

Cluster Home Developments In Low-density Areas in Harare: A Case Study of Greendale, Harare, Zimbabwe

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Abstract

Several Harare's low-density residential areas in Zimbabwe are fast changing due to densification initiatives in the form of cluster housing and garden flats. The increased developments that changed the face of Greendale in Harare were mainly through Local Plan 56, which permitted land-use change and promoted densification of large stands in the area and this resulted in an increased population. The article, therefore, seeks to assess the impacts of cluster housing developments on property values and neighbourhood character in areas initially zoned as low density. It assesses the extent to which existing infrastructure and services suffice the residents' needs concerning the new demands of densification in the form of cluster housing. The study explores the perceptions of residents to examine the knowledge and attitudes of developers, values and other real estate professionals regarding cluster development and proffers optimal options for cluster housing development. The study employed a mixed-methods approach where both qualitative and quantitative data were used. Overall, it is noted that most urban development in the 21st century is characterised by a drift toward promoting compact and self-sustained cities as opposed to the sprawled and dispersed ones.

Keywords: cluster housing, densification, property values, infrastructure, development

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INTRODUCTION

The development of cluster housing must be accompanied by the construction and development of roads, potable water supply and sewer reticulation systems to meet the growing demand (Pivo *et al.*, 1990). The expansion of cluster development from close to the city core to the outskirts inevitably ushers in challenges for property values for residents in the low-density residential areas. This study is, therefore, necessitated by the need to establish how these diverse factors interact and how cluster developments implemented and being implemented affect the conventional developments, either positively or negatively. The study seeks to address the issues of infrastructure challenges resulting from the added pressure of the increased population and to assess how cluster home developments affect property values in low-density areas, particularly the Greendale suburb in Harare.

Clustering or grouping of human dwellings in a fairly compact arrangement is, historically, probably one of the most basic forms of human settlement. The Sutherland Shire Council (2003) defines cluster housing as three or more dwellings grouped on a site to take advantage of good building areas or views and to conserve large areas of open space. This enables more efficient use of land and preserves the character and natural environment. Cluster developments increased popularity is due, in part, to the exhaustion of the conventional large lot developments common in the 1940s and 1950s (Whyte, 1964). In the United States of America (USA), cluster developments were undertaken as early as the 1960s. In Wisconsin, Ville due Parc and Lac du Cours in the City of Mequon, Ozaukee County were early sites for the development of cluster development. Several states were known to have been early, that is California and Colorado. In several states in the modern-day era post-1980s, the municipalities such as Massachusetts, Maryland and Pennsylvania now include mandatory clustering in their planning plans. Clustering is seen as part of the growth strategies. In the USA, the development of Radburn, New Jersey, in 1928 represented the first formal introduction of the cluster development concept (Asabere, 2012).

There is superfluous literature on 'gated communities in South Africa while in Zimbabwe, cluster residential developments or homes are also

becoming commonplace. Jurgens and Gnad (2002) define cluster homes by saying ‘they are called gated or walled communities or security villages, combining both social and racial segregation. They are regarded as privileged communities by some in South Africa. Buildings in South Africa are regulated by their national building regulations and building Standards Act 103 of 1977 amended in 2008. Freehold property enclosed by a boundary wall is referred to as a cluster home. Over the years and particularly post-apartheid era, gated communities have grown and have been demanded due to the perception that the government cannot protect citizens in a transitional society and one feels more secure in a gated community. Alexandria Metropolitan area, in Egypt, is an example of an area in Africa that has seen residential gated communities. The residents of Alexandria prefer this trend of ‘gated’ over ‘non-gated’, for the value, they are searching for such as a sense of community, prestige, lifestyle or security (Salah& Ayad, 2018).

There are rules and regulations as stipulated in the relevant statutes and legislations that need to be adhered to when public/government or private developers build new housing clusters. In Zimbabwe, the statutes and legislations that guide local planning authorities are the Regional Town and Country Planning Act (RTCP Act), Chapter 29:12 of 1976; the Urban Councils Act (Chapter 29:15); the Housing and Building Act (Chapter 22:07). They interact with the other more sector-specific statutes and legislation for roads, water, building bylaws and so forth. These statutes and legislations relate to the provision of reliable water, roads, the spatial distribution of the actual cluster houses and other attendant issues such as sewer disposal. For existing residents living in an area before the densification, a key issue of concern is the effect of the clusters on aesthetic appeal and property values. This is the ambit of this study. The rapid urbanisation that characterises most capital cities in developing economies such as Harare is accompanied by increasing pressure for housing. According to Chanza *et al.* (2014), there is a shortage of housing for middle-income earners. As a consequence of this urbanisation, contra-gravitational forces pull the city outwards into the outskirts where land values are lower than the areas in and around the central business district (CBD) and other affluent areas near the city centre. These outskirts are less attractive for permanent settlement due to

their distance from the core and the general decline in the quality of services provided there, including water and roads.

