AN ANALYSIS OF THE EFFECTS OF PIECEMEAL PLANNING ON DEVELOPMENT OF SMALL URBAN CENTRES IN ZIMBABWE: CASE STUDY OF PLUMTREE

Benviolent Chigara, Linda Magwaro-Ndiweni, Fungai Hamilton Mudzengerere, Anastance Boya Ncube National University of Science and Technology, Bulawayo, Zimbabwe

ABSTRACT

In Zimbabwe, the first traces of urban development by modern standards date back to the time of colonization. Colonial powers developed urban centres as administrative, economic and political centres to strengthen a capitalist system of production. Apart from the racial segregationist policies of the colonial administrators that restricted black urbanization, general population increase in these urban centres culminated in the institutionalization of urban planning to achieve order, harmony, economy, efficiency and city beauty. Regardless of the multiplicity of town planning regulatory frameworks passed from pre and post independence Zimbabwe, piecemeal planning guide urban development in most towns and cities. This research uses case-study analysis to explore the effects of piecemeal planning on development of Plumtree. Extensive desk review was done to collect data on historical development of planning in Zimbabwe, while interviews were held with key personnel in Plumtree Town Council and the Department of Physical Planning to ascertain the effects of piecemeal planning on urban development. Amongst its key findings, the research observed that; apart from being incremental in nature, piecemeal planning is not a sustainable tool for development planning, for example, its concern with the immediate problems facilitated skewed urban development in Plumtree, disorderly cityscape, and production numerous micro-designs/layouts with concomitant management challenges. On the other hand, capacity constraints, cumbersome planning procedures, lack of effective commitment and political pressure are among the noted drivers of piecemeal planning in Plumtree. In that regard, review of the Regional, Town and Country Planning Act to make preparation of spatial development plans mandatory, flexible, responsive and less bureaucratic, and sufficient budgetary support to the Department of Physical Planning will help to ease the situation. In addition, occasional seminars particularly for local authority policy makers, on development planning may help to demystify the place of development planning in fostering sustainable growth of their urban centres.

Keywords: piecemeal planning, urban development, small urban centres, Plumtree, physical planning, regulatory frameworks

INTRODUCTION

In Zimbabwe, the first traces of urban development by modern standards date back to the time of colonization. Before then, the predominant nature of human settlements was entirely scattered and sparsely populated rural settlements with no cities and towns except the long disserted pre-colonial city states of Great Zimbabwe, Khami and Dhlodhlo to mention but only the largest (Munzwa and Wellington, 2010, p.120). In Zimbabwe, an urban settlement is defined as a settlement of 2500 people or more, the majority of whom do not engage in primary production activities, such as agriculture and mining. In both the colonial period and the post-colonial period, urban development has been guided by planning frameworks and legislation. The need for urban planning arose out of the need to create order, harmony, convenience and economy within these urban settlements – what Chipungu (2011) referred to as modernist approach to planning. Population growth from the pre-colonial period through colonial period to post colonial period had a significant bearing on the growth of urban centres in Zimbabwe. According to Chipungu the impetus for the institutionalization of planning grew out of social problems related to massive immigration, large-scale manufacturing and lack of controls over the built environment. Thus the need for urban planning arose out of the need to create sustainable settlements. This follows from that fact that urban planning champions rational use of land resources against competing economic, environmental and social needs of society. As a result, several policies and legislative instruments like the Town and Country Planning Act of 1933 and 1945, the Regional, Town and Country Planning Act of 1976 were promulgated to guide and control urban development. Apart from the promulgation of these planning regulations, technical and financial incapacity of local authorities to produce development plans paved way for a piecemeal approach to urban development. Piecemeal planning is reactionary planning that often results from development pressures that are translated into development needs by creating a multiplicity of micro layout plans to cater for development initiatives like housing. Whilst such an approach to development planning is incremental, however, it is characterized by sprawling urban environments, uncoordinated developments, disorderliness, and lack of harmony among adjacent land-uses. With its main focus being on addressing immediate urban development's demands, piecemeal planning is a threat to sustainable urban settlements. The basic principle of town planning seeks to achieve organized and systematic ways of ordering land resources in response to present and future societal needs and problems.

