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SOCIO-ECONOMIC EFFECTS OF UNCOMPLETED RESIDENTIAL BUILDINGS IN KUMASI'S PERI-URBAN SETTLEMENTS OF GHANA, AFRICA

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ABSTRACT

Cities are defined predominantly as physical structures. These physical structures are mainly characterized by residential facilities and buildings. Housing in many studies is considered as a significant determiner and tool for socio-economic development. Housing, particularly, quality housing for many households in developing economies is highly complex and capital intensive. Many households are constrained with several factors in the quest for housing developments. The results of these are uncompleted houses. Focusing on Abrepo, Sepetimpom, and Kotei in Kumasi, the second largest city in Ghana, this paper assesses the reasons accounting for uncompleted residential buildings in the study areas. Using the Kendall's coefficient of concordance, the paper further evaluates the level of agreement among respondents on the socio-economic effects of dwelling in uncompleted residential buildings. Using a case study, qualitative and quantitative approaches. The study revealed that financial constraints, unwarranted design variations, land litigations inter alia were the most significant reasons underpinning the uncompleted residential houses. The study revealed that susceptibility of uncompleted housing unit to poor sanitary conditions, outbreak of disease, loss of economic value of the housing units, poor academic performance of children was among the socio-economic effects of uncompleted residential buildings.

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INTRODUCTION

The importance of housing to the development of a country is globally acknowledged. Different authors and proponents have viewed the significance of housing to the economic development of a nation in diverse ways. According to Glossop (2008), housing is usually considered as a barometer for the state and conditions of economic performance. The author therefore suggests that improvement in the housing sector contributes immensely to the development of an economy and as such there is a strong relationship between the housing sector and economic performance of every nation.

In another study, Boamah (2010) asserts that, affordable housing is an important economic, political and social issue in every country mainly in developing economies. Dickerson (2009) also maintains that, for an individual house-owner, the house is a significant commodity with regards to the overall wealth creation and accumulation. In view of the authors, the acquisition of a house in developing economies represents the largest life-long investment asset of many individuals and families.

It is therefore not surprising that quality affordable housing is fundamental to all households and the economic development pursuit of nations. The authors, however, conclude that for the benefit of this basic good to be attained in any country, it needs to be affordable to many households but this is not the case in Ghana since low and moderate income households are confronted with difficulties in housing developments. The resultant effect is uncompleted residential buildings. Osuide & Dimuna (2005 cited in Ahianba, Dimuna, & Okogun, 2008) note that the fast rate of urbanization in many developing countries (mostly in peri-urban settings) has not been commensurate with the adequate supply of houses and the basic services, facilities and amenities. The authors, however, explained that such situations create high demand for housing units, increased housing rents, development of uncompleted buildings and overcrowding. In this respect, such geographically built environment has dangerous repercussions on the health of the residents since basic housing services fail to exist. In Ghana, many individuals and households are constrained with high land values, weak socio-cultural values, weak urban governance structure, and high levels of inflation and interest rates rendering them incapable of putting up their own houses and hence resort to reside in uncompleted housing units (Owusu, 2011).

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Also, literature has acknowledged that private individuals and households take between five (5) and fifteen (15) years to furnish a housing project (UN-HABITAT, 2010). This is because of the high constructional and operational cost of putting up a house. The process of addressing the housing deficits in Ghana and for that matter the Kumasi Metropolis becomes disheartening. This situation has undoubtedly contributed to the rate of uncompleted residential buildings in the Kumasi Metropolis, accounting for 24% the total housing units (Kumasi Metropolitan Assembly, 2014). In light of these, that the study was undertaken. The paper therefore aims at achieving two main objectives. Firstly, it seeks to understand the factors that account for uncompleted residential buildings in the peri-urban settlements of Kumasi Metropolis (Abrepo, Sepetimpom, and Kotei). Further, the paper evaluates the level of agreement among respondents on the socio-economic effects of dwelling in uncompleted residential buildings in the peri-urban areas and the Kumasi Metropolis at large.

Literature Review

Urban Periphery and Peri-Urbanisation: Concepts and Theories

The term peri-urban is used frequently in the literature and in policy discussions, yet definitions are largely situational and case specific. Adell (1999) notes that, various conceptions have provided little basis for a unified understanding of what constitutes peri-urban. Also, Živanovic, Crnčević, & Marić (2014) found that the first attempts to achieve conceptual precision in the peri-urban phenomenon was morphological and functional approach to the urban fringe, based on the analysis of features such as density, morphology and land uses changing. According to Pradoto (2012), the concept of peri-urbanization can be observed from the spatial dynamics of the city's peripheral areas as well as more complex dimensions involving social, cultural and economic aspects of community life. In this respect, a peri-urban interface is attained as the result of urban driven processes more than of territorial processes where rural and urban forces interact continuously. Peri-urban areas predominantly denote areas of spatial transition between the clearly urban and the distinctly rural. However, Webster & Muller (2002:6) offer a more accessible and narrative explanation of the concept, explaining peri-urbanization as: "a process, often a highly dynamic one, in which rural areas located on the outskirts of established cities become more urban in character, in physical, economic, and social terms, often in piecemeal fashion". In the views of Živanovic et al. (2014:16),