As people attempt to relocate to the fringes where they can own affordable real estate, clusters emerge as a viable and highly attractive panacea and inevitably. Where land is scarce, clusters are developed in the low-density areas where either some sellers dispose of their old houses and yards or new open and undeveloped spaces are opened up for the development of new houses, including clusters, to meet the rising demand. According to Luyms (1997), cluster housing has the advantages of combining the easy maintenance associated with a townhouse together with the prestige and privacy of a single. The development of cluster housing, henceforth referred to as densification or clustering, fits well with the recent developments in the Greendale suburb, where numerous cluster housing schemes have been developed since 2011.

To address the urban housing problem, the Greendale suburb is identified and a plan was put in place for its densification through Local Plan 56. Cluster development is both a consequence and cause of densification and a contributory factor towards increased demand for sewer reticulation, roads and social amenities. In other geographical locations, according to Asabere (2012), in a study on home values in the Lower Gwynedd Township in Pennsylvania, USA, other factors remaining constant, the study found that properties located within cluster developments attract premium prices of roughly 3.9% on average, relative to properties in conventional developments.

The Greendale locality has several households that use septic tanks and use council reticulation systems and the heavy reliance on septic tanks has an impact on the quality of groundwater that is extracted for domestic and industrial use. Previous studies have shown that cluster development should be accompanied by commensurate development of infrastructure while the city itself must adapt to this growth and become resilient (Chloe and Laquian, 2008; Hans and Rouwendal, 2010), and without that adequate service, delivery becomes a massive challenge (Kalabamu and Bolaane, 2014). The disjuncture between obtaining and permissible

population densities is a cause for concern not only concerning the required standards for cluster development and related infrastructure, but in terms of residents' perceptions of the value of their real estate. If not understood and addressed, the continued cluster development poses challenges for infrastructure and provision of ancillary services. One that comes to mind immediately is the already erratic water supply to the area, with many households having to rely on boreholes. There appears to be no quick solution to the provision of adequate water from the city fathers. Another noticeable problem in the area is the increased traffic and with the limited maintenance of the road network, the condition of the roads continues to deteriorate.

Addressing this will enhance the quality of life of residents of the area while not addressing this, will harm residents' livelihood. Residents are affected by the poor state of the roads that become a hazard to motorists. Lack of funds for infrastructural development means it will be a while yet before the water issue is adequately addressed, and in the meantime, it can be a health hazard, for example, cholera. Noise pollution, congestion and increased crime rates are a result of increased population. This has a bearing on subsequent developments, investments in the area, property values and the value of return on investments to property owners in the area. The Zimbabwean economic scenario has been 'volatile' for decades and yet many cluster developments have come up in the locality of Greendale in this environment, hence the gap that this research will try to establish, what are the perceived impacts on property values; infrastructures - roads, sanitation and sewer; social amenities and perceptions (on crime, congestion and noise pollution) on members of the community.

The study focuses on Greendale and zeroes in on specific locations within Greendale where cluster housing has developed since 2011 and/or is being developed to this day. The Greendale area is planned by the local planning authority for densification of the larger stands and since the year 2011, the area has seen several cluster developments, including six in one road-Rossal Road-alone. The area study Greendale is bounded by the following roads as per Greendale Development Plan 56, revised and approved at a Harare City Council meeting on the 17th of December 2013: Arcturus

Road to the North, Harare Drive and Beryl Drive to the East, Mutare Road to the south and portions off Glenara Avenue and Kew Drive to the West.

LITERATURE REVIEW

This section reviews the literature on cluster housing development with the aim and objective of illuminating understanding of some of the debates around cluster housing development. England is used as an example by several scholars in that in the 1800s, 10% of the population lived in towns and cities, and the figure has gone to 90% and the population is expected to increase from 52 million in 2010 to 62 million in 2023 and 70 million by 2027 (Office for the National Statistics, 2011). In the 50s and 60s, there was a 'planned unit development' as a land-use concept. It is a type of development and regulatory process that permits a development to densify without being bound by existing zoning requirements. It was used as a layout that features clusters of home developments that have both positive and negative impacts. They provide convenience, but there are several consequences, such as having homes nearer to each other. There is more efficiency when setting up infrastructure to service the cluster developments. Densification occurs not only by building single units grouped but apartment blocks or flats. The planning theory is important as the statutes and regulations of the municipal council and governments are used to govern developments and planning at large.