This research looks at the historical policy framework guiding urban development in Zimbabwe, the historical development of Plumtree, and the effects of piecemeal planning practice on urban development. The research is case-study based employing both exploratory and descriptive methodologies. While all cities and urban settlements are unique, each case study highlights an urban issue faced by cities the world over (Cities Alliance, 2007). Therefore this research draws its conclusions on the effects of piecemeal planning based on studies done in Plumtree. Desk study was employed to review books, journal articles, government publications and local authority reports to trace the historical developments of planning legislation in Zimbabwe. On the other hand, primary data was collected through interviews with key informants from Plumtree Town Council and the Department of Physical Planning in the Ministry of Local Government, Rural and Urban Development. In addition to interviews, the research also benefited from observations made at Plumtree during the primary data gathering process.

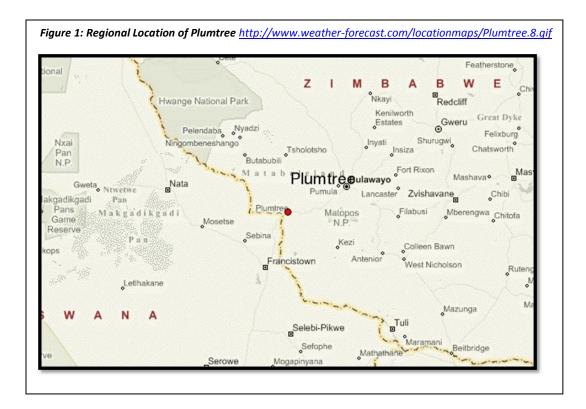
HISTORY OF URBAN DEVELOPMENT IN ZIMBABWE

The historical development of urban centres in Zimbabwe can be classified under three time periods: the pre-colonial period, the colonial period and the post-independence period. Within these phases, Njoh (2008) identifies four ideologies that shaped and still shape town planning in Africa; indigenous elitism (pre colonial era – 1884); European racism (Colonial era, 1884–1960s); modernism (1960–1980s); and globalism (1990s–present). There are many towns and cities that flourished in Africa prior to the European conquest; Great Zimbabwe in Zimbabwe, Sofala in Mozambique , Mombasa in Kenya and Zanzibar boasted with formal governance structures complete with government departments in charge of functional areas of town plan and design (Njoh, 2008). Also, the walls that enclosed ancient towns, for example the Great Zimbabwe were designed not only to define human settlements and prevent urban sprawl, but also to distinguish borders of the town from farming or areas for economic purposes.

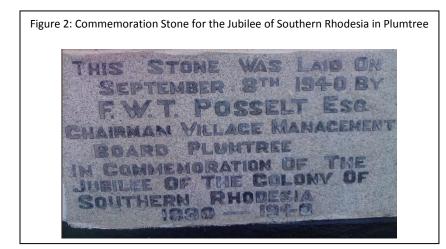
The colonial period was marked by grabbing of land from Africans for establishment of urban centres meant to administer the welfare of the new settler government (Zinyama, Tevera & Cumming, 1993). On the other hand, Munzwa and Wellington (2010) argued that the first colonial urban settlements were developed from military forts, established along the route of entry followed by an expeditionary force called the pioneer column, under the British South Africa Company. These "towns" included Fort Tuli, Fort Victoria [now Masvingo], Fort Charter [later Enkeldoorn, now Chivhu] and Fort Salisbury [now Harare]. Contrary, Plumtree town was developed from a railway station to an urban settlement. To ensure improved economic sustainability of these centres, the colonial government invested heavily in railway and road infrastructure. However, the restrictive and racial segregationist policies of the colonial government impacted negatively on growth of these centres. Munzwa and Wellington noted that such restrictive measures especially on black population were among the measures allowed to control growth of urban populations. At independence relaxation of segregationist policies and legislation opened up the avenues for accelerated urban population growth. In 1980, the percentage of population living in urban areas stood at 22%.

Historical Development of Plumtree

Plumtree is situated 100km south west of Bulawayo, the second largest city of Zimbabwe. Lying in the Matabeleland South Province, the town is 10km from the Zimbabwe-Botswana border and is also 85 km from Francistown in Botswana. Figure 1 below shows the regional location of Plumtree.



Plumtree was founded in 1897 as an administrative point when the railway link between Zimbabwe and Botswana was being constructed. It was first administered by a Village Management Board. The footprints of this Board are still evident at Plumtree Town Council Administration building through a landmark stone (Figure 2) laid by the chairman of the Board in 1940 to commemorate the jubilee of the colony of Southern Rhodesia.



