Land readjustment
The missing link in urban Zimbabwe

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Abstract
Zimbabwe has been experiencing a rapid rate of urbanization amidst a failure by conventional approaches of urban land management to cope with the demand for housing. In view of these challenges, this paper investigates the feasibility and nature of land readjustment for urban land management in Zimbabwe. Using case study research methodology and a desk review of evidence from developed and developing countries the potential use of land readjustment in Zimbabwe is examined. Findings from Zimbabwe show the existence of opportunities for use of land readjustment in rationalizing urban land use. However, the study revealed constraints concerning the legal framework, limited public participation in planning, and the complexity of the land readjustment process. Overall, it is the authors’ conclusion that evident opportunities for land readjustment would require legal and institutional reforms providing for the concept in law and the adoption of more inclusive planning methods by urban authorities.

Key Words: land management, land readjustment, land assembly, urban policy
1. INTRODUCTION

Zimbabwean cities have been experiencing severe challenges in coping with the rising demand for planned and serviced land for housing development. For the country as a whole, the estimated national housing backlog stood at 1.25 million (Government of Zimbabwe, 2013). In 2015 the housing backlog for Harare, the capital city of Zimbabwe; was above 500,000 residential units (African Centre for Cities, 2015). Further manifestations of failure to provide adequate and affordable land for housing have included the emergence of slums and informal settlements within cities and in peri-urban areas across the country. A classic example of such slum settlements is Caledonia in Harare with about 23,000 unserviced stands (African Centre for Cities, 2015; Government of Zimbabwe, 2012). Failure to supply adequate urban land for development has been associated with the outbreak of diseases, severe overcrowding, homelessness, social ills, environmental problems, deterioration of amenity, widening socio-spatial inequalities, high land prices and the overall decline of the quality of life in urban areas. (African Centre for Cities, 2015; Chirisa et al., 2015; Government of Zimbabwe, 2012, 2013; Kamete, 2004; Muzondi, 2014).

The deplorable living conditions in some sections of urban areas as well as in peri-urban areas in Zimbabwe have been a reflection of shortcomings in the current land delivery/assembling methods, namely, land banking, public private partnership, voluntary exchange and upgrading of informal settlements to cope with rapid urbanisation (Government of Zimbabwe, 2012). The shortcomings of this land delivery/assembly system relate to the lack of a sustainable funding mechanism for the acquisition of land and installation of infrastructure as well as mechanisms for coordinating the activities of various actors in the land development process. As alluded to above, the deficient land/assembling system expresses itself in the form of gaps in the provision of infrastructure and services with consequent dysfunctional and unsustainable urban settlements that have detrimental effects on the quality of life. These deficiencies call for the adoption of alternative and progressive land delivery/assembly/tools.

Like Zimbabwe, developed and developing countries have been experiencing pressures of rapid urbanisation and some have dealt with the problem through the adoption of land readjustment as an alternative urban land management tool (Larsson, 1997; Sorensen, 1999; Liebmann, 2000; UN-HABITAT, 2003; Home, 2007; Cete, 2010; Turk, 2008; Mathur, 2013; Adam 2015; Soliman 2017). In those countries, which among others include Germany, Sweden, France and Turkey in Europe; Japan, India, and South Korea in Asia; Egypt, Cameroon, Senegal, Ivory Coast, and Benin in Africa, land readjustment has played an important role in the coordinated repurcelsing of land and providing finances for off-site and on-site infrastructure development (Larsson, 1997; Sorensen, 1999; Liebmann, 2000; UN-HABITAT, 2003; Home, 2007; Cete, 2010; Mathur, 2013; Adam 2015; Soliman 2017). It is against this background that this paper examines the applicability of land readjustment as an urban land management tool for Zimbabwe. The remaining sections of this paper are organized as follows: a theoretical framework of land readjustment is given in Section 2. This is followed by a review of the relevant literature in Section 3. Section 4 presents the methodology that was used in the study. The results are
presented in Section 5 followed by a discussion in Section 6. Section 7 concludes the paper.

2 THEORETICAL FRAMEWORK

2.1 The concept of land readjustment

The concept of land readjustment denotes an alternative legal and innovative urban planning tool used in land management to facilitate proper urban development in existing urban areas and in the urban periphery in accordance with spatial plans by providing land for public uses and enabling the installation of infrastructure. (Sorensen, 1999; Li and Li, 2007; Yilmaz et al., 2014). Land readjustment and its variants has also been referred to as land pooling, land sharing, land pooling and reconstitution, joint development, land reconstitution, replotting, land reassembly, parcellation, repartition, kukaku seiri (or KS in Japan), and umlegung (Germany) and ‘mother of city planning’ because of its approach of enabling joined land development and reorganization of scattered plots under different ownership within a given locality (Home, 2007; Larsson, 1997; Mathur, 2013).