The growth of cities necessitates efficient use of land and European cities are moving towards mixed land use in residential areas, to maximise property values (Hans and Rouwendal, 2010). Cluster housing is when three or more dwellings are grouped on a site to take advantage of good building areas. This can be done to take advantage of great natural views or to conserve large pieces of open land for allocation to other uses. Other reasons for grouping the housing units could include facilitating easier access to energy sources such as solar, avoiding the loss of trees and scenic vegetation and ensuring the availability of spaces that are suitable for outdoor leisure and recreational facilities for the occupants (Pivo *et al.*, 1970). The 'garden city movement is an approach to Urban Planning that

was founded in 1898 by Sir Ebenezer Howard in the United Kingdom (UK). Garden cities were intended to be planned, self-contained communities, surrounded by greenbelts, containing carefully balanced areas of residences, industry and agriculture.

Urbanisation, poverty, unemployment and homelessness are increasing, leading to overcrowding and the development of slums (Kamete, 2009; Chirisa, 2014). Urban growth has led to rising costs of urban real estate (Chloe and Laquian, 2008). Harare is experiencing brisk urbanisation and this has led to the construction of housing units and other buildings to meet the demand of the growing population (Sithole and Goredema, 2013). On current evidence, Zimbabwe's urban areas have more lodgers than homeowners (Kamete, 2009). Communities threatened by rapid urbanisation have had to adapt and become resilient (Kalabamu and Bolaane, 2014).

In Zimbabwe, the government has stuck to rigorous planning legislation and housing standards that it inherited from the former colonial government and these standards are costly and financially prohibitive for the poor urban population (Kamete, 1999). The rising cost of real estate in core areas of the cities has meant that prospective homeowners must search for land in areas further from the CBD where larger pieces of land are relatively cheaper. Other drivers of cluster housing development include the slow pace of stand allocation for core housing development by councils (Schylter, 2003), lack of access to financing for client-funded housing (UNCHS, 1996), fragmented housing policies and administrative systems, insufficient land (The Fuller Centre for Housing, 2014), challenges with and inadequate coverage of aided self-help housing (Landman and Napier, 2009). Social affiliations and individual preferences have been identified as influencing factors leading to the choice of developing cluster housing and the location chosen for the development of those clusters.

Other factors driving the development of cluster housing include the interests of private capital. Private developers invest in real estate to realise

profits and cluster housing development has high returns, depending on several factors such as the location of the clusters. According to Lindsey *et al.* (2014), over 21% of private developers in the USA that have moved or considered relocating out of the inner-city were motivated by a lack of available land in the inner-city areas and 10% were motivated by the comparatively lower cost of building on the outskirts than the central areas in the cities. Other factors include lesser population densities away from the core that enables privacy and reduces the driving and other population-driven challenges associated with the core.

A big contributory driver of cluster housing development is government policy. To address the issue of housing shortages due to land and building costs, the Government of Zimbabwe passed Circular Number 70 of 2004 which stipulated new regulations and standards to be upheld in urban planning and construction of houses and infrastructure in Zimbabwe. The circular aim to stimulating compact urban development rather than sprawled development (Peterson, 2009; Lewyn, 2007, cited by Chirisa, 2014). According to Chirisa the circular targeted increasing “the supply of housing and encouraging densification”. Circular Number 70 of 2004 stipulated that minimum stand sizes for low-cost or high-density housing were allowed to range from 70 to 200 square metres. In past regulations, the same stand sizes ranged from 150 to 300 square metres. According to the Circular, all urban centres were required to have a quota of 10% of their land for medium and high-rise flats in residential areas close to the city/town centre. They were obliged to reserve 5% percent for garden and four-storey flats in other medium-cost residential centres. The new standard contained by the Circular aimed at reducing the costs of servicing the land for housing development, thus increasing densification.

The construction of housing clusters generates employment for a wide range of skill levels, including the self-employed skilled workers. As a result of cluster housing development, self-employment and entrepreneurship are high and growing in some countries where other conditions allow for self-employed property developers (Porter, 2007). According to Hans and Rouwendal (2010), the main goal of clustering is

to deliver more volumes of quality and affordable housing units. According to Asabere (2012) and Pivo *et al.* (1990), cluster development is generally driven by the need to preserve open space for use for recreational and scenic purposes, providing a pattern of development that is in harmony with the natural features of an area and ensuring efficient land use with economical networks of streets and other related utilities. The compact nature of clusters reduces the wide spatial distribution of units and helps contain the costs of servicing the stand and the provision of potable water and sewer reticulation systems that become centralised (Sanders, 1980; Chloe and Laquian, 2008).

