10.3 million land parcels were documented [2]. Following the registration of all land ownership rights and the reforms of land administration and the institutional framework, the land and real estate market and the construction industry are a newly formalized part of the national economy, which is however growing at a high rate. It is

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important to see development processes in this context of the recent reforms.

In the Economic Development and Poverty Reduction Strategy (2013-18), which is the 5-year strategy with the intention to lead Rwanda to economic progress and social welfare, the theme of sustainable urban development was anchored under the thematic area of economic development, and a particular sector responsible for the coordination of urbanization and rural settlement has been created. The urbanisation and rural settlement sector is prioritised as key sector helping to achieve Rwanda's vision to become a middle income country.

The New Urban Agenda expresses the global commitment to sustainability and the synergy between urban development and socio-economic development. The 17 Sustainable Development Goals adopted in September 2015, and successors of the Millennium Development Goals, continue to stand for poverty reduction, and the protection and management of natural resources as a basis for economic and social development. A newly introduced objective is a transformation toward sustainable consumption and production [3].

The EDPRS2, while preceding the New Urban Agenda, does already express its leading ideas, since Rwanda has decided to proactively support urbanisation processes, with the intention to embark on well-planned urbanisation for an economic growth [4].

2. Changes to the Land Market Activity as a Result of Reforms

With the implementation of land reform, the meaning of land in Rwanda has shifted from being a basis of livelihood and continued subsistence to a marketable commodity in development processes. This carries the opportunity of boosting the dynamics of economic activity for socio-economic progress. However, it also contains the risk of threatening small land holders, who do not have the capacity to participate in development, by potentially causing

un-equality and competition.

In 2007, which is at a point in time which dates before the implementation of the LTRP but after the adoption of the Land Policy 2004, the new policy was starting to be reflected by a changing land and housing market activity. Any transactions made before the gazetting of the Organic Land Law in 2005, in contrary, would in the majority of cases have been informal, as only about 10% of land occupants in Kigali [5] and even less country-wide were in possession of officially acknowledged land and property rights.

The following information serves as an illustration. In 2007, 68.8% of interviewed house owners in informal settlements in Kigali responded that they had acquired their house through a type of transfer, while 31.2% of house owners were the first owners [5]. 81% of owners stated that they are not thinking of selling their house in the future. Only about one fifth of house owners considered the option of a future sale, which demonstrated a low aspiration for speculative activities in 2007.

About one third of those owners who were considering a future sale thought of selling the house in the case would be offered a better house by the local government at no additional costs (34.7%). This confirms that the considerations of participating in a land and property market were low; as such motivation was not market-based. Meanwhile, 45.4% of owners would have considered selling the house when they become unable to provide for their families and are in need of money; this illustrates the high dependency on land for livelihood and subsistence even in urban settings. Only 2% of owners would sell the house when they were offered a good price by an interested person. Improvements to the neighborhood and an expected raise of value of the house were not considered as reasons to sell their house for most owners in 2007. This also illustrates the low activity and awareness of changes to the land market at the time right ahead of the implementation of land reform.

A study from 2015 now confirms market activities

after land reform implementation with 27 land or property transactions among 120 respondents between 2011 and 2013, and 30 transactions between 2014 and 2015 [6]; this also means that about half of the respondents have made a form of transaction within 4 years only.

The observed increasing development pressure on land is intended and policy-made, as a result of the Land Policy with the land tenure regularization and changed land tenure principles, of the EDPRS2 which clearly focuses on enabling the private sector to participate in and drive economic development, and of the new urbanization agenda coming with the Vision 2020 and the EDPRS2.

2.1 GIS System Support

The use of technologies is one component for the success of Rwanda's reform implementation and development strategies. The LTRP process was supported by the creation of a digital land record database, which, together with the National Land Use Master Plan, forms the basis for improved land management and administration.

A complementary geo-database which is under development in the Ministry of Infrastructure for the purpose of combining and maintaining complete infrastructure data will support integrated planning and implementation, as well as improving monitoring of development. The system is designed in support of a national data coordination and sharing process for efficient land use and urban development.

Also, processes of development management and, in particular, building permitting became manageable online, and are linked to the spatial planning information as well as banking and tax records, all in support of transparency, efficiency and integrated development for improved service delivery and socio-economic progress.

