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Drivers and traits of peri–urbanization in Benin city, Nigeria: a focus on Ekiadolor community

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ABSTRACT

Peri urban zones are areas capable of promoting urban and rural livelihoods and coping with the pressure and dynamics of population and land use changes. This study examined the drivers of growth, characteristics and environmental challenges of the peri urban zones in Benin city, Nigeria using Ekiadolor as a case study. 30 per cent of the total number of building stock in the area was chosen as sample size. For the survey, one household per building was selected while a head of household was selected for interview. Attributes investigated included reasons for staying in the community, length of stay, infrastructures and land related issues among others. Characteristics of a typical peri-urban community were well amplified in Ekiadolor.The establishment of the College of Education was the major driver for the transformation of Ekiadolor to a peri-urban settlement. The study concluded that the establishment of educational institutions outside the immediate precinct of cities could trigger peri – urbanization and therefore recommends that adequate provision should be made in anticipation of the envisaged challenges that are associated with such development.

Keywords: Benin city, Ekiadolor, haphazard growth, Peri-urbanization, urban growth

Peri-urbanization refers to a process, often a highly dynamic one, in which rural areas that are located on the outskirt of established cities become more urban in character (Webster and Muller, 2004). This transformation occurs in physical, economic, and social terms, and often in piecemeal fashion. Peri-urban development usually involves rapid social change, as small agricultural communities are forced to adjust to an urban or industrial way of life in a very short time. High levels of in-migration are an important driver of such social change. Rapid environmental deterioration and infrastructure backlogs are usually another characteristic of the peri-urban landscape. Typically, peri-urbanization is stimulated by an infusion of new investment, generally from outside (Webster and Muller, 2004). Therefore, peri-urban area could be defined as the transition zone between fully urbanized land in cities and areas in predominantly agricultural use (Appiah, *et al.*, 2014). Thus, it is characterized by mixed land uses and indeterminate inner and outer boundaries. In general, peri-urbanization often arises because effective land use guidance systems are virtually non-existent in many countries (Webster and Muller, 2004).

Key characteristics of the peri-urbanization process, particularly in developing countries include: changing economic structure, a shift from agriculturally based to manufacturing dominated economy; changing employment structure, rapid population growth and urbanization, changing spatial development patterns and rising land costs (Webster and Muller, 2004). The peri-urban (sometime also called the urban fringe) may be the dominant urban form and spatial planning challenge of the twenty-first century (Ravetz, *et al.*, 2013). In older industrial or post-industrial countries, the peri-urban is a zone of social and economic change and spatial restructuring while in new industrializing countries, and most of the developing world, the peri-urban is often a zone of chaotic urbanization leading to sprawl *et al*., Peri urban zone exhibits a relatively low population density by urban standards, scattered settlements, high dependence on transport for commuting, fragmented communities and lack of spatial governance (Ravetz, *et al*., 2013).

The term peri-urban is used frequently in the literature and in policy discussions, yet definitions are largely situational and case specific. They provide little basis for unified understanding of what constitutes peri-urban. Organization of Economic Co-operation and Development (1979) therefore concludes that the term "peri-urban" cannot be easily defined or delimited through unambiguous criteria. It is a name given to the grey area which is neither entirely urban nor purely rural in the traditional sense; it is at most the partly urbanized rural area. Whatever definition may be given to it, it cannot eliminate some degree of arbitrariness.

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The peri-urban areas have and continue to experience in cess ant push and pull tendencies from the cities and the rural areas due to their strategic locations, and multifunctional territorial nature (Ravetz *et al*., 2013). According to Lawanson *et al*. (2012) in theirs tudy of Lagos and Ibadanin Nigeria, the preference for the peri-urban areas for settlement and other commercial pursuits, is motivated by the fact that these fringes of cities have some of the relatively affordable rent in comparison to the main city and big towns.

Masanja (1999) identified two major driving forces for conversion and transformation of land use in the peri-urban peripheries. They include: demand for housing for the growing population and the deteriorating housing conditions and inadequate urban services. Webster (2002) however attribute the reason for conversion of land for urban development as being a result of higher economic gains from conversion and transformation to other land uses other than agriculture. With economic rationality of the land owners, they would opt for other activities with higher future earning returns on their land, against agriculture (Irwin and Geogeghan, 2001), in the end, subtly creating pressures on food security in the areas.