The main challenge with cluster development is the effective integration of services for a unit of a cluster of housing units (Cao and Cory, 1981). These services include roads, water, sewer systems and energy. In particular contexts, there are slow bureaucratic processes that a developer must go through to get the required permissions to start building (Chirisa, 2014). According to Duranton and Puga (2000), some standards need to be met when selecting the land for cluster development and according to Helbich (2015) and Lindsey *et al.* (2014), cluster housing affects the value of nearby stand-alone houses. The influx of more people in a low-density residential area characterised by housing units that are sparsely spatially distributed and have low densities of inhabitants, affects the value of the houses that are already in an area. Concerns with issues such as over-population, crime and the emergence of squalor affect the property values. For existing residents, these issues demand attention. According to Porter (2007), the development of clusters can unintentionally serve to transfer socio-economic challenges from the previously heavily populated areas where people move away from, to the medium-to-low-density areas, where new cluster housing developments are taking place. Some population groups with differing needs end up concentrated in the areas, often leading to more social instability and challenges that need to be attended to through policy (Bond, 1999)

The benefits of cluster housing developments in an economy that is performing ‘normally’ are known to include; the preservation of open

space to serve recreational and scenic purposes; improved living environments with a variety of housing that permits more economical housing to be constructed; provide a pattern of development in harmony with the natural features of land; and, provide an economical subdivision layout, efficient use of the land, with smaller networks of utilities and streets.

RESEARCH METHODOLOGY

The study was mainly explorative and employed both qualitative and quantitative methodological approaches. Owners/occupants' and developers' views on the impacts of cluster housing development comprised the qualitative element of the study and the study sought to quantify the level of growth of cluster housing and to establish the impact of cluster housing on property values in the study area.

The study triangulated data collection tools-the questionnaire and the key informant interviews. The study triangulated the two data collection tools and triangulated sources of data by including homeowners/occupants/residents and developers to enable the study to capture diverse views, experiences and expectations. Sixty (60) questionnaires were administered to the targeted responses. This sample included two categories of residents: those living in cluster houses and those living in stand-alone houses outside clusters in the study location. Random sampling was employed in selecting the residences and eventual residents to respond to the questionnaire. The study generated a sample of one hundred and twenty (120) respondents: 114 for the household level questionnaire and six key informants (developers, planners and estate agents).

THE STUDY AREA

The Greendale Local Plan 56 gives us the boundary of the Greendale Local Plan as Arcturus Road to the north, Harare Drive and Beryl Drive to the east, Mutare Road to the south and a portion of Glenara Avenue and Kew Drive to the West.

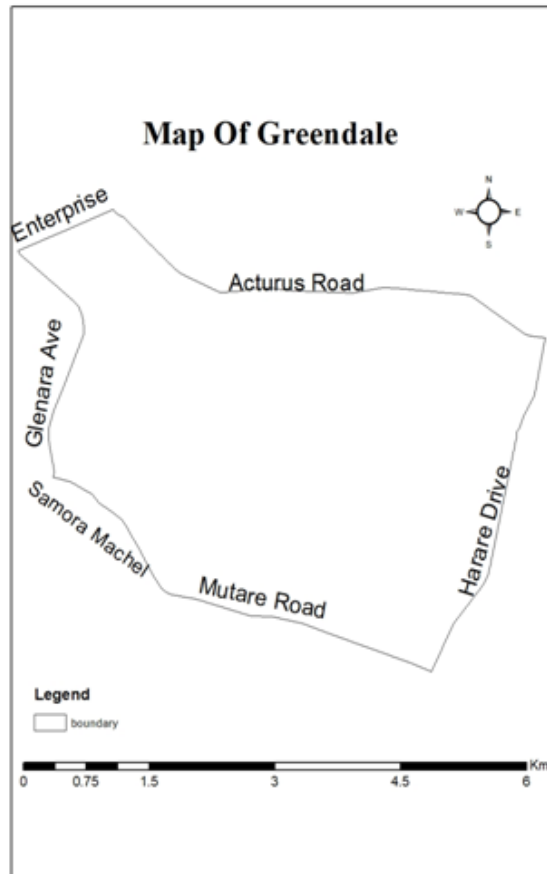


Figure 1: *Boundary roads of the study area* (Authors, 2021)