In the 1960s, rural councils were established in the then Southern Rhodesia to administer white settler areas in the countryside. These included small country towns and large scale commercial farms. Development in these areas was influenced by white supremacist ideology translated through segregationist approaches to spatial development. The Land Apportionment Act of 1930, Land Husbandry Act of 1951 and the Land Tenure Act of 1971 were among the laws promoting this ideology. The location of Mtunduluka, an African township in Plumtree, furthest from the town centre confirms the colonial social objective of racial spatial segregation.

At independence, Plumtree was part of Bulilimamangwe District administered by the 'European' rural council until 1988 when the dual system of local government in predominantly rural areas comprising 'African' district councils and 'European' rural councils were amalgamated to form Rural District Councils (RDCs) through the RDCs Act of 1988. Plumtree centre served as the commercial and administrative centre of that district. In 1997, Bulilimamangwe Rural Master Plan recommended for upgrading of Plumtree centre to a town. In 2002 Plumtree centre was conferred town status thus making it the business, social and political nerve centre for the western wing of Matabeleland South Province under the administration of a town council. Apart from serving the population within its jurisdiction, the town also provides services to people in transit, from Bulilima and Mangwe districts. Currently, the administrative offices for the two RDCs, that is, Bulilima and Mangwe are at Plumtree.

The town also serves as a port of entry and exit between the Zimbabwe-Botswana boarder providing customs, immigration and other services for travellers. From being a railway station, today Plumtree stands out as the major town on the Bulawayo-Botswana railway link with a population of 30000 people (Department of Physical Planning, 2006). The population is dynamic by virtue of it being a border town which experience huge volumes of movements of people. The town is in agro-ecological region IV with temperatures ranging between 28-30^oC and annual rainfall ranging between 450mm and 650mm. Formal and informal economic activities form the core of business of the town. Activities in the town are centered on government service, agriculture, animal husbandry, retailing, hotel and catering, and light manufacturing

LEGAL FRAMEWORK GOVERNING URBAN DEVELOPMENT IN ZIMBABWE

Town and Country Planning Acts are the ordinances that provide urban development and planning regulations. These ordinances have been the main instruments of town planning practice and they are the principal legislations that govern urban development and planning in Africa (Ondiege and Okpala, 1999). Davison (2002) noted that the Zimbabwean planning procedure is stereotyped on the British system although with some improvements to suit the specific requirements of the former colony. Concurring with Davison, the UN-Habitat (2010) noted that in many developing countries, planning systems and processes are still largely based on colonial laws, designed to support spatial segregation and population control. For example, in the UK, to which Zimbabwe borrows most of its planning legislation, since 1948 a highly regulated system of land-use control had gradually been introduced. In Zimbabwe, the first traces of legislation starts around 1892 with the promulgation of Sanitation Boards to administer municipal areas (Davison, 2002; Wekwete, 1989). Early planning powers were vested in municipal authorities through the Municipal Act of 1897.

In 1933, the first town planning Act, that is, the Town and Country Planning Act, was passed in Zimbabwe. The Act formalised town and country planning and gave powers particularly to urban local authorities to prepare town planning schemes (Chipungu, 2011; Wekwete, 1989). The Act provided for the appointment of the first town planning officer and a Department of Town Planning was established in the then Ministry of Justice and Internal Affairs to provide technical

expertise for intervention in the managing of urban land. This Act was repealed by the Town and Country Planning Act of 1945 which broadened development control powers of the local authority. This was in response to increased urbanization and development pressures after the Second World War. The Act made provisions for land-use planning, conservation, land acquisition powers and the management of the assets of the built environment (Wekwete 1989). Apart from making reference to 'country' planning in the two legislations, no 'country' planning was practiced until after the promulgation of the Regional, Town and Country Planning (RTCP) Act in 1976 (revised in 1996). Wekwete observed that the 1976 Act maintained a large measure of continuity in town planning, with the major innovation being the inclusion of regional planning in the new legislation. As had been the case with the 1968 Town Planning in UK, a major landmark of the RTCP Act was a major shift from planning schemes to development plans based on a two-tier planning system with regional and master plans on the upper tier and local plans on the lower tier. The Act introduced some level of flexibility that was lacking with planning schemes.

In addition to the Planning Acts discussed above, allied Acts like the Land Appointment Act 1930, Native Councils Act 1937, African Councils Act 1957 and the Land Tenure Act 1969, just to mention some, impinged on land use planning. Because of these racially oriented statues, built environments were created which were characterized by racial stratification. Social stratification was widely reflected in the physical layout of the urban areas based on race and colour. Towns were divided into white, coloured and black people settlement zones. This class system grouped the residential areas into high density (low income), medium density (middle income) and low density (high income).