In general, peri –urban settlements are usually a reflection of the urban settlement. Urban population growth results to increased population densities within established urban areas as well as in the outward thrust of urban agglomeration, that is, peri-urban regions. It is therefore anticipated that the development of a peri-urban area is an inevitable consequence of urbanization and as cities in developing countries continue to grow, the peri-urban area moves outward in waves (DFID, 1998). This process is manifested primarily by an outward expansion of built-up areas and the conversion of prime agricultural lands for residential and industrial purposes (Brennan, 1999). As the cities expand, the main zone of direct impact is the peri-urban area.

Cities in Nigeria like other parts of the world are experiencing unprecedented rates of growth. According to the Nigeria National Economic Empowerment Development Strategy (NEEDS, 2004), *the rate of urban growth in Nigeria is one of the fastest in the world.* Since the emergence of ancient cities such as Benin, Kano and Zaria between the 14th and 17th century, there has been a steady evolution and multiplication of urban centres. The rate of multiplication however became greater from the 1960's with more urban centres emerging than before then. As at 1960 only four major administrative centres existed, these centres were Lagos, Ibadan, Enugu, and Kaduna. By 1967, the centres rose to 13, while it became 21 centres in 1987. The centres again rose to 30 administrative state headquarters in 1991. Similarly administrative changes were undertaken at the local level resulting in the emergence of towns which are now headquarters of local government areas (Onokerhoraye and Omuta, 1994a).

In the 1996 state and local government creation, the number of state administrative centres increased to 36 while local; government headquarters increased to 774. These administrative centres have over the years attracted commercial and industrial activities which have in turn encouraged immigration from rural areas to them thereby leading to rapid urbanization. The 1950 estimated percentage of Nigeria's population living in the urban areas was 15 per cent. This rose to 23.4 per cent in 1975 and 35 per cent in 1991. By the 2006 estimates, Nigeria has a population of 140 million. By this figure, approximately 60.7 million Nigerians are currently living in the urban areas. The rate of urbanization is 5.5 per cent while the annual population growth is 3.0 per cent. Using the 140 million estimates of 2006 and the rate of urbanization, it is believed that more than half of Nigerian population will be living in urban centres by the year 2020 (Oluwasola, 2007).

Rapid urbanizations have changed the urban landscape of most Nigerian cities. This rapid rate of urbanization according to OECD (1979) has significant impacts on urban growth and population increase. These impacts of economic growth and physical expansion of the urban area are not confined within urban boundaries; they reach into much wider areas surrounding urban centres, creating so-called urban fringe areas, or peri-urban areas. There have been concentration and congestion in inner cities and the opposite process of suburbanization and dispersal at the urban fringes, the peri-urban areas.

Onibokun *et al*. (1987) and Onibokun and Kumuyi (1999) assert that various political and socio-economic factors have mainly been responsible for the rapid growth of urban population. The economic opportunities offered by cities are strong drivers for rural-urban migration. Many of these rural migrants find it difficult to fit themselves in the urban centres and therefore settle in the urban fringes (peri-urban areas). Pasquini and Maconachie (2005) also pointed out that the Nigerian structural adjustment policies of the 1980s forced many people to the peri-urban areas for agricultural purposes to supplement their meager income. Large numbers of urban residents, pushed out by high housing costs in the city, look for cheap accommodations in the peri-urban areas.

Peri-urban areas in developing countries pose many problems including unintensive use of land, low level of services and infrastructure, few job opportunities, uncoordinated development and high cost of providing services, lack of clear jurisdictions and weak planning control, *etc*. They manifest the deep seated problems that face third world cities and societies. Some of these causal factors are unsustainable urbanization and urban growth, poor economic policies and poor management of available resources, *etc*. Challenges of peri-urban areas in developing countries are similar in nature. Most of developing countries experience spontaneous development pattern rather than planned growth. Hence the challenge of peri-urban zones is development in informal way. Land development takes place without conforming to planning regulations. Due to high demand of land, marginal lands in low lying areas, hills and infrastructural setback are being filled up for development purpose, without considering any environmental impact. As corroborated by Onokerhoraye and Omuta (1994b), peri-urban area in Nigerian is characterized by incomplete range of penetration of urban utility services and uncoordinated zoning. The perception that the peri-urban area is no man's land accounts for environmental problems therein. Activities of land speculators who involve in indiscriminate subdivision of peri-urban land are also responsible for the environmental problems. Globally, peri-urban areas are often characterized by extremely vibrant mix of land uses, not as a result of deliberate planning, but because unregulated development has taken place within the specific peri-urban area. Thus in a single street, commercial uses in form of stores, residential apartment, educational institutions, light or small scale industries and agricultural uses can all be found. All these land uses are also often associated with problems of safety, pollution (air and noise) and general poor quality of life.