Greendale suburb historically was spacious, quiet, and sparsely populated with many trees. It would have been difficult to differentiate between Greendale and Highlands suburbs. The study area was low density until the change of use plans, which made it conducive to the development of other developments such as cluster housing. The land use has had proposals put forward as per the Local Plan 56, Map no. 10. The intention is to provide more residential stands through densification of areas with shown positive porosity results that currently have larger stands of 2000m^2 to 4000m^2

RESULTS

EVOLUTION OF THE SUBURB

There is a marked increase in the number of cluster houses in the Greendale area since 2012. The hectarage of the study area is 2076.44 hectares. There is a complex that was built adjacent to the new Pick n Pay at the Kamfinsa Shopping Centre and two more along Greendale Avenue near the Food Lovers' Market and another just off Cunningham Road, being built by FBC Properties. FBC Properties are currently building another complex of clusters on Alfred Road, built one-off Arcturus Road, and along Rossal Road. Others are Coro Breezes and The Palms at the top end of Coronation Avenue and a new complex on Kennedy Drive and Rossal Park and Greenside Villas on Rossal Road. There are already at least seven older complexes close to Kamfinsa, two along Greendale Avenue and several on both sides of the Red Fox Hotel.

New clusters have come up along Mitchel Road and on the left of Rossal Drive, and another to the right of the existing Greenside Villas (brown roofs). The vast change in the landscape and increased densification are visible, as shown in Figure 1. Now the City Council has mooted Plan 56 for Greendale which aims to promote businesses through the regeneration of shopping centres. As the Council appears to be cash-strapped and unable to provide basic services, the implementation and success of their plan remain to be seen. In Figure 2, there used to be just a single house on the corner of Mitchel and Rossal Roads. It was a dilapidated house that was not maintained at the wall and even outside the perimeter the grass was overgrown. But there was a positive development of the clusters as can be seen in Figure 2. There is now a complex with 10 units with well-maintained lawns. The complex next to this one by the same developer has 24 units. Again, we can see that the once single dwelling house has been demolished and land better utilised.



Figure 2: *Present-day Rossal Road between Court Rd and Mitchel Road* (Fieldwork, 2019)

To the left of the existing cluster in Figure 2, there was a single double story house with plenty of land at the rear but in Figure 3, there are several cluster units and the once double storey is renovated into three apartments.

Using these three developments as an example, we see an example of the densification that has occurred and it can be noted that the aesthetics have improved and this trend is followed, as the stands that have been developed all initially appear to have had homes that somehow appeared to be unkempt and not maintained. One could safely say that due to the quantum reduction theory, the values of the residential stands have increased. Smaller properties are easier to manage. However, traffic flow and noise, for example, have increased in the short stretch of the road. This trend of increased vehicles, noise and more waste for disposal

will be witnessed throughout the locations that house these cluster developments. Figure 3 illustrates the boundary area. The red markings are various newer clusters found in the locality that is being studied.

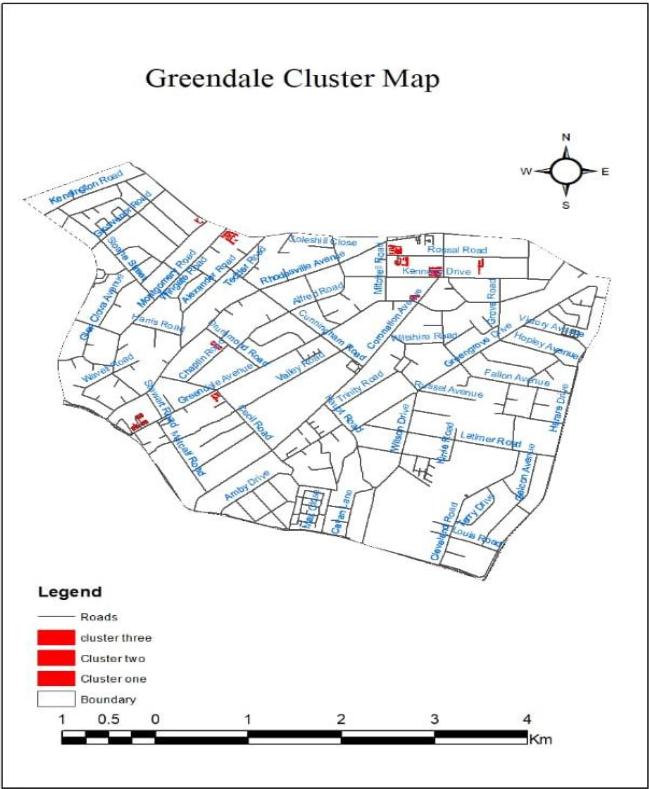


Figure 3: *The Study Area – Greendale* (Fieldwork, 2021)

Respondents were asked the ownership status of the particular property that they resided on. The responses are shown in Figure 4. The majority of those who filled out the questionnaires said they were renting. This makes sense as cluster home developments tend to fill a gap for the ‘middle-income’ that is lacking in our economy.