Different authors have conceptualized land readjustment in various ways as depicted in the following definitions:

*Land readjustment (LR) can be defined as a technique by which a group of adjoining land parcels are consolidated for their unified design, servicing and subdivision into a layout of streets, open spaces and building plots, with the sale of some of the plots for cost recovery and the redistribution of the other plots to the landowners. (Archer, 1992:156).*

*Land readjustment refers to a land development technique which is used for both new developments in the peripheral areas of the city and redevelopments of the structured urban areas (Larsson, 1997, 141).*

In another perspective, LR is defined as a process whereby land-owners pool ownership of scattered and irregular plots of agricultural land, build roads and main infrastructure, and then subdivide the land into an urban plan. (Sorensen, 1999:2333).

The several LR definitions can be synthesized based on the method’s readjustment process and its outcomes (Yilmaz et al., 2014). In this case LR becomes a tool for reorganizing, managing and financing urban land development or redevelopment whereby adjacent but separately owned properties are pooled together for joined planning, subdivision, servicing and financing of the project under the partnership of landowners and government or a private agency where the project costs will be recovered from the sale of some of the stands and the remaining stands will be distributed to the land owners for sale or for development by them (Archer, 1992; Çete, 2010; Larsson, 1997; Li and Li, 2007; Mathur, 2013; Seele, 1982; Turk, 2008; Yilmaz et al., 2014). It is important to note that this tool essentially provides for the proper transformation of land in the urban fringes into urban land and also for enabling redevelopment in urban areas.

2.2 Forms of land readjustment

There are three generic forms of land readjustment that are practiced in urban areas worldwide and these are classified in accordance with the institution that is initiating the project (Needham, 2007). One form consists of voluntary land readjustment projects that are initiated by landowners. Then there are public
land readjustment projects that are initiated by central government, parastatals or municipal authorities and these involve an element of compulsory purchase of land for urban development. Further, there are private developer led land readjustment projects. These forms of land readjustment can be implemented in combination where private landowners who opt for voluntary land readjustment can partner the local authority or the private developer in a project. All these forms of land readjustment are underpinned by a set of principles that form the basis of the legal, administrative, and procedural details of land readjustment (Needham, 2007; Turk, 2008).

2.3 Principles of land readjustment

Principles that underpin land readjustment are universal and remain unchanged even if the legal, administrative, and procedural details get changed by new legislation (Needham, 2007; Turk, 2008). The principles are as follows: Owners of property rights contribute their rights to a virtual pool that is controlled by a body for purposes of facilitating the process. In this case the original landowners and leaseholders do not transfer their rights to this body, which only holds these rights in trust, passes them back to owners and to others after the readjustment. All rights are essentially frozen at the beginning of the procedure. Some land might be taken out of the pool for roads and other shared uses. The boundaries of the remaining land are readjusted, and the new parcels are allocated to those who contributed to the pool, in proportion to the value or size of land that they contributed. In some instances (except in voluntary exchanges), the increase in land values is much lower than the costs of administration and new infrastructure, so land readjustment projects are usually subsidized.

2.4 Land readjustment procedure

LR concept has been adapted for use in both developed and developing countries under various national policy and institutional contexts, and as such different LR models have emerged (Larson, 1993; Adam, 2015; Çete, 2010; Home, 2007; Mathur, 2013; Turk, 2008). However, notwithstanding the variations in the models of the LR concept, it has a general method of operation comprising a sequence of interconnected activities guided by certain principles. The principles of this method are used by various actors in land development who include the public sector, the private sector and the communities in implementing land readjustment projects. A generic procedure for land readjustment is outlined below.

The activities that are involved in the land readjustment process can be clustered into three major steps. The first step in the implementation of LR project is to get the consent and support of the majority of owners of the land that is going to be affected by proposed development. This is done through making of a formal initial decision about embarking on the proposed project. This decision also includes defining the boundary of the area covered by the separately owned properties and compiling profiles of each of the properties in terms of ownership, size and existing buildings. In addition, this initial phase also involves setting up of conditions regulating the process of readjustment and of particular importance are conditions that prevent any material development on and subdivisions or consolidations of the affected properties and opting out of the project by land owners during the process. The land owners who may resist implementation of LR projects are usually
forced to partake in such projects through public power if they are a minority.