These peri-urban areas, on the other hand offer many positive opportunities by absolving the overspill populations and jobs from the cities and therefore relieving them of serious problems of congestion, overcrowding and pollution. They also offer land for agriculture for food production for the urban dwellers and a means of living for many of the urban poor, cheap land for housing, industry among others.

Like many other settlements in Nigeria, settlements in Edo State are also fast urbanizing. The rapid growth in population and socio-economic activities of major towns in the area in recent years indicates this trend. In this regard, there has been an unprecedented transformation of many rural settlements into urban centres. This scenario is most amplified in Benin city which is now enclosed with notable peri-urban communities. This study intends to investigate the characteristics and the drivers of this peri-urban zone in the city using Ekiadolor Community as a case study.

MATERIALS AND METHODS

The study area is Ekiadolor community in Benin city, Edo State, Nigeria. Benin city is a city in southern Nigeria, and capital of Edo State. It is located on the latitude 6^{o} 30N and 6^{o} 00E. The city lies in the warm humid equatorial region in the tropics with two dominant seasons, that is, the wet and dry season. The vegetation of the area falls within the rain forest belt. The predominant ethnic group is Bini which constitutes about 70 per cent of the population. Other ethnic groups in this community include Igbo, Urhobo, Esan, Etsako, Ijaw, Isoko and Yoruba.

Ekiadolor community is about 18 km from Benin city. It is an ancient community. Prior to the establishment of the College of Education in the 1980s in the community, Ekiadolor could rather be described as a village. The establishment of the College of Education resulted into influx of people especially the staff of this College. Other ancillary workers especially traders and artisans also moved to this community. There was a general belief that the establishment of this College will herald rapid infrastructural development of the community. The high quality of life expected in this community led to the massive activities of land speculators and their indiscriminate land subdivision. At the inception of this College, house rent was rather too low in Ekiadolor. Thus, urban dwellers in Benin City who had been facing acute shortage of housing now found respite in Ekiadolor. This increase in the population of the community is further enhanced by its strategic location along the Benin – Ore Expressway. Thus, residents of Ekiadolor could easily commune between the city and the community with ease. This expressway also links Benin with other parts of Nigeria and also serves as connecting distributaries to major towns and roads that converge along its axis. .

Ekiadolor is a community with a population of 5,593. It comprises of 32 streets with 1,350 buildings. Using the total number of buildings as sample frame and an assumption of one household per building, a sample size of 30 per cent amounting to 393 buildings was used for this study. Based on this assumption, a total number of 393 questionnaires were distributed. Subsequently, random sampling approach was employed to select the 1^{st} building, and every 3^{rd} building was systematically selected in that order on each street from which any available head of household was interviewed.

This appears plausible since there are traits of homogeneity in habitability in this study area. For the purpose of data analysis, descriptive statistics including tables, charts, frequencies and means were utilized. Pictures were also used to depict the nature of the environment.

RESULTS AND DISCUSSION

Findings revealed that the working class group (31 – 50 years) constitutes the dominant (67.3%) age group in the study area. This group is the active force of any settlement and will have positive effect on the economy of the residents. Among these two groups are those that are still in the civil service and self-employed (Table 1). This observation reinforces the fact that the inhabitants of Ekiadolor community are possibly workers who were originally living in Benin city.

About 30 per cent of the inhabitants in the area are illiterates. 23.4 per cent have only primary school leaving certificate, while 20 per cent attempted secondary school and 25.3 per cent have tertiary education (Table 1). The implication of the low level of education of the people in the area undermined the importance of healthy environment as significant proportion of the inhabitants live below the minimum environmental standards stipulated in the planning code of the country.

