SERVICING LAND FOR HOUSING DEVELOPMENT IN PERI-URBAN AREAS OF KUMASI, GHANA: THEORY VERSUS PRACTICE

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ABSTRACT

Since the 1950s, developing countries have been experiencing phenomenal growth in urban population and this is reflected in high demand for housing and residential land. In Ghana, the rapid population growth of the national capital and the regional capital towns including Kumasi has brought to the fore the need for more land for residential development. However, the rate at which urban land is being released for housing development by the traditional authorities is not commensurate with the rate at which it is being serviced. This has created problems whereby residents in newly developing housing areas lack basic facilities and services. This paper examines the factors and problems militating against orderly development of infrastructure in the peri-urban housing areas in the Kumasi Metropolitan Area. The paper suggests interventions aimed at addressing the problems related to the provision of infrastructure and services in peri-urban settlements of Kumasi, Ghana.

Keywords: Serviced land, housing infrastructure, peri-urban, Kumasi

INTRODUCTION

There is very little doubt that of all the factor inputs for housing development, the land factor is of paramount importance (Asiama, 1990). Generally there is a shortage of serviced land as the cities of developing countries experience phenomenal growth in their population, and this has adversely affected the level and quality of facilities and services, particularly in the periurban residential areas (Doebele, 1982). The demand for facilities and services in the peri-urban areas far exceeds what the city authorities and the utility agencies have the capacity to provide.

This results in the high cost that individual developers in the city fringes have to pay to get connected to the network of infrastructure. The problems associated with inadequately serviced plots on the urban land market are very acute in sub-Saharan Africa. Basically in sub-Saharan Africa, the servicing of urban land is limited by weak institutional ability of the utility agencies to provide the desired facilities and services (Doebele, 1993). This is further aggravated by the rapid population growth and associated ills in the cities since the 1960s (Obudho and Mhlanga, 1988). Globally towns and cities are growing at rates unprecedented in history. In

1950, only 29.8 per cent of people lived in urban areas worldwide, but by the year 2020 an estimated 57 per cent will live in cities (Tabaijuka, 2003). Currently the urbanisation process is most pronounced in the developing countries, where it is estimated that the urban population will increase from 39.9 per cent in 2000 to 50.8 per cent in 2020 (Habitat Debate, 2002).

Ghana has generally been experiencing rapid urban population growth especially since the 1960s. Available statistics indicate that the urban population in 1960 was 22.9 percent of the total and this increased to 32 percent in 1984 (Central Bureau of Statistics, 1962, 1972, and 1984). By 2000, this had increased to 43.8 percent (Statistical Service, 2002). The bulk of this urban population growth occurs in Accra in the Greater Accra Region and Kumasi in the Ashanti Region. None of the remaining eight regions has urbanisation level above the national average of 43.8 percent. The phenomenal increases in urban population has consequently resulted in very high demand for land for housing development in the Ghanaian towns and cities. The pressure on residential land for housing development is felt more in the peri-urban areas where land is poorly serviced. Generally, the rate at which urban residential land is being developed for housing is not commensurate with the rate at which serviced land is being released onto the urban land market. Though the institutional framework for providing these infrastructures have long been in place since the attainment of political independence in 1957, they have not been able to cope with the demand for basic facilities and services in the cities and towns.

This brings to the fore the question of who is responsible for funding the servicing of plots in the peri-urban areas in Ghana. Generally residential plots in peri-urban areas in the country are not serviced before they are put on the land market. Current evidence suggests that plot servicing before sale by the traditional authorities has not been part of the strategies for improving infrastructure development in urban centres in the country. However, it is essential that there must be conscious efforts to control and manage land development. It is the responsibility of the metropolitan and municipal authorities to determine the direction of growth of the cities at any point in time and ensure that the requisite infrastructure is installed in order to attain sustainable urban growth and healthy society. It is within this framework that this paper discuses servicing of land for housing development at the periurban areas of Kumasi.