The second major step is to work out the total area of the land to be readjusted which is a summation of the areas of all the separately owned land parcels. Then this is followed by working out of a share of the contribution of each property to land required for roads, open spaces, car parks and other public uses as well as land to be sold to cover the transaction and servicing costs of the project and then deduct the total area of shares from the total area to be readjusted.

The final step involves a series of activities which include, subdividing the remaining area into individual stands and then distributing them to the landowners in proportion to either area size or value criteria. In addition, this last phase also involves sale of some properties that would have been set aside to cover project costs, transfer of land designated for public uses to the public authorities and servicing of the area by the public authorities or by hired private contractors. The outcome of the LR concept is the availability of sufficient and properly serviced urban land that is provided under a win-win situation between the municipalities and the private land owners and it can be sold or developed by the individual landowners thereby contributing to sustainable urban development.

In principle the land readjustment process involves a lot of professional and technical work and it may entail hiring services for town planning, land survey, legal, valuation and engineering services. The documentary outcomes of the process include town planning reports and diagrams, engineering diagrams, project budgets, and valuation reports and holding agreements.

Although the application of the generalised land readjustment model has varied among countries, Home (2017) reckons that the procedure follows seven common stages (Table 1).

| Table 1: Land Readjustment Procedure (Adapted from Home (2007: 461)) |
|---------------------------------|-----------------------------------------------------------------|
| Initiation                      | Usually petition to the local authority by a majority of property owners in a particular area. Dissenting landowners may be compelled to contribute their land to the project. |
| Declaration                     | Of the boundaries of the scheme by a public or private agency under enabling legislation. |
| Plan                            | Preparation of a redevelopment scheme, determining future uses and re-planning the road and plot layout. This can identify buildings for demolition or preservation, street closures, proposed public areas, and plots allocated to the development agency to fund infrastructure (sometimes called 'reserve' or 'cost equivalent' land). |
| Measurement                     | Calculation of plot areas before and after readjustment (computer software programmes for this exist). Plot sizes may be reduced by about 20 per cent for roads, and up to 50 per cent for public spaces and facilities (such as schools). |
| Costing                         | This estimates the future market value of re-adjusted plots, and costs of infrastructure. |
| Allocation                      | Fully serviced plots are reallocated back to landowners, usually located as nearly as possible to the original position, and with secondary rights (tenants, mortgagors) protected. The development agency normally guarantees the land values, with no land transfer tax payable, and owners may opt to leave the project and be paid off. |
| Implementation                  | The enabling agency funds the infrastructure costs through the sale of reserve or cost-equivalent plots, generally by advertisement and public auction. |
3. LITERATURE REVIEW

3.1 Country experiences on land readjustment

Although not yet practiced in Zimbabwe, land readjustment has been widely used in some European and Asian countries, and has in recent years been introduced to some African countries. There have been contrasting views about its origin with some scholars tracing its roots to America while others relate them to Germany (Liebmann, 2000; Home, 2007; Turk, 2008; Yau, 2009; Mathur, 2013). Regardless of origins, it is important to understand the institutional settings in which the various forms of land readjustment have been implemented with a view to deriving lessons for successful application of the tool in other environments.

3.1.1 Germany experience

Germany is one of the countries with a long history of using the land readjustment tool dating back to 1902. It started using the tool in reorganizing rural land then adapted it to urban areas where it has been used in dealing with urban expansion and urban re-development issues (Larsson, 1997). The country has a 1986 statute for land readjustment which covers aspects relating to planning, building, urban renewal, expropriation and valuation (Adam, 2015).

In Germany, land readjustment projects are initiated by local authorities. Usually, municipalities appoint multi-disciplinary boards comprising a lawyer, land evaluator, land surveyor and two members of the local parliament to implement these projects (Larsson, 1997; Adam, 2015). All landowners within the area affected by land readjustment projects are expected to participate and there is provision to compel those who resist into cooperation. It has been noticed that while the German approach to the implementation of land readjustment projects is compulsory, it involves a series of discussions between landowners and the land readjustment boards on issues relating to the guiding principles, market value of stands, landowner entitlements and options for cost and benefit sharing (Adam, 2015). Thus the outcomes of land readjustment projects have usually been a product of consensus between the landowners and land readjustment boards.

In a land readjustment scheme, each landowner is required to contribute a portion of land towards public facilities such as roads, parks, and cost equivalent purposes. Such contribution is not supposed to exceed 30 per cent of the original land size or market value. The remaining land forms the net developable or building land which is then shared among the landowners in proportion to the sizes or value of their original properties. In the land readjustment process, landowners have the right of objection or appeal against decisions of the board but the Federal Court retains the final decision on such matters (Adam, 2015; Larsson, 1997). While Germany may have a long tradition with land readjustment, in recent years its use has declined in favour of planning agreements (Home, 2007).