A greater percentage, that is 46.4 per cent of the respondents are within the income range of N151,000 – N300,000. This implies that they receive the stipulated minimum wage which is N18,000 per month. While only 15.4 per cent receives above the minimum range and 38.2 per cent receives below (Table 1). This shows a high prevalence of poverty in the area. This observation attests to the fact that the immigrants from Benin city to this community might be relatively low income group who are in search of low rents.

It was observed that 47.1 per cent of the respondents are civil servants. Some are engaged in the College of Education in the community while a greater percentage are those who work in the city centre but have either built or rent an apartment in Ekiadolor in a bid to move away from the crowd in the city centre and its associated problems. This is closely followed by traders (31.2%). These traders are found within and outside the school premises with their various kiosks, shops used for various businesses like canteen, business centres, phone booths *etc*. Other occupations are farming (12.7%) and artisanship (8%) (Table1). The community still has pockets of fairly large vacant land that is yet to be developed.

Table 1: Socio-economic characteristics

Variable	Frequency	Percent
Age bracket		
Below 20	2	0.5
20 – 30	46	11.9
31 – 40	163	42.4
41 – 50	103	26.9
Above 50	70	18.3
Nativity		
Binis	220	56
Yorubas	78	18
Ishan	47	12
Urhobos	39	10
Others	16	4
Reason for residing in the community		
Safety	7	1.8
Employment	158	41.1
Nearness to market	93	24.2
Place of birth	24	6.3
Family land	11	2.9
Others	3	0.8
Educational level		
Primary	90	23.4
Secondary	77	20.0
Tertiary	97	25.3
No formal education	120	31.3
Occupation		
Trading	123	31.2
Civil service	185	47.1
Artisanship	31	8.0
Farming	50	12.7
Others	4	1.0
Income level		
Below N50,000	9	2.3
N51,000-N150,000	138	35.9
N151,000-N300,000	178	46.4
N301,000-N500,000	42	11.0
N500,000 +	17	4.4

The implication of the foregoing is that the establishment of the College of Education was a major driver for the transformation of the community to peri-urban settlement. In addition, one could infer that the relatively low rents and cost of land in the community

must have informed other civil servants especially from Benin to build their own houses or rent apartments for living in this community. The data further revealed that the traditional occupation of this community is gradually waning as less than 12 per cent are now into farming. The observed large pockets of vacant land in the community attests to weakness of physical planning instruments as buildings are arranged in haphazard manner.

Ekiadolor is essentially a Bini community. However, the study observed that the community is inhabited by different tribes. As informed by the Edionwere (the community head), apart from the Binis, others tribes in the community are Yorubas, Urhobos, Isokos, Ibos, Calabars, Kwales. Only 56 per cent of the inhabitants are Binis. It could be inferred that a significant proportion of other tribes in this community might have been the College of Education workers and migrants from Benin City and other communities who have come to seek greener pasture and more comfortable accommodation.

Employment opportunities offered by the College of Education which also triggered trading opportunities among the inhabitants account largely (65.3%) for decision to reside in Ekiadolor (Table 1). Another significant reason (22.9%) is the prevailing low cost of land and rent in the community. Other identified reasons include safety (1.8%) and nativity (6.3%) (Table 1). Thus, it could be concluded that the most important drivers for the transformation of Ekiadolor into a peri-urban community are the establishment of the College of Education and the accompanying employment opportunities, low cost of land and low housing rent.

A greater percentage of the buildings sampled are used for residential purpose. Most of the buildings (94.8%) sampled in the study area are bungalows (Table 2). While some are flats which are preferred by private owners who reside therein with their families, others are tenement buildings which are mostly preferred by developers who put the structures on rent because of their high rent yield. The pattern of building revealed in Ekiadolor is the informal type. It is obvious from these findings that Ekiadolor is essentially a residential corridor for the College of Education workers and the civil servants who commune daily between Benin City and the community.

The condition of housing in the study area is very poor due to the low quality of materials used for their construction, inadequate technology and poor planning standards of the building components. Most houses in the study area have relatively low habitability, as they were not properly maintained by their users who are mostly tenants. The area lacks any evidence of physical planning and development control as about 80% of the landlords do not have any building permit for their buildings (Table 2). The buildings are scattered and do not conform to any building standard. They lack accesses. Setbacks and airspaces between buildings are rarely observed. These parameters are major determinants of the quality of an environment (Mabogunje, 1980). Thus, the quality of the environment in Ekiadolor community could be described as very low.