"the peri-urban zone constitutes an "uneasy" phenomenon, usually characterized by either the loss of "rural" aspects (loss of fertile soil, agricultural land, natural landscape, etc.) or the lack of "urban" attributes (low density, lack of accessibility, lack of services and infrastructure, etc.)". Notwithstanding, the above depositions and conceptions on peri-urbanisation and urban periphery, Acheampong & Anokye (2013) found that the constitution of a peri-urban area can further be viewed from two main definitional approaches. These are discrete spatial limits and urban-rural continuum approaches. According to the authors, the first approach uses discrete spatial limits in defining the peri-urban zone. McGregor *et al* (eds) (2006) cited in Acheampong & Anokye (2013) propose a distance of about 30-50 kilometres beyond the urban edge to define a peri-urban zone in large cities.

This may not be the case of major developed cities. In China and other developed cities, a distance of about 150-300 kilometres from the main built-up area is used distinctively in determining urban and peri-urban zones (Webster & Muller, 2002). Simon, McGregor & Nsiah-Gyabaah (2004) used this approach in determining the peri-urban zone of Kumasi. According to the authors, Kumasi's peri-urban zone stretches around 20 to 40 kilometres from the main built-up area of the city. 'The discrete-spatial-limits approach is helpful in determining how far the peri-urban zone may stretch and the extent of urban influence at measurable distances away from the main built-up area' (Acheampong & Anokye, 2013:62). Also, the second approach assumes a broad, integrated and functional approach and considers the urban-rural continuum in defining peri-urban areas. This approach views peri-urban zones as transitional or interactional zones, where urban and rural activities are juxtaposed, and landscape features are subject to the rapid modifications mostly influenced by the socio-economic activities of human (Živanovic et al., 2014). The urban-rural continuum approach is also useful in understanding the functional linkages and interactions (economic, political and social) between the city-core and the periphery.

Again, residential land development on the urban fringe has been the critical element in the expansion of cities in developing countries and has created many problems in urban growth and developments. Peri-urban land developments in several countries have often been developed without planning permissions due to the neglects of both rural and urban administrations (Živanovic et al., 2014). The results of these are inadequate provision of basic services and infrastructure leading to poor environmental conditions as well as emergence of informal settlements (Allen, 2003). Informal settlements in this regard may include slum settlements, unfinished housing units, inadequate housing among others. The spatial dynamics of the urban area determine where the low-income groups live. Peri-urban zones may be populated by a mixture of low income migrants engaged mainly in informal economic activities (Browder, Bohland, & Scarpia, 1995). The choice of these areas by the low-income groups depends much on the tradeoff between the price of land and economic opportunities. This is because there is a low demand for peri-urban lands and these low-income groups are able to acquire residential lands at cheaper prices as compared to that of inner areas of urban settings.

Housing, Uncompleted Residential Buildings and Socio-Economic Effects

The sustained effects of housing on the development of an individual, community or any geographical space are well-established. In the view of (Doling, Vandenberg, & Tolentino, 2013), housing has a considerable impact on human welfare. The authors further posit that in order to maintain an adequate standard of living and social inclusion, individuals need to reside in a decent housing. According to the authors' decent housing is said to occur when the housing unit is made up of the appropriate fixtures and fittings as well as other environmental factors (good access routes, ventilation, sanitation) and individuals have access to basic human needs such as water and food which makes living comfortable. In another study, Hingorani & Tiwari (2012) maintain that adequate housing is a prerequisite for protecting households and families from bad weather conditions, place to bring up

families and places meant to work. The authors however, defined adequate housing as a social welfare commodity. Invariably, most developing economies and countries of which Ghana is no exception are challenged with housing problems. Owusu (2011) and Awuvafoge (2013) pointed out that the housing deficits or problems in Ghana and other Sub-Saharan African countries are as a result of the decades of neglects of the housing sub-sector as a critical area for country-wide development. Further, the authors posit that the formulation and implementation of several fragmented housing policies and programs rather than a holistic and all-inclusive vision amass the acute urban housing problems. Subsequently, these housing problems may be as a result of 'financial inadequacies faced by the very government that initiated them or they are deserted by new governments that lack the political will to operationalize them' (Awuvafoge, 2013:16). The quantity of the urban housing need in Ghana undoubtedly reveals large deficit in the entire housing stock. However, there are data variations with respect to the housing stock, housing deficits, and the housing need. For instance, data from the Ministry of Water Resources, Works and Housing (MWRWH) with particular reference to the 2000 Population and Housing Census Report observed a total of 2.8 million residential housing units, estimated that Ghana needs 70, 000 housing units annually of which only 35% is currently supplied (National Development Planning Commission, 2005). Owusu (2011) found that the national housing deficit is in excess of 500, 000 units with annual requirements of 120, 000 units but only about 33% is actually supplied. Based on these figures, the author accordingly estimated that the annual housing supply in Ghana falls far short of demand with between 65% to almost 70% of the national requirement, which remains unsatisfied.