At independence in 1980, Zimbabwe inherited the colonial government planning system albeit with some modifications to suite new policy orientations. For example, physical planning was reoriented in line with other state activities to reflect new government priorities particularly the need to transform rural sector through allocation of funds of public sector funding for settlements, energy and water, land resettlement, social services, transport and housing (Government of Zimbabwe, 1982, as cited in Wekwete, 1989). However, minimal revisions were made to the Regional, Town and Country Planning Act in 1996, and since then the Act has remained the main instrument governing land use planning in urban areas in Zimbabwe.

The RTCP Act;

'provides for the planning of regions, districts and local areas with the object of conserving and improving the physical environment and in particular promoting health, safety, order, amenity, convenience and general welfare, as well as efficiency and economy in the process of development and the improvement of communications; to authorize the making of regional plans, master plans and local plans, whether urban or rural;...to provide for the control over development, including use of land and buildings; to regulate the subdivision and the consolidation of pieces of land...' (RTCP Act, 1996, p. 406).

Apart from providing the framework for guiding urban development, the planning procedure enshrined in the RTCP Act has come under attack from members of the public and planners alike. The Zimbabwe Institute of Regional and Urban Planners (ZIRUP) during its Annual School in 2010 criticized the RTCP Act for advocating a planning system that is too complex, cumbersome, time consuming and excessively bureaucratic. According to Musoga (n.d.), master and local plans which, are the key development instruments guiding urban development in Zimbabwe, suffer from strong influence by engineering and architectural disciplines making them too technical to adequately address environmental, social and community issues. Regrettably, due to the complexity involved in preparation of such plans and the budgetary support required, some local authorities have failed to prepare such plans. This failure has paved way for the less costly method like piecemeal planning. Nevertheless, this approach has grave effects on the urban economy, the environment and society. Thus the Cities Alliance (2007), argued that poorly managed urban settlements will be unable to keep pace with urban expansion, and unserviced slums will proliferate, bringing with them poor health, poverty, social unrest and economic inefficiency.

DEVELOPMENT PLANNING AND CONTROL IN ZIMBABWE

The broad objective of urban development and planning regulations is to ensure the orderly development of urban areas. The development plan sets the agenda for the development of the local authority's area over its lifespan (Rockie, 2007).

In particular a development plan aims at:

- (i) Providing a good living environment for all by ensuring safety, amenity, accessibility, energy conservation and environmental protection;
- Providing a safe, healthy, useable, serviceable, pleasant and easily maintained environment for all commercial, industrial, civic and community land users. In addition, it is aimed at preventing disturbance to neighbouring environment particularly by the industrial land users;
- (iii) Ensuring that any conflicting requirements of different land uses are reconciled particularly among mixed land users; and
- (iv) Providing orderly and progressive development of land in urban areas and preserve amenities on that land as well as promoting environmental control and socio-economic development (Ondiege and Okpala, 1999, p. 7).

In Zimbabwe, master and local plans are the two main planning instruments used to guide urban development. Although the RTCP Act makes provision for preparation of regional plans, however, apart from the Sebungwe Regional Plan of 1979, no other regional plan has been prepared. Alternatively, provincial plans and trans-frontier development plans are taking the place of regional plans. Whilst the preparation procedure for master and local plans is almost similar, the two are differentiated by the level of detail and geographical area covered. A master plan, for example, is a strategic policy document that is meant to guide development for the whole or part of local authority area for a longer period of time usually extending to 25 years. Musoga (n.d.) concur by noting that master plans are long term plans intended to provide long range development guidelines. They have to take into account broad policy issues and the economic development of the urban area. On the other hand, local plans are short term plans prepared within the framework provided by the master plans. They are more detailed and they provide a basis for exercising development control.

Procedurally, a development plan precedes development and it is therefore illegal to carry out any development without a valid development permit from the presiding local planning authority. The RTCP Act (Chapter 29:12) defines *development* as

the carrying out of any building operation or mining operation in, on, under or over any land, the subdivision or consolidation of land or making of any change of use in the use of land. To ensure sustainability, preparation of a development plan involves extensive study of the planning area to make an inventory of the resources obtaining in that area and to make development proposals taking cognizance of economic, social and environmental aspects that underpin development. Irrespective of this noble procedure, in practice this process is sometimes not followed as planning becomes reactionary and only responsive to current needs. In addition, flaws in the regulatory frameworks, for example regularization has been abused to provide a conduit through which non-conforming developments find their way onto the urban built environment. Apart from the non-conformity issues, Ondiege and Okpala (1999) noted that enforcement of planning regulations in many cities in sub-Saharan Africa is affected by inadequate manpower of municipal development control officers to implement development control.