About 13 per cent of the buildings are mud houses, 44.79 per cent made with concrete, 26.83 per cent plastered, and only 15.36 per cent plastered and painted (Table 2). Roofing materials of the buildings in the community are 89.9 per cent of zinc coated corrugated iron sheets types, only about 4.2 per cent are made of PVC (Table 2). This depicts the different stages and years of development in the area.

In the assessment of general condition of the environment, about 50 per cent of the respondents agreed that their environment is unkempt and overgrown with grasses. This was followed by the 28.5 per cent who affirmed that the environment was dirty. Only 18.3 per cent considered their environment as clean while 4.1 per cent assessed theirs to be flooded (Table 2). Transect walks around the community further confirms this response.

Ekiadolor community has no approved layout. This implies that the community is unplanned while physical planning standards and regulations are compromised. This is a clear manifestation of lack of government presence in this community. Thus, buildings are indiscriminately built on drains, setback *etc*. In addition, there is no distinct road network pattern. Access to most buildings (51.7%) is by footpath while 48.3 per cent has distinct access road. However, only 20.3 per cent of the respondents access their buildings through tarred road (Table 2). This observation indicates that the Government failed to respond to the physical planning needs of this community irrespective of the envisaged increase in population following the development of the College of Education.

Most of the roads in the community are untarred (Table 2). However, due to constant use and lack of drainage the road is in a dilapidated state with potholes and flooded during the rainy seasons. There is no evidence of government intervention in the area of road construction and maintenance in the community.

Table 2: Building characteristics

Variable	Frequency	Percent
Building type		
Bungalow	364	94.8
Storey building	-12	-3.13
Duplex	8	2.07
Availability of building permit		
Without building permit	307	80
With building permit	47	20
Wall		
Mud	50	13.02
Concrete	172	44.79
Plastered	103	26.83
Plastered and painted	59	15.36
Roof type		
Corrugated iron sheet	344	89.8
Clay tilesPVC	2416	6.04.2
Environmental condition		
Clean	70	18.3
Dirty	109	28.5
Unkempt	189	49.1
Flooded	16	4.1
Accessibility to building site		
Footpath	198	51.7
Tarred road	78	20.3
Untarred road	108	28.0

Most households (65.7%) in this community depend on pit latrine (Table 3 and Fig. 1). As confirmed by some respondents, age of buildings, ignorance, lack of proper education and awareness on health and hygienic issues are largely responsible for this option. Again, latrines are easier and cheaper to construct. Only 10.4 per cent used modern day water closet, while 23.9 per cent depend on open defecation (Table 3). This category of respondents makes use plastic bags which are subsequently thrown into the nearby bush, dunghills, backyards, stream and drainage channels. Thus, the community appears aesthetically unpleasing as it is polluted with plastic bags and human wastes making it vulnerable to diseases such as diarrhea, typhoid and cholera. This scenario indicates the high level of prevailing poverty in Ekiadolor.

A large proportion of the buildings examined have bathrooms and kitchen, only that they are substandard, inadequate or inconveniently located. Many of the bathrooms are just small enclosures, some of which are made of materials like bamboo, rusted iron sheets, or planks and located at the backyard. The use of firewood and charcoal for cooking is common; hence many of the buildings have their kitchens located at the backyard, residents of such areas cook food in the open rendering food items and utensils vulnerable to disease causing pathogens. Only the few ones that used kerosene stoves cook at the passage or right inside their rooms.

Table 3: Household facilities

Facility	frequency	Percent
Toilet facility		
Pit latrine	198	65.7
Water closet	78	10.4
None	108	23.9
Disposal method		
Open space	170	43.3
Burning	97	24.7
Roadside & drainage	88	22.5
Others	38	9.5
Source of energy		
Electricity (PHCN)	355	92.5
Generator	7	1.7
None (Kerosene lamp)	22	5.8
Natural gas	-	-

Water supply is not a serious challenge in the community. Most respondents revealed that adequate provision is made for supply of water as it has about twenty six (26) boreholes constructed in different years and located at various streets within the community among which twenty (20) are still functional. These bore holes were constructed by individuals, past governors and Federal government.