The efforts of governments are complemented by individuals in addressing the acute housing problems in Ghana. The supply of numerous houses in Ghana are done by the private sector which is mainly individuals through the use of personal savings and assistance from families and friends (Boamah, 2010). According to the author, this informal way of housing financing accounts for 90% of the total houses delivered in the country where construction is done on an incremental basis. In his study, Awuvafoge (2013) also notes that only 8% of Ghanaians can afford to buy houses by utilizing the existing mortgage facilities and only about 15% of households can access loans to put up their houses. These undoubtedly show that many households are challenged with providing adequate housing; hence they resort to stay in uncompleted housing units. The nature and dimension of the housing problems in Ghana can both be described as a quantitative and qualitative. Uncompleted residential buildings are defined in this study to include any house where major building and construction works have been done but lack several facilities and infrastructure needed to make living comfortable. However, the authors of this study equate uncompleted residential houses to inadequate houses. This is to say uncompleted housing units are of poor quality. In explaining housing quality, Lanrewaju (2012) uses the physical condition of the building and other facilities and services that make living in a particular house and area conducive. These facilities may include access to water, sanitation, electricity, sufficient ventilation among others. In their study on the 'causes of failure of housing projects in Dar es Salaam, Tanzania, Mrema & Mhando (2005) found not only the marginalized roles played by the architects, engineers or the building managers but also the financial

constraints on the part of the individual developer. The authors further observed that architects fail to involve clients (homeowners) from the beginning of the housing projects. It can be said that the architect-client relation is less effective and broken which thereby results into unfinished buildings. Subsequently, Danso & Barry (2012) researched on "land tenure administration in Peri-Urban Accra: a case study of Bortianor". The authors found that violent conflicts over land due to double sales of land as well as the power to allocate the land are common in many peri-urban areas. The resultant of this is delay in the putting up buildings. In situations where major building works have started, the constructions have been put to a halt since such cases are left in the law court for settlement. Literature has outlined the socio-economic challenges and effects of living in uncompleted residential housing units. Such effects abound on the physical, mental, social, and economic mechanisms of the individual, immediate housing environment and the community at large (Bonney, 2007). Uncompleted and inadequate housing causes the fast spread of diseases (communicable, respiratory and foodborne), increase in crime related activities (theft, assault, rape, child abuse, etc), poor nutritional growth (especially among children), erosion of social capital or social cohesion in families, depression and stress (Bonney, 2007; CCSF, 2004; Chazovachii, 2011; ECEH, 2006; Ogundahunsi & Adejuwon, 2014; Raymond, Wheeler, & Mary, 2011; Tackie-Ofori, Mahama, Kumador, Budu, & Sackey, 2014; Wilkinson, 1999; Zinyama, Tevera and Cumming, 1993).

Ali & Sulaiman (2006) further posited that there have been frequent outbreaks of water borne diseases like cholera dysentery among households in informal settlements as a result of pollution from solid and liquid wastes. In explaining the authors' view liquid waste from washing, laundry, bath and kitchen uses is indiscriminately discharged around the housing environment because of non-existing proper sewage system. The incomplete status of buildings have given rise to a number of health and safety issues including sewage contamination, poor water quality, no street lighting, open excavation pits, uncovered manholes (Kitchin, O'Callaghan, & Gleeson, 2014). The authors further emphasized that children within these residential facilities and environments have been beleaguered by vandalism, theft and anti-social behavior. Consequently, Mafiko (1991) cited in Chazovachii (2011) postulates that the education sector is affected by lack of proper shelter and inadequate housing unit. The author maintains that children at school, mostly at the senior high levels find it very difficult to do their homework where the houses are not connected to the national grid and they largely depend on candles as the source of light. Accordingly, Carrero, Malvarez, Navas, & Tejada (2009) assert that the vast number of abandoned buildings destroy the environmental view quality of both the geographical location and that of the building, as well as increase in unemployment. This is because, abandoned and uncompleted structures deteriorate the aesthetics of settlement as they are ordinarily unhygienic and polluted and consequently affecting the general outlook.

Profile of Study Area and Research Methodology

The study adopted the case study approach and focused on three of Kumasi's peri-urban settlements as study areas. The case study approach was adopted because it provides an in-depth investigation of the problem in the case sites. Guided by Simon, McGregor & Nsiah-Gyabaah (2004) estimation of