3.1.2 Japanese experience

In Japan land readjustment has been extensively used since the end of the 19th century and accounts for significant urban development in the country. It has been used in the establishment of new cities, re-development of old ones, and implementation of infrastructure projects (Adam, 2015; Sorensen, 2007). Unlike in Germany where land readjustment projects are
only implemented by local authorities, in Japan the projects can be initiated by local authorities, central agencies, parastatals, legal entities, as well as private landowners (Adam, 2015; Larsson, 1997; Sorensen, 2007). It has been observed that the privately initiated land readjustment projects have a thrust on residential development and urban renewal while public initiated projects have focused on infrastructure development.

The legislation governing land readjustment in Japan is the 1954 Readjustment Act and the 1968 City Planning Act (Sorensen, 2007). Like in the German approach, each landowner is required to contribute 30 per cent of the original land towards public facilities and reserve land that is disposed to cover transaction and land development costs (Sorensen, 1999). The land that remains after deductions is shared proportionally among the landowners. Landowners are engaged at various stages of the land readjustment process. Unlike in the German approach where objections are addressed by the court, in Japan cases brought forward by aggrieved parties are dealt with administratively (Larsson, 1997).

The land readjustment system in Japan gained international acclaim because of its ability to provide land for public uses and enable self-financing of land development projects (Sorensen, 1999). But critics have drawn attention to lengthy development periods that have fostered speculative tendencies among landowners (Larsson, 1997; Turk, 2008). Further, the approach has been criticized for lax development control that has resulted in unsightly developments. Since the 1960s, land readjustment operations have been less frequent and have been increasingly contested by citizens. In most of the cases, landowners claimed the reduction of land area without compensation to be a violation of their constitutional property rights (Home, 2007; Turk, 2008; Solimen, 2017).

3.1.3 African experience

With the exception of a few attempts in all regions of Africa, there has been little experience of land readjustment on the continent (Adam, 2015). In southern Africa, Botswana has applied the land readjustment technique to manage conflicts over customary land in peri-urban areas (Adam, 2015). In West Africa countries like Senegal, Cameroon, Ivory Coast, and Benin have started applying land readjustment to deal with issues concerning urban expansion into customary land (UN-HABITAT, 2003). These countries have shown innovation by creating institutions to implement land readjustment projects in partnership with customary leadership so as to facilitate urban expansion into rural areas with less tension (UN-HABITAT, 2003; Adam, 2015). This institutional arrangement has facilitated regularization of informal settlements in peri-urban areas as well as the planning and servicing of new areas (Adam, 2015).

3.2 Lessons from international experiences

Experience from Germany, Japan, African countries and beyond has shown that land readjustment can be an effective method of financing urbanization. The land readjustment technique meets the cost of land assembly and finances infrastructure development from within the project (Larsson, 1997; Agrawal, 1999; Li and Li, 2007; UN-Habitat, 2013; Yilmaz et al, 2014). Land owners share the burden of providing land for infrastructure and public facilities, thus municipalities do not incur cost of land assembly as would be the case in compulsory acquisition. Infrastructure development is financed through the disposal of
reserve land. This in built self – finance or partial – finance has been the most important component of the procedure, through the creation of an economic base for urbanization (Larsson, 1997; Agrawal, 1999; Li and Li, 2007; Yilmaz et al, 2014; Adam, 2015). Notwithstanding this cost recovery mechanism, in cases where projects have shown less potential for land values to rise, public subsidies have been needed to cover the costs of providing basic infrastructure and services.

The land readjustment technique has given landowners space to exercise critical roles in mobilizing and organizing themselves in project implementation. This participation by property owners in the process has ensured a fair distribution of development costs and profits created by spatial plans (Sonnenberg, 1996; Yilmaz et al, 2004). Further, by retaining portion of their original land, this approach to urban land management preserves the social networks and environment of the community (Larsson, 1997; Agrawal, 1999; Yilmaz et al, 2014).

Out of the countries that were reviewed for their experiences with land readjustment, Japan came out as the country that has made extensive use of the tool. Like in the case of Germany, a common explanation of Japan’s success was the country’s long tradition of social hierarchy and deference to authority. It was observed that once large landowners had agreed to land readjustment, consensus could be reached relatively easily and quickly (Home, 2007). A related observation has been that special norms such as group harmony and consensus formation were central to the wide application of the technique (Sorensen, 2007). Hence, the experiences of Japan and Germany have led some authorities to conclude that land readjustment is best suited to countries with social conditions of a strong state (Larsson, 1997; Turk, 2008).