Kumasi: Profile and Pattern of Land Development

The Kumasi Metropolitan Area is one of four metropolitan Assemblies (namely Accra, Kumasi, Sekondi-Takoradi and Tamale) within the 138 districts constituting the decentralised local government system of Ghana. It covers an area of 150 km² and has a population of 1,170,246 in year 2000 with a growth rate of approximately 3% per annum (Ghana Statistical Service, 2002). Kumasi has been experiencing rapid growth in its population through both natural increase of the resident population and the process of rural-urban migration. It has 31.9% of the total population of the Ashanti Region of which it is the capital city.

During the 1970s and early part of the 1980s, as the national economy declined, Kumasi's housing stock and infrastructure deteriorated. However, the global economic trends and policy reforms in the country since the mid-1980s have positively affected Kumasi. The suburbs (especially, the peri-urban areas) of the city have, as a result, been experiencing significant spatial growth. However, there is a serious deterioration in the general housing environment in Kumasi as a result of rapid population growth which has been exerting pressure on the facilities and the long period of inadequate repair/

maintenance. The housing conditions in Kumasi exhibit overcrowding and over stretched infrastructure and services.

In Kumasi, the release of land for development and the direction of expansion are not controlled by the planning authority (the Kumasi Metropolitan Assembly). Housing and other physical developments in the city take place at all fronts especially along the major roads leading to the city and the utilities agencies are unable to keep pace with the spatial growth. The infrastructure provision therefore lags behind residential development in most of the peri-urban areas of the city. This problem of inadequate infrastructure arises out of the sequence in which land development is taking place in the Kumasi Metropolitan Area, and this is the subject of discussion in the next sections.

Land Development: Theory Versus Practice

Urban land is a public good in that its productivity and hence its value in the urban setting is heavily dependent on public services, which includes streets, water, electricity, sewers, fire and refuse management. Without these infrastructure and services, urban land is unproductive. As pointed out by Cotton and Franceys, (1991) infrastructure and services are necessary and should first be available on land before it is released for physical development in order to avoid the problems that developers may experience in getting connected to the facilities.

Unlike many other types of production which can be initiated from individual resources, the full development of urban land for housing almost always involves the decisions of the local governments and quasi-governmental agencies or parastatal institutions such as the Ghana Water Company Limited (GWCL), the Electricity Company of Ghana (ECG), the Ghana Telecommunication Company Limited, the Lands Commission, and the Town and Country Planning Department (TCPD). Land for housing development is subject to landuse controls, building

standards, regulations and codes, which are promulgated and enforced by local and/or national governments.

The conventional sequence of land development. which has been practised in most developed countries, starts from planning and continues through servicing, building and occupation (PSBO). In some developing countries (e.g. Bolivia, Argentina, Chile and Brazil of Latin America, and Indonesia and other South-east Asian countries) occupation starts with land invasions whereby low-income squatters invade for example public lands overnight and then construct structures for residential and other purposes (Alexander, 1988). The next step is for them to obtain some form of recognition and then demand municipal services like water, electricity and access roads. When this happens, it becomes impossible for the city authorities to ignore them. Therefore the land that had hitherto been invaded is integrated into the main planning scheme, hence the occupation, building, servicing and planning (OBSP) model. Baross (1987) argues that the cities of the developing countries generally develop through occupation, building, servicing and planning model. He contends that low-income households and settlement builders face four obstacles in the realisation of this alternative; namely, access to land, development right, development assistance and development protection. He points out that these problems are location specific when viewed from the perspectives of both inter and intracities.

The practice in Ghana is different from the model described by Baross, (i.e. occupy, build, service and plan model), and does not follow the conventional model of plan, service, build and occupy (PSBO). The argument of Baross (1987) on occupation, building, servicing and planning (OBSP) being the common practice in most developing countries is not permitted under the National Building Regulations (LI 1630) of Ghana (Government of Ghana, 1996). Our

study of the practice and sequence of development in Kumasi points out that neither the orthodox model which involves planning, servicing, building and occupation (PSBO) nor the OBSP model formulated by Baross can describe the contemporary practice in Kumasi. The pattern in Kumasi is the model that can be described as plan, occupy, build and service (POBS).