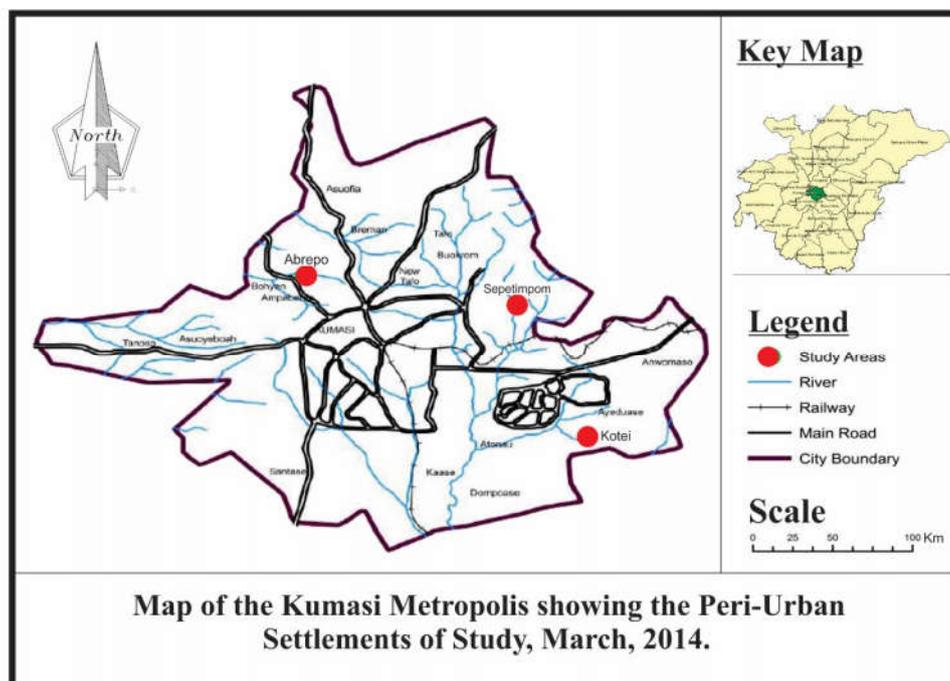
Kumasi's peri-urban interface as extending some 20 to 40 Kilometres from its center, Abrepo, Sepetimpom and Kotei, located within the inner to the middle segments of Kumasi's peri-urban zone were selected as study areas as well as the increasingly residential developments within these areas. Abrepo is located at the North-western part of the Kumasi metropolis, about 7 kilometres from the city's center. Sepetimpom is also located at the North-eastern part of the Kumasi metropolis with a distance of about 5 kilometres away from the city's Central Business District (CBD). Kotei, on the other hand, is located at the South-eastern part of Kumasi metropolis of about 10 kilometres from the city's main built area.

The Kumasi metropolis is the most populous district in the Ashanti Region. Available census data suggest Kumasi resident population figure of 1,170,270 in 2000 while the metropolis recorded population figure of 2,035,064 in 2010 (GSS, 2005; GSS, 2013a). The available census data revealed Abrepo resident population of 10,146 in 2000 (GSS, 2005) which is projected to be 49, 585 in 2014. The average household size in 2000 was 5.7. The peri-urban area of Abrepo is mainly dominated with a lot of trading, services and construction activities. The population of Sepetimpom in 2000 was 5,189 (Ghana Statistical Services, 2005), projected to yield a figure of 16,900 in the year 2014. Also, the population and housing stock of Kotei in 2000 were 4373 and 367 respectively.

The 2010 Population and Housing Census kept the housing stock in the Metropolis at 520,234 and the regional housing stock at 1,169,030 (GSS, 2013b). In percentage terms, Kumasi has 44% of the regional housing stock. It is estimated that about 24% of residential structures within the district are uncompleted (KMA, 2014). This shows that the uncompleted residential buildings in the Kumasi Metropolis are made up of about 124,856 units. With a population growth rate of 5.47 percent vis-à-vis an annual growth rate of the housing stock at 2.4, it is obvious that housing demand far exceeds its supply. According to the 2010 Population and Housing Census, Kumasi is the most populous city in Ghana.

Kumasi has attracted such a large population partly because it is the regional capital, and also the most commercialized center in the region. Other reasons include the centrality of Kumasi as a nodal city with major arterial routes linking it to other parts of the country and also the fact that it is an educational center with two State Universities, Private Universities, a Polytechnic, two Teacher Training Colleges, Secondary Schools and a host of Basic Schools. The high population growth rate as well as rigorous commercial activities in the city has resulted in the development of housing units mainly at the city's fringes.

Over the years, Kumasi has grown to engulf Abrepo, Sepetimpom and Kotei to the extent that it is now difficult to determine and examine visually where these peri-urban communities' boundaries lie. This notwithstanding, Abrepo, Sepetimpom and Kotei still maintain peri-urban characteristics. They have also retained distinct rural identities and institutional arrangements, peculiar socio-economic opportunities, among others. Abrepo, Sepetimpom and Kotei has transformed spatially in land form and land use. Thus, areas originally occupied by agricultural purposes are constantly used for commercial and residential use to accommodate the populace it tends to produce from the rural-urban continuum. Figure 1 shows the geographical location of the peri-urban settlements of study. Further, uncompleted housing units were selected purposively. This is because the study sought to assess the socio-economic effects of uncompleted residential housing units on residents in the selected peri-urban areas. Representative samples of 120, 50 and 30 households in uncompleted houses were selected respectively from Abrepo, Sepetimpom and Kotei based on the resident population. Structured questionnaires were designed, tested through a pilot survey and administered through personal interviews to collect primary data on a range of relevant socio-economic variables at the household level. In totality, 200 households in uncompleted houses were randomly selected from the study areas. Other relevant primary data was gathered from key departments within the Kumasi Metropolitan Assembly through the use of semi-structured interview guides.