3. Risks in New Land Market Activity

3.1 Social and Economic Vulnerability

There are concerns about the risk of reforms to result

in segmentation and an increase of inequalities. An increase of credit being accessed and land transactions made contains the risks a reducing land ownership prevalence and of vulnerability against potential land grabbing, with the risk of poverty as a possible consequence. Mitigation measures should be introduced, comprised of educating land holders on the continued social and subsistence value of land [7]. Policy formulation processes, and particularly the National Housing Policy, have identified and addressed the risk. The policy and legal framework provide the opportunity to plot small holders to participate in urban development through collaborative urban renewal models.

3.2 Land Use, Land Use Planning and Land Rights

Underlying the changed meaning of land, accelerated development and the challenges to effective planning and development management are the potentiality for land disputes. Particular areas requiring attention are the impact of planning and zoning or changes to zoning. A newly adopted set of implementing orders determines the details of a plan elaboration process and integrated public participation requirements. Processes of urban expansion are expected to be very transparent with information publicly available. This will yet require assistance to land holders to understand possible development expectations, as well as mitigation of up-scaled speculation through education, since planning and zoning have a direct effect on people's rights to land, even when it is formally registered. The contained conflict is that land holders on concerned land have not purchased their plot according to their desired land use and zoning regulations suitable to their budget, but are only in retrospect identifying the newly introduced zoning regulations and their meaning for the particular and usually long before occupied plot. In other words, plot owners are dependent on the decision taken regarding the zoning of a plot, while such decision might not fit the purpose of the plot owner, for which

he/she wants to or has to utilize it.

3.3 Food Security in the Context of Development Pressure on Agricultural Land

Urban development and expansion shall not exceed the consumption of agricultural land to a degree that would compromise food security. The challenges coming with development—both urbanisation and rural development—are multiple. Urban residents need access to basic food commodities, which requires an intensified agriculture, to also serve residents who have migrated to urban areas in order to take up off-farm employment. Rural residents who depend on subsistence agricultural practices must be included in projects targeting higher yield agriculture. It should be high concern to maintain individual rights to property in the process of land consolidation for technologized, and possibly outsourced agricultural practices. In addition, development pressure also contains the risk of degrading land through its exploitation, and if not sustainably managed, opportunities may be short-term.

4. Opportunities for Sustainable Urban Development

4.1 Best practice Policies

Rwanda's policies are the best practice but also home-grown. This provides the basis for feasible solutions. The “home-grown solutions are a testimony that local ownership of development programmes, citizen involvement and national unity always yield results”. Achieving sustainable development is not only citizen-centred but solutions react on the particular local context after a collaborative search and exploration of how to make progress feasible. Rwanda intends to achieve social inclusion while developing policy. Its development vision expressed by the Vision 2020 and EDPRS2 is to reach the status of a middle-income country by 2020 [8]. Rwanda is one of the few countries which, according to preliminary assessment, achieved many of the Millennium Development Goals.

4.2 On-going Reform Processes

Reform processes that build on the land reform are still on-going; the impacts of the land reform have just started to be understood. Therefore, the land reform cannot be highlighted enough as being the basis for market-based development. Secure land rights are the precondition for a legal land market and for clarity of the legal land tenure status.

4.3 Decentralisation and Grassroots Involvement

Rwanda's governance structure is strongly decentralised and the participation of communities has been part of governance culture. There are many examples of formal and informal governance arrangements which provide platforms for community participation and engagement for development at grassroots level. Also, with the help of the law governing Urban Planning and Building in Rwanda from 2012 and particularly its implementing orders adopted in 2015, local physical development is regulated based on clear procedures to support sustainable, integral and inclusive development, institutional strengthening and development, decentralization, local economic development, citizen participation and accountability mechanisms.

With the amended law determining the organization and functioning of decentralized administrative entities, executive committees are accountable to the councils at city, districts, sector and cell levels. A situation with registered land rights also provides the basis for an efficient local revenue generation in support of the functioning of local governments and their capacity to deliver services to the population.