While countries that have made notable progress with land readjustment such as Japan, Germany and France are supported by a conducive legal and policy environment, the lack of an appropriate legal framework has been a major setback in most of Africa (UN-Habitat, 2012). A legal structure is necessary for elaborating the country specific form, institutional framework and procedure of land readjustment (Turk, 2008). The lack of a relevant legal framework has not been helped by the many variants of the method which have been adapted from the general approach of the concept. Each model has depended on the institutional arrangements and legal conditions of a country. To this end it has not been easy to adopt and introduce the method in a country considering the need for undertaking structural changes to the institutional and legal frameworks (Turk, 2008).

4. METHODOLOGY

The study made use of case study methodology. Case study methodology was used in this study because it was found to be the most appropriate for investigating policy issues such as those to do with land readjustment. The case study was complemented with a desk review of evidence from developed and developing countries concerning the use of land readjustment as a tool for land readjustment.

Lower and Upper Rangemore, a smallholding area in peri – urban Bulawayo was purposefully selected for in depth study because the area was under pressure for land subdivision as a result of rising housing demand. Within the case study approach various data collection methods such
as interviews, observation and document analysis were used. Document analysis included a review of the legal framework for planning, urban strategic, master and local development plans. Most of the secondary data was drawn from the Bulawayo West Town Planning Scheme, Bulawayo Strategic Development Plan, Bulawayo Master Plan, Local Plan Number 6 South Western Areas, and the Lower and Upper Rangemore Concept Plan. The concept plan sought to rationalize development in the peri – urban area that has been under increasing pressure for the subdivision of land for high density residential development.

Documentary evidence was complemented by key informant interviews and on site observation of the uncoordinated subdivision of land in Lower and Upper Rangemore. Key informant interviews were held with the following stakeholders: planners drawn from academia, central government, Bulawayo City Council and the private sector (15), members of the Zimbabwe Land Owners and Developers Association (2), land developers (2), landowners (5), senior officials in the Umguza Rural District Council (2), civil engineers in the Bulawayo City Council (2) concerning the potential of land readjustment as a tool for urban land management in Zimbabwe. On site observation was made of the land subdivision that has been taking place, the housing development in the area and level of infrastructure provision.

Data triangulation was used to validate evidence from interviews, observation and document analysis. Qualitative data analysis techniques such as content and thematic analysis were then used to derive meaning from the gathered data.

The fact that land readjustment has not been practiced in Zimbabwe poses some limitation to the study. Nonetheless, initiatives by the landowners in Lower and Upper Rangemore to jointly finance off – site infrastructure to support their land subdivisions provided a case where the land readjustment tool could potentially be applied.

5. RESULTS

Zimbabwe’s urban areas have been experiencing rapid growth and most of the growth has been taking place in peri – urban areas including agricultural smallholdings. The high demand for housing driven partly by rapid urban growth and partly the desire for home ownership has put pressure on peri – urban areas where owners of smallholdings have been responding by subdividing their land for sale. Land owners have individually been subdividing their smallholdings and developing housing schemes of different sizes and independent of each other leading to undesirable and uncoordinated development in peri – urban areas.

The increasing pressure for land subdivision in peri – urban areas has been experienced at a time when Zimbabwe’s urban councils have been facing difficulties in raising funds for land acquisition and infrastructure development.

The sorry state of affairs in urban council finances reflects in the general deterioration and degeneration of roads, water and sewerage infrastructure. In 2018 the Mayor of Bulawayo lamented the challenge of inadequate capital funding as available revenue was inadequate to cover the city’s needs. Of concern was the city’s inability to recruit new staff, maintain the city roads, dilapidated water and sanitation infrastructure (Newsday, 2018). The Mayor
ascribed the city's financial problems to policy failures such as government's directive for all local authorities to write-off debts accrued to residents in July 2013. The financial position of the city had been exacerbated by an underperforming economy and unfavorable macro-economic environment. Throughout the country, urban water and waste water infrastructure has suffered from lack of maintenance, upgrading and replacement and treatment works have been operating at 50 – 60 per cent capacity (Siziba, 2014).