In the case of secondary sources, information from published and unpublished sources including journals, textbooks, periodicals, theses, working papers and the internet were used. Particular emphasis was placed on the main objectives of the study in designing the field survey instruments in order to assist household-heads of uncompleted residential facilities to give reconsideration. Owners of residential units were asked the reasons which have contributed to their inability to complete their houses. Both household heads and owners of residential facilities were asked to state their level of agreement on enumerated factors with respect to the socio-economic effects of the uncompleted housing units as well as the mechanisms for sustainable housing development. Survey responses and results were presented through the use of descriptive statistics of mainly percentages and other measures of central tendencies.

RESULTS AND DISCUSSION

Background Characteristics of Households

From Table 1, it can be seen that males are more than females, which is 64% of the respondents were males while the remaining proportion of 36% constituted females.

areas, the mean annual household income of the total respondent is GH¢4,107.84 as against the national annual mean household income of GH¢16,644.59 (GSS, 2014). This figure however suggests that individual home-owners will struggle to put up their residential buildings in the expected time frame. A further look at Table 2, shows that detached houses dominate within the study areas, representing about half (48.0%) of the total houses. However, compound houses constituted 25.0%. 17.0% and 10.0% of the houses are semi-detached and flat apartments respectively. There has been a reduction in the demand for traditional compound houses. Available data shows that in the year 2010, 55.2% of households in Kumasi lived in traditional compound houses as against 15.7%, 9.21% and 12.4% who lived in detached houses, semi-detached houses and flat apartments respectively (GSS, 2013b). Owner-occupier residential status accounted for 56.5% as against tenants (24%), free-occupiers (13.0%), and free-caretakers (6.5%). UN-HABITAT (2010) observed that 23.8%, 41.8%, 33.8% and 1.2% of the residents in Kumasi are owners, renters, rent-free and caretakers respectively. This study confirms the same assertion. The free-caretakers perform supervisory functions by taking care of the uncompleted residential buildings for owners who are living in other areas in and around the city, in Ghana as well as those living abroad.

Table 1. Socio-Economic Characteristics of Respondents

Socio-Economic Characteristics (Variables)	Frequency	Percentage (%)
<i>Gender</i>		
Male	128	64.0
Female	72	36.0
Total	200	100
<i>Age</i>		
1-29 years	50	25.0
30-39 years	70	35.0
40-49 years	40	20.0
50-59 years	34	17.0
60+ years	6	3.0
Total	200	100
<i>Marital Status</i>		
Single	26	13.0
Married	152	76.0
Divorced	16	8.0
Widowed	6	3.0
Total	200	100
<i>Highest Level of Education</i>		
Never	23	11.5
Primary School	84	42.0
JHS	31	15.5
SHS/Vocational/Technical	46	23.0
Tertiary	16	8.0
Total	200	100
<i>Occupation</i>		
Farming	21	10.5
Trading	93	46.5
Salaried Worker	52	26.0
Artisans	34	17.0
Total	200	100
Mean Annual Household Income	GH¢4,107.84	

Source: Field Survey, March, 2014

More than half (76%) of the respondents are married which affirms the desire of the married people to acquire and develop a housing facility for the protection of their family. 13%, 8% and 3% of the 200 respondents are single, divorced and widowed respectively. Due to the low level of education and professional qualification, many of the households were engaged in small home-based commerce and petty trading (46.5%), farming (10.5%), artisans (17.0%). A significant proportion (26.0%) of the respondents are formal employees or workers who are categorized as salary workers. With respect to the various types of occupation within the study

Reasons for Uncompleted Residential Buildings

The presence of many uncompleted residential buildings in the landscape of the peri-urban areas defines an unpleasant outlook of the city's structure. Kumasi Metropolis is mainly constrained with several housing shortages, and why then do we see many uncompleted residential buildings in the city mainly within the peri-urban areas? Table 4 presents the factors which have contributed to uncompleted residential buildings in the peri-urban areas. From Table 4, it is clearly evident that more than half (60.2%) of the total owner-

Table 2. Housing Typology and Residential Tenure of the Peri-Urban Areas of Study

Types of Houses	Abrepo	Sepeimpom	Kotei	Total Number of Respondents	Percentage (%)
Housing Typology					
Compound Houses	35	11	4	50	25.0
Detached	50	28	18	96	48.0
Semi-detached	20	8	6	34	17.0
Flat Apartments	15	3	2	20	10.0
Total	120	50	30	200	100
Residential Tenure					
Owner-Occupier	69	29	15	113	56.5
Free-Occupier	11	7	8	26	13.0
Tenants	31	10	7	48	24.0
Free-Caretaker	9	4	0	13	6.5
Total	120	50	30	200	100