4.4 Opportunities for Local Economic Development and Raise of Socio-economic Status

Secure land rights provide an opportunity to invest in land for its higher productivity and the protection of the land resource from environmental degradation. Such investment may be individual or collective in a cooperative, or as shareholders in investment. An

increasing income for households may even begin and sustain a cycle of steady investment and improvement of the socio-economic status of the land holder. The land- and planning-related framework contains large potential and the opportunity for all to participate in development. The promotion of collaborative schemes is a result of identifying, that the bundling of capacities may be a vehicle to overcome shortage of finance and other resources; it now serves as a promoted opportunity not only in housing development and urban upgrading, but also in commercial development and in rural agricultural intensification. It is for the civil society to understand and take this opportunity, and processes must be well reflected and monitored for their positive results and success.

5. Determinants of Land Market Value

An understanding of the characteristics which impact the value of land in urban areas would be beneficial in order to maintain an inclusive and sustainable land market after land reform.

For the example survey in 2007, land value information is insufficient or contradictory. An inaccuracy of responses may be related to insufficient

knowledge about the land law and to the lack of formality and proper documentation by transferring parties at the time. Therefore, no specific land value information is considered here, since in the previously described transition phase during land reform implementation, two land value systems had coexisted.

However, land values in rural zones of Kigali City were far lower than in central and non-central urban zones. Various other influences on the sale prices of informal real estate property apart from the location and distance to the central areas were also examined; astonishingly, no increase of sale price was found from the availability of sanitary infrastructure for example.

As shown in Fig. 1, the assessment of how people perceive the location of their home, and putting it into perspective with factors influencing this perception, can give another indication of determinants of market value. Also, the locations of housing units chosen by tenants speak of determinants of choice, and therefore a market. Most tenant (71%) households surveyed in 2007 rented houses near a main road, whereas about half the owner households tended to live inside a neighborhood, with fair accessibility of the house. Generally, the majority of houses were constructed near

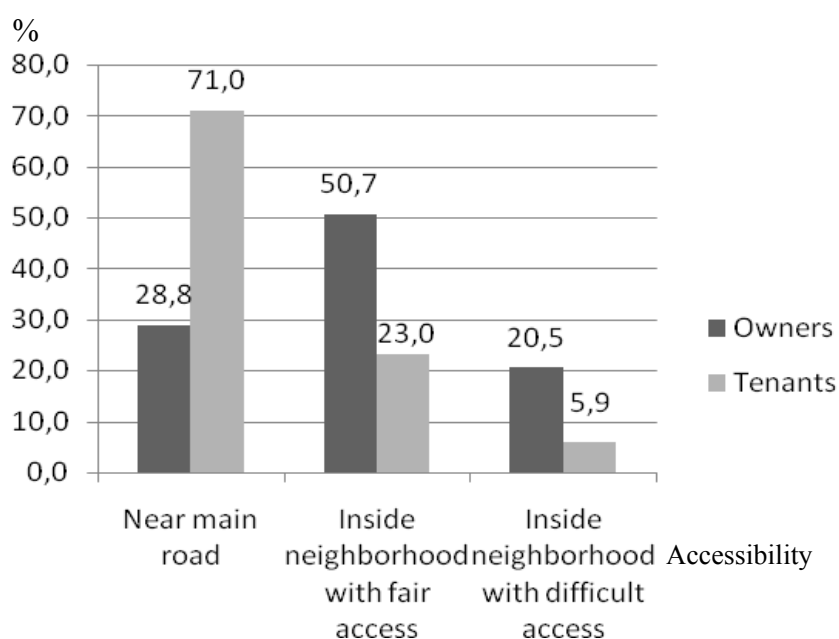


Fig. 1 Accessibility of house (% of houses).

Source: Ilberg et al. [5].