This study focuses on peri-urban areas that were planned as residential/agricultural smallholdings in the colonial era. The increasing subdivision of land with under-provision or absence of infrastructure in these areas has been posing a challenge to planning authorities. From an examination of the problems it is evident that land readjustment is a potential tool for funding infrastructure while making serviced land available for development. Interviews with planners revealed that land readjustment has not been practiced in Zimbabwe. In fact more than 90 per cent of the planners were unaware of the existence of the tool. Upon the researcher's explanation about the tool and how it works, planners were quick to point to the lack of a legal framework for land readjustment. Zimbabwean law enables consolidation of properties belonging to one owner but not multiple owners. Likewise, subdivision permission is considered for a property owned by one entity. The approach of subdividing and consolidating land as one entity is one that has been contributing to uncoordinated development in residential/agricultural smallholding areas.

Despite the lack of a legal basis for land readjustment, planners thought it an important tool for urban land management in Zimbabwe. They clearly related some of the planning challenges where the land readjustment procedure could be experimented with. In this particular study we turn to the case of a peri-urban area, namely Lower and Upper Rangemore for purposes of demonstrating the potential of land readjustment in Zimbabwe.

5.1 Land Management in Lower and Upper Rangemore

Lower and Upper Rangemore shares its boundary with Bulawayo municipality but is under the jurisdiction of Umguza Rural District Council (Figure 1). Although the area falls under Umguza, the rural district council does not have the capacity to provide it with urban services. The area is covered by residential/agricultural smallholdings of between 7 – 51 hectares in extent and during the colonial area was reserved for settlement by middle class coloureds. Later, the Bulawayo Master Plan (2000 – 2015) rezoned the whole area for high density residential development as it forms a logical extension of the south western suburbs. The rezoning from residential/agricultural to high density residential enhanced land value.
There has been pressure for peri-urban development in the south-western areas of the city that are zoned for high density residential development in the master plan. The high demand for residential stands in the Rangemore area motivated smallholding owners to subdivide their land for sale. These subdivisions have mostly been driven by land developers from outside the area who purchase land and build houses for sale. A senior official in Bulawayo City Council ascribed the development pressures in Rangemore to good business in housing. Inspection of the Rangemore area showed that the smallholdings were not agriculturally viable and owners were said to be subdividing land because of economic hardships. As a result of speculation some landowners wanted to subdivide and sell land ahead of incorporation of the area into Bulawayo municipal boundary. Sell of land on the open market was expected to give higher returns than receiving compensation from Bulawayo City Council upon incorporation of land into the municipal area.

The Rangemore area recently experienced an upsurge in the number of applications for subdivision of land for residential purposes in response to the high demand for residential stands. Planning authorities initially allowed such land subdivision applications some of which led to the creation of townships such as Mbandane (2,300 stands) and Emthunzini (3,500 stands). Without building plan approval developers of these townships built and sold houses that have earth access roads, no water supply and sewerage disposal system.

Subdivision permission was granted for several other properties in the area resulting in the sprouting of high density residential settlements. The main problem though has been that these settlements are neither served by water nor sewerage network since no authority has assumed responsibility for such. This is surprising because as a condition of subdivision a landowner may be required to pay up to 20 per cent of the property value as endowment to the local authority. Endowment is a land value capture mechanism put in place specifically to fund infrastructure development. Land developers that made the payment have not...
seen the contribution being used for the purpose.

Areas with created high density residential stands are interspaced by smallholdings bringing about uncoordinated development in terms of the road network and provision of public facilities. The leap – frog and piece – meal development is unsustainable in terms of the present and future management of the area. Because of the desire to maximize profits, landowners and developers did not set aside land for public facilities.

Upon realization of a potential health hazard that could be created by continued subdivision of land in the absence of infrastructure, the planning authority suspended the acceptance of any new applications for land subdivision in the area. It was at this point that some landowners and land developers approached the planning authority to map the way forward and recommendation was made for the preparation of a non – statutory concept plan for use as a framework for guiding development in the area. The main issue remained the provision of off – site infrastructure and the land owners and developers decided to form an association that would raise funds for off – site infrastructure and coordinate the development of the area. About 40% of the land owners joined the association. Other land owners have been resisting joining the association for varied reasons including use of land for supplementing livelihoods and lack of financial resources to pay for the land subdivision process.

In order to enable the coordinated development of the area, the land owners and planning authority prepared a concept plan for the rationalization of development in Lower and Upper Rangemore. Of particular note, the plan provided for a road network, social services, and economic activities such as shopping centres, industrial sites, recreational land, and conservation of the environment. The plan proposed the funding of infrastructure through charging a proportionate levy for each stand. Estimates based on the concept plan showed that through a levy of US$0.50 per m², residential stand infrastructure costs could be fully recovered from the project. Generally, respondents observed that the sale of stands can take place over a long time. Meanwhile, there may be need for an agency with capacity to raise upfront funds and recover the money through billing people allocated stands. There was a sense that Bulawayo City Council would be best placed to play such a role.