The state of waste disposal in the area is generally poor. There is no controlled method of waste disposal in the community (Table 3). Over 40 per cent dispose their refuse in open spaces (Fig. 2); some through burning within residential environment (24.7%) thereby causing air pollution while others dispose theirs at road sides and drainages (22.5%).This hampers the free flow of run-off and constitutes comfortable breeding grounds for flies, mosquitoes other health-infected animals that could contribute to the spreading of diseases. In the rainy season flooding is also prominent in the area as a result of blocked drains.

The main source of electricity supply to the area is through the Power Holding Company of Nigeria

(PHCN), which accounts for 92.5 per cent of the sampled households. About 1.7 per cent used generating plant as supplements (Table 3). This is quite impressive as respondents were of the opinion that supply of electricity in the community is constant except for a situation where a fault is identified, then such area affected may be put in total darkness for weeks or sometimes months. To ensure adequate supply of electricity, the community is furnished with three (3) transformers which were facilitated by community members through the Ekiadolor Community Development Association. This association has also helped in other areas such as road maintenance, supplies of instruction materials to schools and security among others.

Other facilities investigated in this category include school, health and security facilities. Educational facilities available are limited in number. There are three (3) primary schools, three (3) secondary schools (one owned by the Government and two private owned) and a higher institution located in the community. The schools are poorly funded, managed, lack good structures, learning facilities and conducive environment (Fig. 3). The students also do not have access to water and toilet facility. They make use of open field for defecation.

The community has three hospitals/ health centres. Two are owned by the government (Health Management Board and Primary Health care) while the third is owned by an individual. The surroundings of the Government health centres are unkempt as they are engulfed by weeds. A large number of the respondents complained of having the facilities either farther away from their dwellings or completely absent within their neighbourhoods. A large proportion of the inhabitants confirmed paucity of health facilities in this community (Fig. 4). No doubt, in terms of infrastructure, there is a palpable neglect of Ekiadolor community by the government.

Policy implications and recommendations

This study has investigated the characteristics and the drivers of a typical peri-urban zone in Benin city, Nigeria using Ekiadolor Community as a case study. It was observed that the establishment of the College of Education and the accompanying employment opportunities was the major driver for the transformation of Ekiadolor to a peri-urban settlement. In addition, the relatively low housing rents and low cost of land in the community must have informed civil servants from Benin city to build their own houses or rent apartments for living in this community. Thus, Ekiadolor is essentially a residential corridor for the College of Education workers and the civil servants who commune daily between Benin city and the community.It was further observed that the traditional occupation of Ekialdolor community which is farming has waned over the years as most inhabitants are now civil servants.

There was a clear evidence of poverty in Ekiadolor as manifested in all the indexes of quality of life including educational facilities, health facilities, water and sanitation facilities among others. In general, evidence of government intervention in the development process of this community is scanty as manifested in the poor quality of technical and social infrastructure. This situation is further amplified by the weak applications of appropriate physical planning standards to regulate land use thereby resulting into haphazard development of this community. It could be concluded from this study that the establishment of institutions such as universities, colleges of education and research institutes among others outside the immediate precinct of cities could trigger peri – urbanization. Such facilities have the potential of transforming their communities of abode to growth centres. Once this is envisaged, adequate provision should be made to meet the challenges that could be posed by such development.

In a bid to mitigate the anticipated effect of peri – urbanization especially with respect to checking the haphazard growth and expansion of the peri – urban community under focus and other communities in the developing countries and ensuring that developers adhere to planning standards for development, the creation of a specialized unit to plan and coordinate such settlements is advocated. This specialized unit should focus on the design and implementation of some planning strategies such as master planning, land use planning, development control that would curtail haphazard growth and ensure that developers adhere to planning standards for development. The sub-unit handling development control should be strengthened in terms of finance and manpower to be able to efficiently discharge its duties. Other issues to be addressed by this unit include upgrading programme through rehabilitation/renovation approach as well as provision of urban basic services. Specifically, this unit should give adequate attention to the provision of necessary facilities that would enhance habitability such as the provision of adequate supply of water and sanitation.