Source: Field Survey, March, 2014

Table 3. Availability of Basic Services and Infrastructure in the Buildings

Services/Infrastructure	Abrepo	Sepeimpom	Kotei	Total Frequency	Percentage (%)
Water					
Available	88	38	22	148	74.0
Non-Available	32	12	8	52	26.0
Total	120	50	30	200	100
Electricity (Home Connection)					
Available	53	17	9	79	39.5
Non-Available	67	33	21	121	60.5
Total	120	50	30	200	100
Toilet Facilities					
Available	51	26	19	96	48.0
Non-Available	69	24	11	114	52.0
Total	120	50	30	200	100
Bath House					
Available	93	35	23	151	75.5
Non-Available	27	15	7	49	24.5
Total	120	50	30	200	100
Kitchen					
Available	44	21	13	78	39.0
Non-Available	76	29	17	122	61.0
Total	120	50	30	200	100

Source: Field Survey, March, 2014

Table 4. Reasons for Uncompleted Residential Buildings

Reasons	Frequency	Percentage
Financial constraint	68	60.2
Unwarranted design variations	25	22.1
Land Litigation	11	9.7
Failure to acquire development or building permits	9	8.0
Total	113	100.0

Source: Field Survey, March, 2014

Table 5. Percentage Distribution and Extent of Agreement on the Socio-Economic Effects of Uncompleted Buildings Among Respondents

(N=200)	% Level of Perception					Mean Score	Mean Rank	S.D
Perceived Socio-Economic Effects								
	1	2	3	4	5			
Prone to Poor Sanitary Conditions	4	2	2	26	66	4.48	1	.94
Outbreak of Diseases	4	7	5	35	49	4.18	2	1.07
Emergence of Crimes/theft/rape	4	8	7	29	52	4.17	3	1.12
Loss of Economic Value of Housing Units	8	7	5	27	53	4.10	4	1.26
Loss of Environmental Beauty	8	10	21	15	46	3.81	5	1.33
Poor Academic Performances of Children	19	13	22	17	29	3.24	6	1.47

1= Strongly Disagree 2= Disagree 3= Neutral 4= Agree 5= Strongly Agree

Source: Field Survey, March, 2014

occupier respondents (113) attributed the failure of uncompleted residential buildings to the financial inadequacies. For example, given the respective mean annual income (GH¢4,107.84), more than half (53.1%) of the homeowners will struggle to put up a complete one-bedroom

apartment which costs US\$12,926.32 (GH¢48,990.75; GH¢3.79=US1.00) (GREDA (2010), within the expected period of 10 years even if they forgo other basic necessities of living. Only a significant proportion (19.5%) will be able to put up a one-bedroom apartment of the same cost within the time frame

Table 6. Extent of Agreement among Respondents on the Effects of Uncompleted Residential Buildings

Socio-Economic Effects	Mean Score	Rank
Prone to Poor Sanitary Conditions	4.33	1
Outbreak of diseases	3.92	3
Emergence of Crimes/theft	3.90	2
Loss of Economic Value of housing Units	3.76	4
Loss of Environmental Beauty	3.06	5
Poor Academic Performance of Children	2.04	6
Test Statistics		
Kendall's W ^a		.376
Chi Square		375.819
Asymptotic Significance		.000
n		200
df		5

Source: Field Survey, March, 2014

of above 15 years. However, other factors have challenged these homeowners to furnish their residential buildings. 22.1%, 9.7%, and 8.0% of the respondents associated their inability to the completion of the residential facilities to the unwarranted design variations, land litigation, and failure to acquire development and building permits respectively. Aspects relating to unwarranted design variations as a result of communication problem between the homeowners and the construction parties appear to be taking the denunciation. The survey revealed that obliviousness on the part of owners to be involved in the overall building processes by contractors and architects have resulted in the emergency of the uncompleted residential buildings. Owners take to accept designs which they never had a complete and adequate knowledge and information about and more often they accept such structural designs without knowing the associated financial repercussions of such designs. This outcome conforms to the observations made by Mrema & Mhando (2005) in Dar es Salaam in Tanzania which revealed the malignancy of clients to assume roles of their consultants through making decisions and changes affect the design and the building cost undermine the efforts to attain the intended commodity 'house'. Metropolitan, Municipal, and District Assemblies (MMDAs) are mandated by the Local Government Act 1993, Act 462 to issue building permits, legal documents to prospective developers to permit them to put up buildings in accordance to specifications in their drawings and in line with development plans and schemes to ensure environmental sustainability and prevent other hazards within the geographical location.