The formation of an association was a big step forward but the effective planning of the area remained constrained by existing property boundaries. Some smallholdings were too small in size and a substantial part of them would be taken up by roads, social services and open space. One of the problems faced in preparing the concept plan was the need to evenly distribute the provision of space among consuming public facilities such as schools on sites that straddle properties owned by different developers so that each and every developer equitably contributes land towards the provision of facilities. Besides the constraint posed by existing property boundaries, it was clear that owners were going to subdivide land at different times making the financial contribution to infrastructure a long drawn out process. Regarding this challenge, a senior official in the Bulawayo City Council pointed out that the initial capital outlay for off – site infrastructure is substantial and needed to be funded through long term borrowing.
Clearly, the Rangemore case is one where land readjustment could be experimented with. But some landowners were reluctant to join the association preferring to retain the smallholdings character of the area. A positive development is that the Bulawayo City Council has been interested in promoting the coordinated development of Rangemore as the city’s high density residential suburbs will logically expand into the area. To that effect, the city has shown willingness to raise capital funds for the development of off-site infrastructure in the form of roads, water, and sewerage infrastructure. The city has already gone into a memorandum of understanding with the Umguza Rural District Council under which it will contribute towards infrastructure development in Rangemore and recoup the infrastructure investment from stand beneficiaries. Under the memorandum of understanding, Bulawayo city council would receive property rates and building plan fees from Rangemore residents and remit 33½ and 70 per cent respectively to the Umguza Rural District Council. Bulawayo City Council negotiated for direct billing of land owners because the Umguza Rural District Council did not have the capacity to manage the project. The revenue sharing will remain in place until Lower and Upper Rangemore get incorporated into the Bulawayo municipal boundary.

6. DISCUSSION

6.1 Housing

The pressure for subdivision of land in Rangemore has been driven by a high demand for residential stands. Bulawayo has a housing stock of 130,000 and had 115,000 people on the housing waiting list (Bulawayo 24 News, 2016). Rising land values, engendered by land rezoning, rising demand and land shortage within the municipal area have been an incentive to land developers looking for business in the housing sector. The desire for homeownership rather than rental accommodation has contributed to rising demand for residential stands. As a result of the high demand, all the stands that were created through land subdivision have been sold out.

Smallholdings in the Rangemore area have been undergoing transformation from residential/agricultural use prior to independence in 1980 to the current residential primary use. The transformation of land use has been assisted by the Bulawayo Master Plan that zoned the Rangemore area for high density residential use. Evidently, the change of zoning from residential/agricultural to high density residential provided an opportunity for landowners to subdivide and realize the market value of their land ahead of incorporation into the Bulawayo municipal boundary.

6.2 Land readjustment: the missing link in urban land management

The concept plan for the development of Rangemore addressed the issue of off-site infrastructure funding through proposing an equitable levy on each residential stand. By willing to share the development gain with the municipality the landowners satisfied an important prerequisite of land readjustment. But the potentially supporting public agency, Bulawayo City Council has shown incoherence by undertaking to contribute to the funding of off-site infrastructure while at the same time encouraging Rangemore residents to sell their land to it for purposes of high density residential development.
The retention of existing property boundaries has been a major constraint to the proper land use planning of the area. With created stands confined to existing property boundaries, most landowners have not been willing to contribute much land towards off-site infrastructure and public facilities. At the same time land developers have not conformed to the requirements of subdivision permits. Upon obtaining a subdivision permit from the local planning authority, developers have proceeded to build houses without planning permission. This has constituted illegal development that cannot be connected to municipal services. Where land developers have provided on-site infrastructure, it has been very basic, for example earth roads in place of full road pavements.

The formation of an association provided an opportunity for joint development that would have addressed the limitations arising from uncoordinated subdivision of land. But about 60 per cent of the landowners were not willing to join the association. Some landowners believed that subdividing their land would lower their status as large property owners. Some were retired, of low income and could not afford to raise application fees for subdivision of land. Those who own small plots, for example, of 2.5 hectares in size, did not see the profitability in subdividing land. Landowners in this category were generally using their smallholdings as a source for supplementing livelihoods. Other land owners preferred to keep their land as a collateral asset for securing their children’s future and as capital investment. The lack of motivation by some landowners to participate in the land rationalization project has been a common problem (Larsson, 1997; Dube and Chirisa, 2013; Yilmaz et al, 2015; Soliman, 2017). Despite these challenges, sub-Saharan Africa has witnessed an increase in the adoption of the land readjustment tool for urban land management (Home, 2007).