PIECEMEAL PLANNING AND SUSTAINABLE URBAN DEVELOPMENT

Piecemeal planning is a planning methodology that uses incremental, although autonomous micro-designs to guide urban development. It is reactionary, spontaneous and non-conforming to the requirements of planning statutes. Alternative names like *ad hoc* planning, disjointed instrumentalism, reactionary have been coined to explain this approach to planning. Apart from providing an immediate solution to development needs, however, the 'micro level' approach to planning leads to skewed and haphazard development with little or no respect for the environment. Piecemeal approach to planning has not only been confined to Zimbabwe. In the USA, Blackburn (2011) noted that the Whatcom County Council's approach to planning seem to be working in a piecemeal fashion, zoning properties parcel by parcel based on the requests of individual property owners. A fact finding mission on urban planning needs in the Lake Victoria Region on a sample of secondary towns revealed that some towns had no urban plans at all, while others have plans which are out of date. According to Musoga (n.d.) the Lake Victoria towns reveal all of the worst features of unplanned and haphazard development as a result of the absence of effective urban planning systems. For example, lack of a long term plan in Bukoba, Tanzania paved way for disjointed instrumentalism, where development has been guided by incremental layout plans. These incremental layout plans and the subsequent cadastral surveys have not been able to keep pace with the demand for surveyed plots and this has led to a mushrooming of unplanned settlements in various parts of the town and areas prone to flooding have also been inhabited (Musoga, nd).

In Zimbabwe, piecemeal planning is most prevalent in small towns that have no capacity to prepare master plans or local development plans. These towns rely extensively on the Department of Physical Planning (DPP) for their development planning needs. The DPP is an arm of government created to provide technical support on planning matters to local authorities. However, due to understaffing, lack of capital resources and other provincial commitments DPP is incapacitated to produce long-term development plans. Therefore, DPP responds to development needs in local authority areas through producing micro-designs/layouts or site plans. Lack of coordination in site planning make the whole planning process a danger to the environment. Due to its concern with the immediate, it fails to balance the economic, social and environmental needs of society. This approach to planning departs from the very basic principles of urban planning which seek to project developmental movement from the past to the future. The future imagination is not merely a matter of short-term political

expediency, but is expected to be able to project a transgenerational temporal scale, especially in relation to infrastructure investment, environmental management and quality of life (Healey, 2004, as cited in UN-Habitat, 2009). Unlike piecemeal planning, urban planning seeks to promote sustainable urban development. Campbell (1996) argued that sustainability is a helpful concept to planning in that it posits the long-term planning goal of a social-environmental system balance. The United Nations define sustainability as a concept that is concerned with meeting the needs of the present without compromising the ability of future generations to meet their own needs. However, incrementalist theory builders question the wisdom of comprehensive master planning that sustainability can be achieved in a single grand leap. Instead, sustainability in planning will be achieved by making trade-offs between economic, environmental and social equity requirements of society.

FACTORS THAT CONTRIBUTED TO PIECEMEAL PLANNING IN PLUMTREE

Irrespective of the fact that local authorities in Zimbabwe are aware of the statutory planning procedure, however, there are certain factors that promote piecemeal planning. Capacity constraints to prepare and implement development plans, complex planning procedures and lack of substantive political will are some of the factors promoting piecemeal planning in Plumtree. These are discussed under the following headings

Shortage of Technical Manpower

Apart from attaining town status in 2002, Plumtree Town Council has no substantive town planner. In addition to the services of a town planning technician the local authority heavily relies on DPP for most town planning matters. However, understaffing, work overload and low motivation (due to low salaries) affect service delivery by DPP. Currently, DPP for Matabeleland South Province (responsible for Plumtree) has two town planners and three technicians against a staff complement of ten. Taking into account the earlier mentioned challenges bedeviling DPP compounded by lack of technical staff at local authority level, preparation of master plans and local plans is an uphill task. As a result, DPP resorted to production of layout plans whenever there is development need in the town. This situation is further complicated by central government's failure to pay travelling, subsistence and accommodation allowances for DPP town planners when providing services to local authorities. Thus the local authority has taken over welfare arrangements for these planners. However, this arrangement has its own costs since the 'paymaster-cum-client' relationship may not guarantee professional objectivity of the planner. In addition, staff turnover at DPP accounts for loss of institutional memory that manifests through production of two or more layouts for the same piece of land in Plumtree.