In this respect, 27 homeowners constituting 23.9% in the study areas failed to acquire building and development permits from the Kumasi Metropolitan Assembly while 76.1% had acquired building or development permit. 9 of the of the individual homeowners which represent 8.0% have their buildings put to a halt by the city authorities as a result of failure on their (homeowners) part to acquire a requisite building permit. Consequently, 46.9%, 16.8% and 36.3% of the homeowners acquired their residential lands from chiefs, families and individual people respectively. Within the study areas, various problems of multiple sales of lands and payment of bribes were revealed. The failure to acquire appropriate documents (lease and cadastral plan) given rise to multiple sales of lands has ended into severe litigation issues rendering the building processes into a halt, hence the state of incompleteness. The outcome of this study supports the finding made by Danso & Barry (2012) which maintains that the double sales of land have resulted into land litigation issues rendering construction works standstill. 86.7% of the homeowners possess the

appropriate documents with respect to their residential lands. 13.3% of the 113 homeowners did not have the requisite document covering the possessions of the land. They associated their inability to acquire the appropriate documents to the high transaction cost of land titling and registration as well as the cumbersome processes involved and time consuming aspect of it. According to UN-HABITAT(2010), the transaction costs of between US\$625 and US\$834 (GH¢2,368.75 and GH¢3,160.86) face anyone documenting land through the Lands Commission. At the same time the cost of a cadastral survey is US\$286 (GH¢1,083.94) per plot (NB: GH¢1=US\$3.79).

Socio-economic Effects of Uncompleted Residential Buildings

The second objective was to examine the extent to which the uncompleted housing units affect residents and the community at large. The focus was to establish the socio-economic effects of uncompleted residential buildings on residents as they do reside in these housing units for making a living. The results from table 5 below, reveal the assertion that, majority of the respondents agree or strongly agree that all enumerated effects have consequential effects on them and the peripheral communities. As indicated in table 5, findings of the study revealed that of the 200 respondents, 66% and 26% indicated a strong agreement and agreement respectively to the fact that uncompleted housing units are prone to poor sanitary conditions. Further, 2% took a neutral stand with additional 2% stating that they disagree that residential buildings which are uncompleted are highly prone to poor sanitation and its attendant challenges. The remaining 4% of respondents indicated that they strongly disagree. With respect to the factor of outbreak of disease being a challenge, the survey outcomes revealed that 5% of respondents indicated a neutral point of view that indeed living in uncompleted housing units posed severe challenge. However, while 35% just agree, about half (48%) of the respondents strongly agreed to the view that individuals living in uncompleted housing units have the tendency to acquire of diseases. A further 7% expressed disagreement to this factor while the remaining 8 percent stated that they strongly disagree. In terms of emergence of crimes or theft being an effect of uncompleted buildings, 52% and 29% of the respondents expressed strong agreement and agreement to the fact there are high rates of theft and crimes in the residence of uncompleted houses. Of the remaining 19% of respondents, 7% indicated a neutral viewpoint on the subject while 8% and 4% of respondents stated disagreement and strong disagreement to the point that residing in uncompleted houses exposes the individual to theft issues. The non-availability of electricity connection in some houses (60.5%)

has put the security situations in the study areas under threat. Some respondents reported that in some cases, they have been attacked by armed robbers leading to the loss of their personal belongings. Other households also made a strong case for their children (females) who have been a victim of rape cases as they stayed outside their homes due to the less entertainment opportunities available as a result of no home electricity connections. Similarly, loss of economic value of housing units was identified as a socio-economic effect of uncompleted residential buildings in the metropolis. However, majority (53%) of respondents indicated a strong agreement that due to the uncompleted nature of the houses, rent charges were relatively low. Thus, the monthly mean rent cost was GH¢22.38 as against GH¢97.00 quoted by UN-HABITAT (2010) for completed housing units in the Kumasi Metropolis. The low rent charge was due to the non-availability of basic social services and infrastructure such as water, toilet facility, and electricity among others (Refer to Table 3 above). 27% agreed to the point whereas 5% took a neutral viewpoint. Additionally, 7% and 8% of respondents expressed disagreement and strong disagreement respectively regarding loss of economic value being a challenge of uncompleted houses.

Respondents' view was further sought on whether loss of environmental beauty forms part of the effects of uncompleted residential buildings. The results however revealed that 44% of respondents were neutral and thus could not either agree or disagree with the point. About a quarter (25%) of total respondents disagree with this viewpoint and a further 8 percent strongly disagree. On the other hand, 17% and 16% of respondents agree and strongly agree to this viewpoint respectively. Finally, respondents' view on poor academic performance as a socio-economic effect of uncompleted residential buildings revealed that while 13% disagreed with the point, 19% strongly disagree. 22% indicated a neutral stand while 17% and 29% expressed agreement and strong agreement respectively. As indicated in table 3 above, 60.5% of the uncompleted houses do not have electricity connection. This has consequently affected the academic performances of children since they are not able to learn during the night hours. Some respondents stated that they lack the necessary household appliances (television sets) needed to make home-living worthy enough for children, hence they (children) move about either within the peri-urban areas or to other parts of the city. Similar to this study, Mafiko (1991) cited in Chazovachii (2011) found that children under the school going age are constrained with learning activities during the night in houses where there are no electricity and their only source of light is the use of candles and torches. The repercussion of this is poor academic performances leaving them to dropout of schools and engaging in other social vices. A further look at table 5 shows the mean extent of respondent perception regarding the socio-economic effects of uncompleted housing units. Outputs of the study revealed that the paramount effect of uncompleted housing units is its susceptibility to poor sanitary conditions, with a mean score of 4.48. This is followed by outbreak of diseases (mean score of 4.19), emergence of crimes/theft (mean score of 4.17), loss of economic value of the housing units (mean score of 4.10), loss of environmental view of the geographical area (mean score of 3.81) and finally the poor academic performance of children (mean score of 3.24). In examining the level of agreement among respondents on the extent to which uncompleted housing units pose the enumerated effects and consequences in the areas under study