General Approach to Residential Land Development in Kumasi: Ayeduase Example

When any of the surrounding villages becomes part of the statutory planning area of Kumasi. the practice is that TCPD requests the Survey Department to survey the land in the respective villages or settlements and prepare necessary base maps. Due to a number of problems including inadequate funding and human resource, the Survey Department has not been able to provide the required service. Consequently, the caretaker chiefs of the respective settlements engage private surveyors to demarcate the land and prepare base maps for the areas. Copies of the maps are submitted to the local Town and Country Planning Department (TCPD) and the Lands Commission. With the availability of the base maps, TCPD prepares layouts for the areas, detailing out the various land uses. Copies of the layouts are subsequently sent to the caretaker chiefs who in turn engage qualified surveyors to demarcate the plots and put the pillars at the appropriate places on the ground. The allocation of plots by the caretaker chiefs for development starts after this exercise (Zakaria, 1993). This indicates that planning precedes building and occupation.

When an allocation is made, the allotee is required to register the land with the Lands Commission and seek planning and development permit from the TCPD and the local authority, which in Kumasi is the KMA before he starts the building process. While seeking the required permission, he may stockpile sandcrete blocks and other materials, pending mobilisation of funds for the construction of a house. Depend-

ing on the finances of the developer, construction is either done incrementally (that is, in many phases) or in one phase. It is after construction that services like water and electricity are extended to the area and then installed in the houses. The experience of Ayeduase is used to further explain this process.

Ayeduase was incorporated into the statutory planning area of the then Kumasi City Council in 1965. The chief engaged a private surveyor to survey the land and prepare a base map. The private surveyor prepared a base map and a layout for housing development in the outlying farming area around the old settlement. The Plan was submitted to the Town and Country Planning Department (TCPD) for approval in the 1970s. Before the TCPD could consider and approve the layout, sale of the plots by the traditional authority had started in the adjourning farming areas around the old settlement. Land prices (or the customary drink money) charged by the chief during the period 1970 to 1980 were between 700 Cedis and 1200 Cedis (equivalent to US Dollars 321 and 550 respectively). Sale of most plots in the New Site area also started in the early 1980s and were costing between 5,000 Cedis (USD 2294) and 8,000 Cedis (USD 3670). The TCPD incorporated the plots that were demarcated by the surveyor of the chief of Ayeduase into the main layout of the city. Based on that the TCPD prepared a draft scheme for Ayeduase. The problems, which emerged out of the incorporation of the surveyor's demarcation include reduced width of most access roads, sizes of open spaces, and the land reserved for utility agencies for installing the network of municipal facilities in the New Site Area.

GWCL and ECG extended the network for water and electricity to Ayeduase New site in phases. The Kwame Nkrumah University of Science and Technology (KNUST) first extended the network for water from the University campus to the Old settlement. The second phase was undertaken by GWCL by extending the network from Kotei to the New Site when it was realised that the existing network could not cope with the rate of housing development in the New Site area. In this phase, the GWCL provided the technical services, construction materials and the financial support, whilst the local community provided labour for digging the trenches. The third and final phase of the network was done under the Urban IV project through World Bank and Government of Ghana funding. Due to the problems that were experienced by the community when they were supplied water from the Kotei network, the GWCL extended the network from Boadi and Emena suburbs to Ayeduase New Site through the Government of Ghana funding.

The study of Ayeduase in 2004 shows that about 68 percent of houses in the New Site area lack regular supply of potable water, 27 percent do not have pipe borne water connection, and 20 percent of the houses have no electricity connection. Out of the number that has electricity and water supplies, about 20 percent were not properly connected since the work was done on the initiatives of the property owners. Apart from the main road linking the New Site to the Old settlement and Boadi, the road network was not properly constructed. Currently the main road linking Boadi is in very bad condition; the surface has been affected by erosion. The other access roads within the New Site area are not properly constructed and lack drains. As a result of this, storm water flows on the streets whenever it rains, thereby creating gullies on the carriageways.

It is important to emphasise that the problems that the residents of the Ayeduase New Site are experiencing in relation to the low level of provision of facilities and services can be attributed to the sequence of the development of their land and the low level of involvement of public agencies. The situation in Ayeduase New Site is an example of what exists in the peri-urban settlements of the Kumasi Metropolitan Area.