Lack of Financial Resources

The local planning authority suffers from limited financial resource base. This comes on the backdrop of a slowly performing economy after introduction of multi-currency regime in Zimbabwe in March 2009. Under these conditions, the local authority finds it difficult to pay high consultancy fees for preparation of development plans. As previously mentioned, the local authority relies on DPP. Apart from resource constraints, DPP has little or no adequate experience to prepare development plans. As a result, cheaper and easier to prepare layout plans were produced to pave way for development to take place within Plumtree. In addition to meeting development needs in Plumtree, layout plans were also enhanced by the need to generate revenue for the local authority through sale of subdivided residential stands. However, there was no immediate evidence that

the proceeds from these sales have been channeled to development planning. Therefore, lack of budgetary support and the use of land an immediate source of revenue are some of the factors that promote piecemeal planning in Plumtree. In the study town, a Local Development Plan initiated in 2006 is yet to be completed. In earlier studies, Musoga (n.d.) observed that lack of combination of planning with budgeting process has led to ineffective planning as evidenced by widening gap between planning and implementation.

Complex Planning Procedure

The complex, bureaucratic, costly and length process of planning as guided by the RTCP Act sometimes stifle local authority initiatives in preparing development plans. Whilst the period taken to prepare a development plan is not clearly defined in the RTCP Act, previous experiences have shown that it is impractical to prepare, approve and make operative a master plan in less than twelve months. In Plumtree, irrespective of doing the first Report of Study in 2006, six years later the town has no operative master or local plan. The long gestation period between plan preparation and implementation often result in plans becoming outdated even before they are implemented. In addition to the complex planning procedure, the legal framework suffers from gross omissions on important matters regarding development plans. RTCP Act, for example, does not make it mandatory for local planning authorities to prepare development plans. Armed with that loophole, local authorities do not feel compelled to do so since they can still parcel out land using approved 'micro' layout plans.

Politics and Development Planning

The level of understanding of development planning and its role in shaping the town and fostering economic growth of a town is varied within local authorities. As a result of that, dedicating resources to such a process is problematic. Lots of 'talk shows' on the need for development planning with no corresponding action yields no results. On the other hand, the 'principal-agent' relationship within the local authority weakens the position of the planning office when pitted against policy makers. The location of *Garikai* housing estate on the edge of a water course/stream is a clear spatial reflection of the consequences of giving lip service to the role of the planner in location of land uses in urban space. This township was developed as a wake-up response to the government initiated *Operation Restore Order/Muramabatsvina* which saw government destroying all 'illegal' housing structures in urban areas. However, the closeness of the township to a water stream has environmental consequences.

IMPLICATIONS OF PIECEMEAL PLANNING ON URBAN DEVELOPMENT

The effects of piecemeal planning are manifold. In the case study town, piecemeal planning has shown fissures in the following areas: environmental quality, town beauty, economic self-sustenance, harmony in development and territorial expansion of the town. These fissures discredit piecemeal planning as a good candidate for sustainable planning.

Incompatibility and uncoordinated spatial development

Due to lack of comprehensiveness and city-wide approach to planning, piecemeal planning fosters uncoordinated urban development. Apart from attaining town status in 2002, Plumtree has no development plan (local or master plan). Although the local authority has a strategic plan, however, this plan lacks spatial reference therefore posing difficulties in using the plan

for guiding development and for development control purposes. As a result, planning is reactionary to the needs of potential developers. Lack of coordination on the micro-layout designs account for incidences of double layouts for the same piece of land. Such practice has administrative challenges such as duplicate numbering of stands. On the other hand, the CBD is characterised by mixed uses some of which are not compatible. Backyard industries like welding shops and car repairs, flea markets and vegetable vending stalls are common in the CBD. In addition, some business stands have double frontage with no service lanes for delivery vehicles. Lack of development control policy frameworks, affirmative action and black economic empowerment drive paved way for multipurpose use of commercial stands and buildings. Whilst multipurpose use of buildings is a growing phenomenon in most towns and cities in Zimbabwe, however, over-liberalization of this sector affects the character of the town particularly when it is at the core of the town. These irregularities negatively affected the character, form and townscape of Plumtree.

Environmental quality and city beauty

Due to lack of development control policy framework, environmentally unfriendly buildings or land uses, for example, the coal-fired bakery (Figure 3) emitting smoke into the atmosphere is found at the CBD. Apart from being a threat to the city beauty principle, such developments are a threat to environmental quality and the general quality of life in the town.