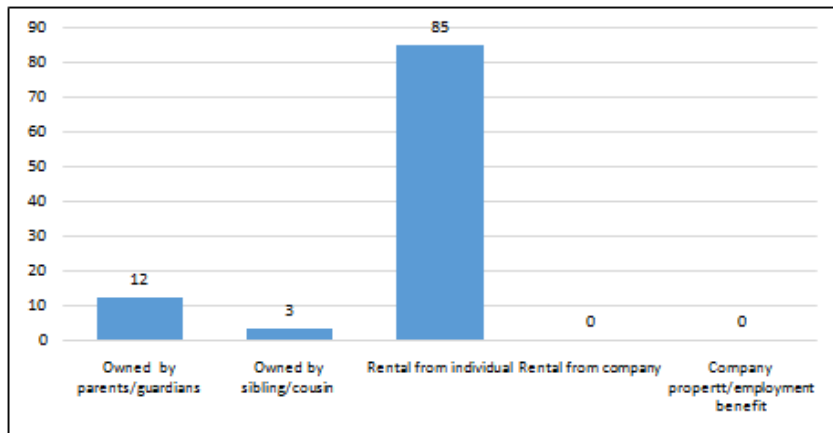


Figure 4: *Ownership status of the property* (Survey, 2021).

Respondents were asked how long they had lived in Greendale and how long they had lived on the property they are living on at the time of the study. Slightly more than 30% had been in the location for up to five years. This tallies with the fact that the face of the study area appeared to change in earnest from 2014. Nearly 9% of respondents were people who had been born in the area, as they had lived in the area ‘all my life’. The suburb is a mature suburb that was laid out in the 1940s and 1950s. Slightly more than 50% of the respondents had been residing in the suburb for 21 to 30 years, and only less than 10% has resided there all their lives, six to 10 years and those had lived up to five years. Forty-two percent (42%) of respondents responded affirmatively that they had resided in a cluster development either currently or before, while 58% had not.

The majority said the affordability was their main motivation together with the fact that more housing units were added to the national housing stock. Twenty (20%) indicated it was the only available option, as, despite the new cluster developments, Greendale had many existing clusters that were available for rental. Twenty-one (21%) indicated that by living in walled and gated communities, they made some savings on costs for maintenance and other communal charges.

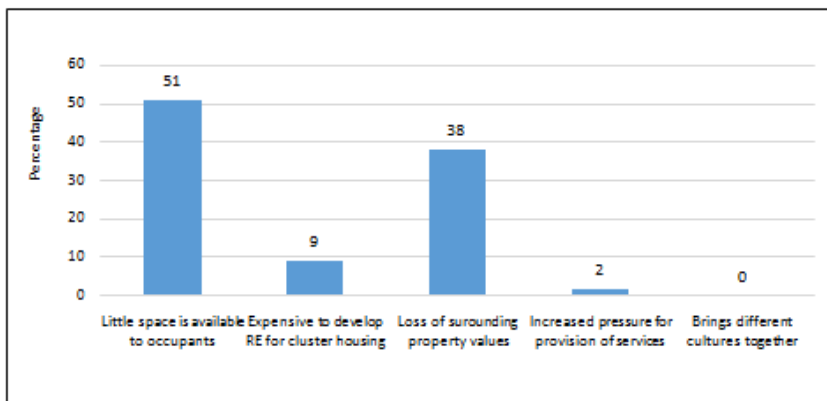


Figure 5: *Main challenges of cluster housing development* (Survey, 2021).

Some of the notable challenges of cluster housing as highlighted by respondents were that there is little space available to the occupants (Figure 5). On the value of the surrounding conventional property, nearly 40% thought that there was a loss of value due to the perception that increased numbers would cause more noise pollution and more traffic in the area. This perception, however, differs greatly from one who resides in Dandaro Retirement Village, located in Harare, off Borrowdale Road, where living in the cluster is all about the benefits derived from living with like-minded people in a secure, safe and controlled facility with a well-equipped hospital on-site as one of the major attractions. Respondents were asked what they felt were the challenges posed by cluster developments and the result showed that: 6% said the property values were declining, 15% were not happy with the densification, 24% thought there would be increased criminal activity, 22% felt there was an extra strain on service delivery, 28% were concerned with the air pollution from the increased vehicular traffic, noise pollution was of concern to 4% of respondents and 1% was indifferent and did not specify.