Factors Underlying the Current Approach to Service Provision in the Periphery of Kumasi

As stated previously, most of the peri-urban areas of the Kumasi Metropolitan Area do not have basic infrastructure to support sustainable and effecient housing development. This can be attributed to a number of factors, which are discussed as follows:

Ineffectiveness of the Utility Agencies

In Ghana, the practice is that TCPD collaborates with the utility agencies and the caretaker chiefs in the preparation of planning schemes. Within the framework of the collaboration, the utility agencies make inputs into the preparation of layouts or planning schemes. Despite this and due to inadequate funding, the utility agencies have not been playing their part effectively with regards to matching settlement development with service provision. Partly as a consequence of the ineffectiveness of the utility agencies, physical development in most of the peri-urban areas has preceded provision of basic is "rass" cture (access roads and drains, water and electricity networks).

Lack of Investment in Land by the Traditional Authority

The traditional authority in Ghana is based on customary land ownership and kinship. Unfortunately the traditional authority has not been making any significant investment in infrastructure development and this has been the main contributory factor to the lack of infrastructure network in the peri-urban settlements. The chiefs, who are the heads of traditional system of government and the landowners, do not follow the planning procedures in releasing land for housing and other physical developments. Some caretaker chiefs very often encroach upon land that should have been used for the provision of access roads, networks for water and electricity, and other facilities.

Added to this is the use of land revenue by the caretaker chiefs and family heads for develop-

ments/activities, which do not include infrastructure provision. The proceeds from land leasing are used to maintain the traditional authority rather than as an investment in providing infrastructure. The chiefs hold the land in trust for the subjects and therefore any revenue accruing from the leasing of the land should benefit the entire community. The community can benefit from revenue from land if among others it is used to provide infrastructure and other community facilities. Generally the chiefs and family heads lease out land to developers without first providing the basic infrastructure. Consequently, the provision of infrastructure and basic utilities starts after physical development has taken place.

Lack of Infrastructure Policy

Lack of equitable distribution of benefits accruing from the leasing of land mainly explains the absence of infrastructure in the peri-urban and other settlements of Kumasi. The Administration of Lands Act, 1962 (Act 123) does not specify the percentage of royalties that should be allocated for the provision of infrastructure in the respective areas. It is therefore not binding on the caretaker chiefs and family heads to allocate any percentage of funds realised from the leasing of land for infrastructure development. They very often lease the land without reference to the planning authority and this makes it difficult for the utility agencies to cope with the extension of facilities and services to the various suburbs.

There is also no legislative instrument ensuring that caretaker chiefs service land before leasing to prospective developers. This may be due to the undeveloped nature of the land market in the country as compared with other developing countries like Indonesia (Marulanda and Steiberg, 1991). Prospective housing developers know that the provision of infrastructure takes most of their development funds, which could have been used for building additional houses. Our study reveals that most of the individual developers who purchase plots at Ayeduase, Ku-

masi, did not commence development the same year that the plots were allocated to them. They waited for approximately three years before house construction work began by which time some minimum level of infrastructure had been provided by the rich developers among them, who could afford the cost of installation under the supervision of the utility companies. In the Aveduase New Site, some of the house owners pooled resources together and tapped electricity and water from the Old settlement area of Aveduase to their houses through contractors who were in turn supervised by GWCL and ECG. This practice is not the best since it is not all housing developers who can afford the initial installation cost.

Policy Interventions

Due to the rapid growth of Kumasi and other urban centres in Ghana and the contribution of urban centres to the national economy, the efficient servicing and supply of urban land cannot be overemphasised. Given that land is a finite resource and satisfies multiple needs, it is crucial that its use is carefully planned and implemented. To ensure that the necessary facilities and services are installed on the land that is earmarked for housing and other development, the following are recommended:

Funding of infrastructure provision by landowners (traditional authority)

In view of the fact that caretaker chiefs and other landowners are charging "drink money" that are almost equivalent to the market value of the residential plots, it is therefore their responsibility to provide the basic infrastructure, especially access roads, the network for water, electricity and storm drainage gutters. For this purpose, there is the need for government through legislation to compel the caretaker chiefs and other landowners to allocate a proportion of the "drink money" (that is, revenue from leasing land) on plots for the provision and improvement of the basic infrastructure in the respective areas. In the District/Metropolitan/ vein. the same

Municipal Assemblies should set aside a percentage of their shares of the stool lands revenue as well as revenue from the collection of property rates for infrastructure development. The current practice whereby the housing developers join in loose associations to levy themselves for providing such facilities is not appropriate and efficient since in some cases the standards are compromised. It should be borne in mind that the facilities that are provided through private initiatives become public properties and chiefs and other landowners reap the benefits of betterment.