In addition to atmospheric pollution, another environmental disaster is looming at *Garikai/Hlalani Khuhle* Township. The township is hardly 15m from the watercourse. In 2009, some houses situated close to water course were submerged by water in Nketa 9 and Nkulumane 5 townships in Bulawayo. Such previous experiences may be repeated here. Furthermore, improperly managed solid and wastewater may be released into the stream – thus causing environmental pollution with additional multiplier effects such as disease outbreaks. For example, in 2008 Harare and other parts of the country were hit by a deadly cholera

outbreak which was attributed to improper solid waste management and drinking polluted water.

Economic sustainability

In addition to other sources of revenue, subdivision of land for housing development is a critical avenue for local authority revenue mobilization. As a result land is subdivided to meet the dual purposes, that is, to meet development needs (particularly housing) and to raise revenue for the local authority. However, residential development has not been met with a corresponding growth in industrial development. Apart from aiding town sprawling, lack of corresponding growth in employment generation infrastructure and subsequent growth of economic production centres is a cause for concern. The mismatch between housing and industrial development contradicts the European Commission's view that cities should be

places of advanced social progress and environmental regeneration, as well as places of attraction and engines of economic growth based on a holistic integrated approach in which all aspects of sustainability are taken into account (European Commission, 2012). Thus, the ad hoc nature of development planning is partly to blame for the slow uptake of industrial stands/plots and their subsequent development. Slow industrial development increase the risk of making Plumtree a dormitory neighbourhood of Bulawayo or Francistown. This is attributed to lack of a wholesome spatial development framework showing the town's physical and economic growth potentials. Previous studies show that towns that develop without supporting productive and employment generation infrastructure run the risk of becoming dormitory towns of the parent city.

Urban Sprawl

Increasing demand for housing and subsequent subdivision of land to cater for this demand saw an increase in land acreage being converted to housing. This has seen territorial expansion of Plumtree with concomitant challenges of providing for bulk infrastructure. Lack of a city-wide development plan facilitates sprawl as the town will continue to bring in additional pieces of land onto the town's built environment as and when demand for such land arise. Although urban sprawl is not yet highly pronounced, the rate at which land is taken up for housing development is certainly expanding the town's territorial built up area. The ZIRUP Annual School in September 2012 also identified piecemeal planning as a major driver of urban sprawl in most towns and cities in Zimbabwe.

CONCLUSIONS AND RECOMMENDATIONS

This research used Plumtree as a case study to assess the impact of piecemeal planning on urban development. Due to a number of administrative and planning similarities of Zimbabwean towns, the observation noted from Plumtree may be applicable to other towns in Zimbabwe and from other developing countries. The research observed that, apart from a clearly defined planning regulatory framework in Zimbabwe, Plumtree still employ piecemeal planning to guide urban development. Lack of capital and human resources, lack of substantiated political commitment and the cumbersome procedure for preparing development plans are amongst the drivers of piecemeal planning. On the other hand, lack of compelling clauses in the RTCP Act that make preparation of development plans mandatory for all local authorities provides a corridor that is frequently used by local planning authorities to evade urban planning procedure. However, the conciliatory planning approach adopted come with its own problems, for example: uncoordinated development, land zoning challenges, double/multiple allocations of land, skewed land use distribution, poor townscape and urban sprawl. Plumtree is dominated by residential development with no corresponding industrial development and service infrastructure development. A major pitfall of piecemeal planning is its narrow vision of urban development and the predominant response to current needs without taking into account future requirements. Apart from affecting the attractiveness of the town as an investment centre, piecemeal planning contradicts sustainable development agenda which advocates for efficient use of resources without exhausting them for future generations. The shortsightedness of piecemeal planning, concern for the immediate, lack of respect for the environment and lack of economic balance in spatial planning are seedbeds for unsustainable communities. Residential development with no supporting employment drivers is a recipe for failure. At the current pace of development, Plumtree is developing into a dormitory neighbourhood for Bulawayo.