The cooperation of government and community is essential to achieving the goals of this specialized unit. The government should be prepared to facilitate development in peri – urban communities while community members should be encouraged to be willing

Fig. 1: A typical latrine in the community

Fig. 3: The existing schools in the community are in a state of disrepair

Fig. 2: Indiscriminate dumping of refuse

Fig. 4: The primary health centre in the community appears unused as it is overgrown with weeds

to contribute towards community development. Specifically, there should be a synergy between the peri – urban communities and the main cities through progressive integration. This is desirable since these peri urban communities are the agents that usually absorb the pressure and dynamics of population and land use changes in cities.

REFERENCES

Appiah, D.O; Bugri, J.T; Forkuo, E.K and Boateng, P. K. 2014. Determinants of peri-urbanization and land use change patterns in peri-urban Ghana. *J.Sustain. Dev*. **7:** 95-109.

Brennan, E M.1999. Population, urbanization, environment and security: a summary of the issues. *Comparative Urban Studies*, Occasional Papers, Series, 22. Woodrow Wilson International Center for Scholars,Washington DC, USA.

DFID. 1998. Review of the poverty relevance of the peri-urban interface production system research, *2nd Draft Report* for the Department for International Development Natural Resources Systems, U.K.

FAO. 2002. Defining the peri–urban: rural–urban linkages and institutional connections. *Land Reform*. Rome, Italy.

Federal Government of Nigeria (2004). National Economic Empowerment Development Strategy (NEEDS). National Planning Commision, Abuja, Nigeria

Irwin, E.G and Geoghegan, J. (2001): Theory, Data, Method: Developing spatially explicit Economic Models of Land Use Change. *Ag., Ecosys. Env.*, **85:** 7-23.

Lawanson,T.,Yadua,O., and Salako,I.2012. Environmental challenges of peri-urban

settlements in the Lagos megacity. In M.Schrenk, V.V.Popovich, P.Zeile, and PietroElisei (Eds.), *Proc.of Real Corp2012:Re-Mixing The City– Towards Sustainability and Resilience?* Retrieved February, 2015, from http://www.corp.at /archive/ CORP2012_40.pdf

Mabogunje, A.L. 1980. *The Development Process: A Spatial Perspective*. 2nd Ed; London: Unwin Harman Ltd, pp 189-93, 217-18.

Masanja, A.L 1999: Rationalization and sustainability of land use activities in peri-urban environment: the case study of Kumasi city, Ghana. *M.Sc Thesis Report*. University of Science and Technology, UST, Kumasi, Ghana.

Oluwasola O. 2007. Social systems institutions and structures: urbanization, poverty and changing quality of life. *Proc.* of *Training Session of the Foundation for Environmental Development and Education in Nigeria*, Ile-Ife, Nigeria.

Onibokun, A. G. and Kumuyi A. S. 1999. Managing the monster: urban waste and governance in Africa. *Int. Dev. Res. Centre*, Ottawa. Retrieved from:http://www.idrc.ca/en/ev-42976-201-1-DO_TOPIC.html

Onibokun, A., Olokesusi, F and Egunjobi, L 1987. *Urban Renewal in Nigeria.A Book of Reading*. Nigeria Institute of Social and Economic Research (NISER), Ibadan, Nigeria.

Onokerhoraye A,G ,Omuta G. 1994a. *Urban Systems and Planning for Africa*. Ilupeju Press Limited, Benin City, Nigeria.

Onokerhoraye A,G , Omuta G. 1994. City structure and planning for Africa. *The Benin Social Science Series for Africa.* University of Benin, Benin, Nigeria

Organization for Economic Cooperation and Development (OECD). 1979. Agriculture in the Planning and Management of Peri-urban areas. *Synthesis*. 1:94

Pasquini, M.W and Maconachie, R 2005. Peri-urban systems under stress in Jos and Kano, Nigeria? New perspectives on source management and degradation. In: Parrot, L. (ed) *Proc. of the Int. Workshop on Agric. and Urban Dev. in Central Africa, University of Yaoude*, Cameroon.

Tibaijuka, A. K .2006. A message from the UN Habitat Executive Director. *Habitat Debate*,**12:** 2-12.

Ravetz, J; Fertner, C and Nielsen, T.S.2013: *Peri-urban Futures*. Springer. Verlag Berlin Heidelberg, Germany.

Webster, D and Muller, L.2004. *Peri-urbanization: Zones of Rural – Urban Transition*. EOISS Publishers. USA