Collaboration between Traditional Authorities and Public Departments and Agencies

Effective collaboration and consultation are important elements in any human endeavour. To avoid situations of uncontrolled development and its attendant lack of infrastructure and the pressure on the limited services and facilities. there should be strong and effective collaboration and consultation between the traditional authorities (the custodians of land) and the Town and Country Planning Department, Lands Commission and the utility agencies (ECG and GWCL). Regular consultation amongst traditional rulers and the policy implementing officers on matters relating to land for residential development should be encouraged. The objective of this consultation should be on how best to provide the network for facilities and services on plots in newly demarcated areas before they are leased to prospective developers so as to facilitate orderly and sustainable physical development.

Enforcement of Planning and Development Regulations

The procedure for demarcating land for residential development has already been described. In Kumasi, most caretaker chiefs do not follow the guidelines for that activity. However, there is no legislation to enforce the process. It will therefore be appropriate if the necessary steps are taken to enact a law that will define the proc-

ess and punitive measures against all who may flout it. The caretaker chiefs should be made to comply with all the necessary zoning regulations and be sanctioned for non-compliance. The planning authority should therefore determine fines for offenders and the revenue that may be realised under the fines should be used to improve infrastructure in the respective areas.

Adoption of Sites and Services Approach

The lack of infrastructure in most of the new housing areas of the Kumasi Metropolitan Area and the other towns and cities in the country can be addressed if sites-and-services schemes are encouraged through housing policy. The key objective of the serviced plot approach is to stimulate maximum private sector involvement in housing development and employment generation using minimum public funds. Public action is initially geared to removing constraints (including the availability of land, and basic infrastructure) to people's demonstrated willingness to house themselves and thereafter to ensuring the development of a complete and sustainable community. Sites-and-services schemes generally provide new serviced land which can be leased to individuals or in some cases to groups. Under the sites and services approach, there is a gradual construction and improvement of infrastructure and houses at costs that government and individuals can afford (Madayo and Haldane, 1974; and Rodell, 1983).

To achieve these targets within the urban settlements in the country, it is necessary that there should be a policy on residential land development and specifically to direct that all such lands should be serviced with the minimum level of infrastructure before leasing to prospective housing developers. When the planning authority has approved the layouts and the plots are demarcated, the networks for water, electricity and access roads with drains should be provided before physical development is allowed to start. Since the infrastructure networks are public properties, the local governments can establish a fund with

money realised from the leasing of stool lands for the purposes of financing the servicing of plots in areas designated for housing development. The cost of servicing the plots should be part of the "drink money" to be charged by the caretaker chiefs and placed in a reserve fund for future infrastructure development of the areas to the benefit of the entire communities. By this approach, the investment made in the land can be recouped after disposition.

CONCLUSION

The issues of sequencing infrastructure development in relation to physical development (PSBO, POBS and OBSP models) have been discussed and the problems and merits outlined. An attempt has been made to show the benefits that the traditional authorities and developers would gain by investing in infrastructure development. The traditional form of land administration in the Kumasi Metropolitan Area, the non-performance on the part of the utility agencies in the delivery of infrastructure, and the lack of clear-cut infrastructure policy for our cities have resulted in a situation where infrastructure provision comes after house building and other physical development. There is also lack of effective programming to match housing development with the capacity of the utility agencies to provide required infrastructure. In situations such as what exists in the peri-urban areas of Kumasi, it is the resident population that suffer and the proper functioning of the towns and cities is affected.

To improve the situation, four measures have been suggested. These are funding for infrastructure provision by landowners, collaboration between traditional authority and public sector agencies/departments, enforcement of planning and development regulation, and the adoption of site-and-services approach. These measures can contribute to solving the problems of the POBS model as currently practised in the peri-urban areas of Kumasi and other cities in the country.

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