In response to water shortages, most people in the area have drilled boreholes while some resorted to buying water from bulk water delivery companies. Land owners' responses to the other identified challenges such as air and noise pollution are not clear. Some respondents felt that their property values were declining due to the resultant pressures being created

by the increased population, such as increased crime rates, which may not necessarily be due to increased numbers but coincide with the developments in the country. But looking at the neighbourhood watch newsgroup, crime and noise complaints are more prevalent.

According to respondents, the area is now characterised by a markedly clear struggle by the local authority to provide services and vital infrastructure to residents. There is an acute water shortage that the local authority tries to mitigate by implementing a crippling water rationing regime. The water rationing is so severe it forces some residents who can afford it, to turn to private service providers for bulk water deliveries and the drilling of boreholes. Refuse collection is non-existent in some areas and yet with the increased population more waste is being generated. Asked if they were aware that the development of cluster housing was properly regulated, 71% of the respondents indicated “No”, 24% indicated that they did not know, while 5% indicated “Yes”.

They were asked if they were aware of any regulations governing the development of cluster housing. Those that responded they were, indicated their awareness of the regulations to do with (i) procedures to acquire density, (ii) standards on population density, (iii) services required for areas where cluster housing is being developed, (iv) the need for one to secure permits to sub-divide housing stands for the development of clusters, (vi) minimum building lines, and (vii) need for notifying neighbours before building/development of clusters.

Respondents indicated a strong belief that property developers and landowners were not adhering to the regulations. Seventy-eight (78%) indicated that “there were challenges in adherence to such regulations”, 21% indicated there were no such challenges while 1% indicated they did not know if there were such challenges. For some of the 78% that reported the presence of challenges in adherence, these challenges were evidenced by the continued development of cluster housing, which is causing strain on service delivery. For example, refuse collections are not always timeous and potable water is still in short supply. They viewed this as a weak regulation because the clusters are developed in areas that are already developed, and according to them, this put a huge strain on the

existing infrastructure in an area because there is no commensurate infrastructural development. Several respondents lamented the failure of the Local Government to properly monitor and ensure that the appropriate density is implemented and maintained.

According to respondents, there was a huge increase in housing clusters being developed in this area and this was largely not commensurate with the rate of associated developments in service delivery and other ancillary services. Some respondents explained further that the area where these clusters are built was not originally designed for the densification, resulting from the development of housing clusters. Existing services such as roads, reticulation systems, water and public facilities such as schools, were overburdened. In response, many landowners in the area were selling their land often at higher prices to developers intending to build more clusters in the area. The amount of refuse produced by the households has grown due to the increase in the number of households and the Local Authority was incapacitated by the issue of foreign currency needed to purchase refuse collection trucks, chemicals for water treatment and expanding the sewer systems. Other respondents posited that the general character of the area has changed and this has affected its social fabric and the community as a whole. They argued that there was more road traffic than before and this has brought with it more noise to the area. Others highlighted the land developers' profit orientation and pointed this out as the main reason developers paid no consideration to the area's essence and the long-term effects of the development of clusters. The existing infrastructure is being destroyed due to the population increase, causing further problems that remain unattended.

The Letombo reservoir, Chisipite pump station and Firlle Treatment works provide the bulk of the study area's water supply. Respondents were asked if these reservoirs and pump stations were able to meet the increased demand. Seventy-three (73%) indicated "No", and explained that water supply and refuse collection have always been challenges in this area and had become worse. Some further explained that another factor was the local authority's dire financial situation that prevented the stations from working optimally. The main reason given by those reporting "No" was that the population being served had increased massively, thereby

overwhelming the current reservoirs, pump stations and treatment work stations. Twenty-one percent (21%) indicated “Yes” and 7% were “Not sure” if these pump stations and reservoirs were able to meet the water demand from the area.

EMERGING ISSUES AND DISCUSSION

The study needed to assess the extent to which existing infrastructure and services suffice residents’ needs. From the investigation in the locality, it was established that sometime in 2016/2017, there was a serious challenge with part of the main sewerage line that runs along Kennedy Drive between Mitchel and Court Roads, going for several weeks exposed as the sewer line had blocked. Sewer flowed on the road for several weeks as new bigger pipes were put in. The new cluster developments up on Rossal Road all have to feed into this sewer and this is an example of one of the infrastructures buckling under pressure. Informed by the increasing number of cluster unit developments, the study had to seek and establish the effects of cluster housing development on property values driven by the quality of amenities, among other drivers. The review of related literature shows that there are various drivers for cluster development and one of them is the need for accommodation. Cumulatively, property values should have increased as more units on one stand will have more value totalled than a single household.