Against such background, the research therefore recommends revisions of the regulatory framework governing urban development to make preparation of development plans mandatory. As such conferment of town status to urban centres and eligibility for infrastructure development grants should take into account progress made by the local authority to prepare and implement development plans. In addition, the need for budgetary commitments to development planning including empowerment of the Department of Physical Planning beyond just preparation of layout plans to revenue collection from penalties emanating from defective planning tendencies cannot be overemphasized. In that regard, the DPP will be empowered to effectively *police* development planning as is the case with statutory boards such as the Environmental Management Agency (EMA). Workshops or seminars on separation of powers between planning and policy making will assist local authority policy makers (councilors) to appreciate the importance of development planning for sustainable growth of urban centres

REFERENCE

Blackburn, V. (2011, February 3). Piecemeal planning: stalling and delay comes at considerable cost. Cascadia Weekly

Campbell, S. (1996). Green cities, growing cities, just cities? Urban planning and the contradictions of sustainable development. *Journal of the American Planning Association*. Summer 1996. Retrieved from <u>http://www-personal.umich.edu/Greencities.html</u>

Chipungu, L. (2011). Insights into urban development control challenges: A case study of Operation Murambatsvina/ Restore Order in Zimbabwe. *The Built & Human Environment Review*, 4(2)

Chirisa, I., & Dumba, S. (2012). Spatial planning, legislation and the historical and contemporary challenges in Zimbabwe: A conjectural approach. *Journal of African Studies and Development* 4(1), 1-13.

Cities Alliance (2007). Livable cities. The benefits of urban environmental planning. A cities alliance study on good practices and useful tools. Washington: Cities Alliance

Davison, C.A. (2002). An evaluation of existing residential layout design approvals in Zimbabwe and suggestions for alternative approaches. *Urban Forum*, 13 (4).

Department of Physical Planning. (2006). Plumtree master plan report of study. Gwanda, Zimbabwe: Author

European Commission (2012). Smart cities and communities - European innovation partnership. Brussels: Author

Government of Zimbabwe (1991). Report on development of human settlements in Zimbabwe. Harare: Government of Zimbabwe

Government of Zimbabwe (1996). Regional, Town and Country Planning Act, Chapter 29:12. Harare: Government Printers

Munzwa, K. M., & Wellington, J. (2010). Urban development in Zimbabwe: A human settlement perspective. *Theoretical and Empirical Researches in Urban Management No.* 5(14), 120-146.

Musoga, G.K. (n.d.). Strategic urban development planning in Lake Victoria Region: Lessons of experience. Nairobi: UN-Habitat. Retrieved from www.unhabitat.org/.../10691_1_5944290

Njoh, A.J. (2008). Colonial philosophies, urban space, and racial segregation in British and French colonial Africa. *Journal of Black Studies, Volume 38 (4), 579-599 Sage Publications*

Ondiege, P and Okpala, D. (1999). *Reassessment of urban planning and development regulations in African cities*. Nairobi: UN-HABITAT.

Plumtree [Map]. (n.d.) Retrieved from http://www.weather-forecast.com/locationmaps/Plumtree.8.gif

United Nations Human Settlement Programme (UN-Habitat) (2009). *Planning sustainable cities: Global report on human settlements 2009*. London: Earthscam. Retrieved from http://www.unhabitat.org/content.asp?typeid=19&catid=555&cid=5607

United Nations Human Settlement Programme (UN-Habitat). (2010). *Planning sustainable cities: UN-HABITAT practices and perspectives*. Nairobi: UN-HABITAT. Retrieved from: http://www.unhabitat.org/pmss/listItemDetails.aspx?publicationID=3008

United Nations Human Settlement Programme (UN-Habitat). (2008). Urban planning best practices on creating harmonious cities. City experiences. Submitted to the Expert Group Meeting. Rome, November 29 - 30th, 2007.

Wekwete, K.H. (1989). "Physical planning in Zimbabwe. A review of the legislative, administrative and operational framework". *Journal of the Overseas Development Institute*

Zinyama, L., Tevera, D., & Cumming, S. (1993). *Harare: the growth and problems of the city*. Harare, Zimbabwe: University of Zimbabwe

ABOUT THE AUTHORS

Benviolent Chigara: Lecturer, Department of Landscape Architecture and Urban Design, Faculty of The Built Environment, National University of Science and Technology, P. O. Box AC 939 Ascot, Bulawayo Zimbabwe

Linda Magwaro-Ndiweni: Research Fellow, Faculty of The Built Environment, National University of Science and Technology, P. O. Box AC 939 Ascot, Bulawayo Zimbabwe

Fungai Hamilton Mudzengerere: Research Fellow, Faculty of The Built Environment, National University of Science and Technology, P. O. Box AC 939 Ascot, Bulawayo Zimbabwe

Anastance Boya Ncube: Lecturer, Department of Landscape Architecture and Urban Design, National University of Science and Technology, P. O. Box AC 939 Ascot, Bulawayo Zimbabwe