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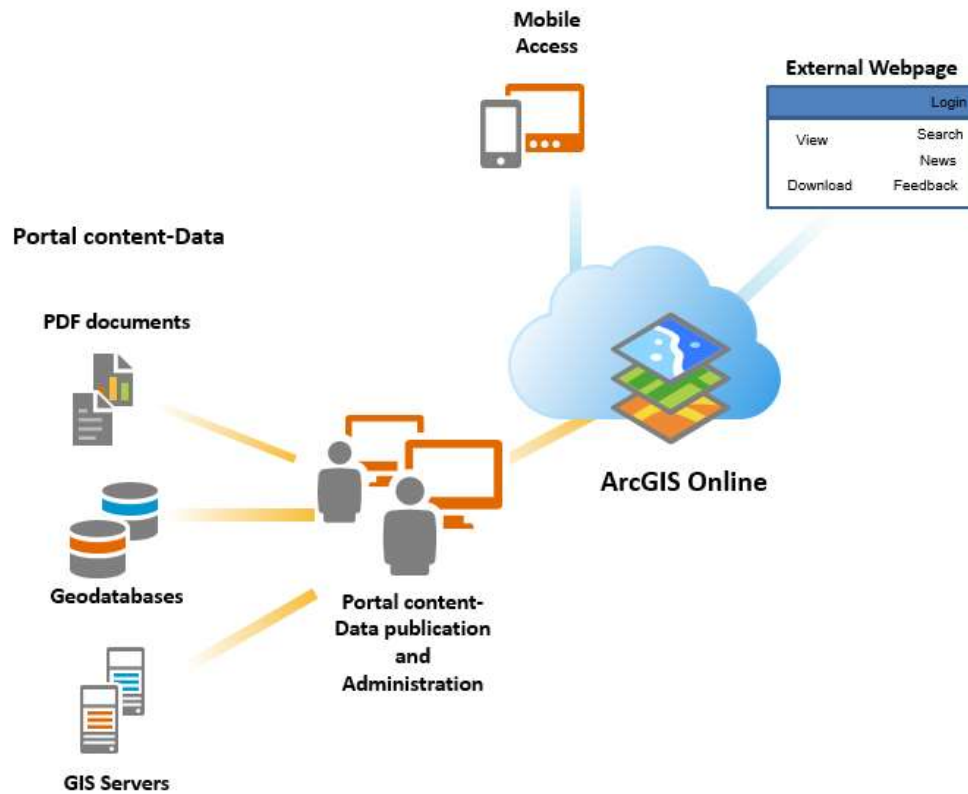


Fig. 2 Cloud-based solution using ArcGIS online under establishment at MININFRA (Rwanda Ministry of Infrastructure). Source: ESRI Rwanda, 2015.

a main road or the plot was accessible by a public path. Only 5.9% of tenants rented a house in a badly accessible location, while about one-fifth of owners have constructed in such location. This means that an important factor influencing the choice and defining demand—the degree of accessibility of a housing unit—was already valid for market activity observed in 2007.

Also according to the 2015-survey in a neighbourhood in Kigali, describing the conditions of a farther established land and property market after LTRP, identified that land values in the survey area were influenced primarily by accessibility to the property, before location, investment activities and land use [6].

6. Use of Geospatial Technologies for Sustainable Land Market Activity and Urban Development

The use of geospatial technologies is beneficial

when combining data coordination and management, process analysis and modelling, and decision-making and planning.

To achieve a well-managed urban development and sustainable land market activity, it will be important to analyse the comparative impact of public investment on private land market activity, the investment mainly being infrastructure. The analysis of its placement in different locations within an urban area and conclusions about the ideal urban network and structure can help in deciding about the most efficient use of resources, which would trigger the most sustainable urban growth pattern. This would include the assessment of growth patterns which are for example nodal and decentralised, compared to growth which is central with independent satellites, among other models. As per the GIS-based FE architecture presented in Fig.2, a database containing and combining geo-referenced settlement data and data on the location of infrastructure and infrastructure

investments would help analysis about the market and development dynamics over time. To assess land market activity and land value development, the contained data would also require data on outputs and productivity, such as tax data and data from the establishment census.

An added component assessing the life cycle of material input is a further component which would support a type of decision making toward a sustainable impact. This would assist judgements about land consumption and environmental degradation, and help define benchmarks to limits local resource exploitation risked in the context of urbanisation and economic growth, to maintain food security and protect natural resources.

Last but not least, the impact on individual subsistence and maintenance of livelihood to ensure socio-economic progress for all, and the maintenance of a land market which is inclusive and does not segregate, must be monitored and safeguarded and be the underlying principle of policy and decision making.

7. Conclusions

Rwanda has embarked on a process which aligns policies in a way to support private sector driven development, while intending to harness its dynamics in the public interest. Besides well-harmonised and complete policy frameworks, the use of technologies is

essential for the effective and foresighted decision-making based on modelling, but also for the efficient management at all governance levels and especially the local government level. The observed changes resulting from recent reforms can be accompanied with the understanding of the dynamics triggered, so that the public benefit will be maximised and sustained.

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