Residents’ perceptions of cluster developments were noted. The participants appeared more concerned with the lack of service delivery, lack of water, the conditions of the roads and the increased social ills that result from the increased population. There have been significant benefits aesthetically, as the location is now much improved in appearance. This is evident from the fact that many of the developments have been done on stands that had houses that had been dilapidated and deteriorated.

The attitudes of developers, valuers and other real estate professionals were established through telephone and face-to-face interviews. Most developers are motivated by the need to provide themselves with profitable projects that will earn them a pension and assist the middle class find decent and affordable accommodation. Developers see value in

cluster developments not just for themselves but for the locality. Other professional stakeholders, that is realtors and valuers, perceived cluster developments as enhancing value to the locality. They noted that there were some challenges in the uptake of some of the developments and gave the example of the property next to Kamfinsa shopping centre – where water was not available, and the boreholes had not successfully struck water. Boreholes are having to be sunk to great depths to reach the water.

It was learnt that stands with areas of 4000m² could use on-site sewer disposal through septic tanks. For stands close to the reticulated sewage system, they could trench towards and connect. For the sustained and successful densification to continue in the study area, the Firlie treatment works will need to be upgraded so that they can accommodate the changing land use in the area and the resultant increased human population. It was noted with concern that densification is occurring without existing infrastructure being upgraded, putting a strain on the services.

Property values in the Greendale area have increased due to the aggregate value of the land increasing as a result of the developments through densification. The more manageable cluster home developments are walled and gated and some have controlled access, allowing for more security. A secure home attracts more value. The values have been increased as modern homes have better finishes than single dwellings that have not been updated through refurbishments by the owners. The challenging economic environment has meant that institutional investors are the ones who were able to raise the large sums of money required to construct a home.

The local municipality should continue to identify land that is suitable for development. The reason for this is that land is a finite resource and the only way to add to the accommodation provided is to fully utilise and densify land through cluster homes or flats. Developers with resources to build should be facilitated in submitting the required paperwork is submitted and approved if the stipulated regulations are met.

RECOMMENDATIONS

The following matrix presents the recommendations concerning conclusions made. Table 1 shows the issue to be dealt with, the recommendations, the responsible authority, individual or group of people capacitated to handle the issue in question and, finally, the desired outcomes are presented.

Table 1: *Recommendations Matrix* (Authors, 2021)

Issue	Recommendation	Responsible Authority	Desired Outcome
Property Values	Property values are rising in places where clusters are properly managed and maintained and the reverse is true. Hence, clusters should be managed efficiently through the homeowners' constitution.	Cluster committee or Board corporate & Local authority	Proper maintenance and management of cluster houses to achieve value increases or appreciation of values.
Infrastructure	Infrastructure should be provided proportionately to the increase in the cluster. It should be maintained regularly to make sure that residents get utilities as and when required.	Local authority	Infrastructure should be working efficiently and residents should be satisfied with the same. Upgraded where necessary for time.
Population	This should be kept low by lowering the maximum number of occupants in a cluster, based on the number of bedrooms, as some nations, like the UK, do.	Board corporate, Local authority, Ministry of Local Governance Public Works and National Housing	The services should not be overwhelmed by the population thus a balance is desired.
Environment	Sinking funds for the protection of the environment and local authorities should maintain a general environment for example through the disposal of waste.	Board corporate	A clean and liveable environment where residents are comfortable paying for the services enjoyed.

Housing by-laws and regulations	The current housing by-laws and regulations are outdated and the same should be revised regularly. The needs and tastes change with time and amenities dilapidate. There should be a requirement that periodic revamping of amenities is done in clusters.	Local authority	The desired situation is when building regulations provide for service delivery and reduce stress on the services and amenities in clusters. Cluster residents enjoy uncompromised amenities.
Security, safety	A cluster home is expected to be safe and secure. The local authority, through planning, should provide for enclosed clusters that are secure. The homeowners' association of each cluster should provide for security through security guards and security technology such as access control.	Local authority and homeowners' association	Secure complexes with controlled accesses that are monitored.
Security and safety of the neighbourhood	To keep all residents safe. Residents to organise themselves into neighbourhood watch committees, in conjunction with the local Zimbabwe Republic Police (ZRP).	Citizens and ZRP	Patrols that will deter criminal activities.

In summary, the recommendations are on infrastructure, population, safety and security, the environment and building by-laws and regulations. Concerns were raised on the issue of safety and security, more congestion on the roads, and noise pollution. Therefore, it is recommended by this study that the responsible authorities consider the above actions such that property values are not compromised, but rather enhanced.

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