as well as on the residents, the Kendall's Coefficient of Concordance was used. The result is depicted in table 6. From table 6 the statistical results of the study revealed that, among the socio-economic effects of uncompleted housing units, only 37.6 percent of the respondents were unanimous in rating the extent of the effects. In view of this, the respondents had diverse views on the extent to which the enumerated six socio-economic effects affected them, their respective households and the community at large. Thus, what is seemed by an individual household as the highest socio-economic effect of his/her uncompleted dwelling unit might be seen by the other household as less an effect. This is as a result of the various forms of residential tenure the respondents found themselves to be in; ranging from homeowners, tenants, free-occupants, and free-caretakers. In the gratitude of their dwelling units, it is not unpredicted that some of them may possess distinctive socio-economic effects uncharacteristic to their dissimilar households. For example, a free-occupant is likely to disagree with the assertion 'loss of economic value of housing units' because such individual does not incur any financial cost in dwelling in such facility while a homeowner will strongly agree with the assertion. Also, with the differences in the economic status and the composition of the households, might influence the low Kendall's W or their low agreement on the ranking of the effects. Thus, the households do possess varied economic status, diverse residential tenure systems, and different composition of the households hence the differences in the opinions with respect to the socio-economic effect they face for dwelling in the uncompleted housing units. Although, the Kendall's W is not high ($KC = .376$), it is still significant ($p .0001$). The level of significant however shows that some of the individual households were unanimous and had common socio-economic effects confronting their housing units and this cannot be downplayed.

Conclusion and Recommendation

Good, affordable and adequate housing is essential to the quality of living. The socio-economic environment has created significant difficulties for many housing constructions and developments across the country. Recognizing the impact those difficulties are having on households mostly the vulnerable groups (urban poor, elderly, children, and people living with disability), the process of managing and resolving the uncompleted residential buildings is a matter of national importance for increasing aggregate housing stock. Access to finance is the major factor to residential housing developments. The adequacy of it determines the quality of the residential facility to be produced as it affects the type of building and construction materials to be used as well as the necessary social and infrastructural services. It also has a strong influence on the duration of the overall housing development processes with regards to how many years a developer can actually complete his or her house. Homeowners (60.50%) depended heavily on their limited incomes as a self-financing strategy which has adverse effects on the process of development. The study therefore recommends that the Ghana Housing Finance Association (GHFA) should lend a supporting hand to the individual homeowners to effectively acquire larger and longer term credit at lower cost. Land access is an issue of much concern as effects emerging from its access pose serious threats to developing a house. A significant proportion of the owners have no lease documents covering their land. The only means of evidence in some case was an allocation letter issued by traditional land owners to

them and yet land has not been registered by the respective agency of Land Commission resulting in double sales of land. The reason being ignorant as many of the owners had no or little formal education per the survey. Others also relate their failure to acquire lease document to the high transaction cost and the cumbersome steps outlined in the acquisition processes. The Lands Commission as part of its mandate should educate the general public on the importance of land acquisition documents and also enhance the processes of registration and titling. Individual developers should as a matter of urgency request the lease document covering a purchased land (from respective individuals) and also visit the Lands Commission to validate their state of ownership. This will help to avoid any conflicts and problems that may arise before the commencement of the building process.

The building Inspectorate division of the Kumasi Metropolitan Assembly should extensively educate and sensitize the prospective individual home developers on the essence of acquiring building and development permits. This will enable the Assembly to detect any flaws within the land use policies, to know that physical developments are in accordance with development schemes and deem it appropriate to apply sanctions to individual developers who build on unapproved lands. The fees will help the Assembly to increase its Internally Generated Fund which will in turn help in the development of services and facilities within the peri-urban areas. The extent of communication within the planning and implementation stages at the between the homeowner and the builder affected the state of residential completion. Thus, at the design stages developers make changes without knowing its detail financial constituents which delay the process. The architect-client, the contractor-homeowner relation should be coherent and more structured such that at each stage the developer is made aware of the inputs and requirements to avoid any major design changes or variations which have consequences on the development processes. These mechanisms will go a long way to ensure the completion of housing developments, increasing the aggregate housing stock of the metropolis and Ghana in general thereby minimizing both the quantitative and qualitative urban housing problems, promoting structural urban growth and sustainable development.

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