The planning challenges faced in Rangemore provide an opportunity for applying the land readjustment tool to land management. Possible use of the tool has not been considered by planners mainly because it has not been provided for in Zimbabwean law. Zimbabwean planning law borrowed from the British tradition that has no provision for land readjustment. No wonder there is limited awareness of the tool in the country. Zimbabwean planning law is based on a tradition that entrenches individual property rights and this has been further strengthened through the adoption of constitutionalism and the doctrine of fundamental rights. More recently in countries belonging to the same legal tradition, some landowners have claimed reduction of land area without compensation to be a violation of private property rights. Despite this legal void successful initiatives in South Africa and Botswana, countries with similar legal tradition, holds promise for the adoption of land readjustment in Zimbabwe.

A feature that would affect the feasibility of land readjustment in Zimbabwe has to do with the social traditions of the country. Land readjustment is best suited to countries with a strong state such as Germany and Japan (Home, 2007). More-so countries that have a wide application of land readjustment, for example, Japan are characterized by norms of group harmony and consensus formation (Sorensen, 2007). In the case of Lower and Upper Rangemore there has been evident conflict between landowners who saw opportunity in city expansion towards their properties and those interested in preserving the agricultural
character of the area (Dube and Chirisa, 2013). While Zimbabwe may not exhibit the cultural norms of Japan, the initiatives taken by landowners and developers in Rangemore provide promise.

7. CONCLUSION AND POLICY OPTIONS

Zimbabwe’s peri-urban residential/agricultural smallholding areas have been experiencing pressure for land subdivision under the impact of rapid urbanisation. In the absence of provision for land readjustment in Zimbabwe’s planning laws and urban policy, urban authorities have not been able to properly re-plan the affected peri-urban areas. The case of Rangemore, where landowners and developers formed an association to facilitate the coordinated subdivision and servicing of their land offers opportunity for application of land readjustment in the country.

This study has drawn important lessons for the possible adoption of land readjustment in Zimbabwe. First and foremost would be need for the country to come up with enabling legislation for land readjustment. As such, “the existence of the legal structure has been identified as an important success factor in land readjustment” (Yilmaz et al, 2015: 159). The legislation should include all the details and standard procedures of all processes, such as planning, project management, cost recovery, value capture and allocation. Roles and responsibilities should be clearly indicated to avoid overlaps and conflict.

Given obvious capacity constraints in associations, a sustainable model would be one where land readjustment is done through the municipality, whether public or private initiated. Given expected resistance, the agreement of two – thirds of the landowners in the project area would suffice. In addition, the amount of land owned by the concerned landowners must be at least two – thirds of the owned land as in the Japanese model (Adam, 2015). As learnt from the Rangemore case, financial and technical support of a public agency is important in terms of increasing the success of land readjustment.

Importantly successful land readjustment requires trust between landowners and the public authority, technical expertise, possible financial subsidy, a phased approach and capacity building of participants. In Bulawayo trust between landowners and the city council has been established through regular transfers in which landowners have transferred their land to the city council in exchange for stands in the same or other area. Trust is important because land readjustment “requires a bridge of trust between the government and landowners, which many of them do not feel guaranteed their life long investment” (Soliman, 2017:322). The municipality has the technical capacity to facilitate land readjustment, the scope to subsidize such a project, plan and build the capacity of stakeholders. Thus, where a project has been initiated by landowners it becomes necessary for the municipality to manage the process.

The fact that some landowners may not be willing to participate in land readjustment project is counsel for municipalities to work with small projects. With small projects it is easier to convince landowners to organize and participate in land readjustment projects. This necessarily calls a phased approach to development in projects where the municipality finds it beyond its capacity to implement the whole scheme at once. Developing limited areas at a time enables the supply of land to be quickly absorbed by demand.
Zimbabwean urban councils have been failing to cope with the demand for serviced residential land and land readjustment offers a sustainable self – financing option. It enables the costs of development to be recouped so as to finance new urbanization. However, adoption of land readjustment may require a change in the country’s planning culture and urban policy.

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9. REFERENCES


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10. KEY TERMS AND DEFINITIONS

Land management: the process of managing the use and development of urban and rural land.

Land readjustment: is an approach whereby landownership and land use of fragmented adjoining sites is re-arranged, usually in order to provide planned and serviced land for development purposes through cost recovery.

Land assembly: the process of acquiring separate pieces of land and consolidating them to facilitate joined planning and servicing in order to achieve integrated urban development.

Urban Policy: purposive and deliberate guide prepared in dealing with issues of concern in urban areas in a manner consistent with the legal and institutional framework.