Significant Demographic Factors Fuelling Housing Deficit in Ado-Ekiti, Nigeria

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Abstract: *This article assesses the significant demographic factors fuelling housing deficit in Ado-Ekiti, Nigeria. Using a mixed method approach as survey design coupled with a combination of purposive and stratified sampling technique, 1254 households were selected for administration of questionnaires during data collection process. Questionnaires, interviews were the major instruments of data collection from seven residential development corridors (RDCs) in Ado-Ekiti. Ministries, Agencies and Departments (MDAs) supported secondary data. Findings revealed that high population growth, rapid urbanisation and migration increased housing deficit in the study area. Hence, this study observed an increase in live births (162, 901) than deaths (45, 046) in Ado-Ekiti. Also, findings revealed an increase in building concentration (57.7%) from 2000-date. Similarly, this study observed an increase in challenges such as urban sprawl and infrastructure deficiency (L-INFRA) encountered as a result of rapid urbanisation. The study noted an increase in quantitative housing deficit (223,086) in 2023. Thus, a quantitative housing deficit of 334,554 housing units would arise in 2034.Furthermore, sharing of dwellings with other households (SHAD), a resultant effect of high migration trends constituted 43.4 percent across the RDCs in Ado-Ekiti. Also, improved infrastructural facilities (33.8%) was the modal reason for staying (RESTAY) in the study area. Using Paired T-test, this study further validated that a perfect positive relationship (1.000) exists between population growth and housing deficit in Ado-Ekiti. Therefore, this study recommends adoption of effective Family Planning Methods (FPMs), regional distribution of infrastructural facilities and conversion of under-utilised lands for an efficient housing delivery in Ado-Ekiti.*
Key words: housing, demographic factors, housing demand, housing supply, housing deficit

INTRODUCTION

Housing serves as the foundation for people to rebuild their lives after experiencing the pain and upheaval of homelessness (Smith, Albanese & Truder, 2014). Demographic factors such as urbanisation and population growth, resulted in a rise in housing demand. Conversely, Mulder (2009) noted that a population

decline would lead to a decrease in housing demand. The researcher further documented that adequate supply of housing influences the opportunities for population increase through immigration and various opportunities for people to form new households. Thus, housing supply played a significant role in the formation of new households.

However, 330 million urban families in developing countries lived in sub-standard housing and were faced with severe financial hardship as a result of rapid urbanisation and population (McKinsey Global Institute 2014). Thus, providing adequate housing and other necessities to the rapidly growing urban areas is one of their biggest challenges. To this effect, Omiunu (2014) contended that a rapid population increase would have a substantial impact on the distribution of resources, especially housing, and this could seriously jeopardize national development. Similarly, Olotuah (2015) saw signs of a dense population living in filthy housing in Ado-Ekiti as a result of high population growth and urbanisation. Thus, the term "housing deficit" alludes to the quantity of dwelling units and the quantity of shelters that are devoid of the amenities required to be livable and needed to house everyone who does not currently have one and must, therefore, share a shelter in cramped conditions with another household (Carols, 2012).

Furthermore, Demeldo (2019), ascertained that the problem of slum development is a global one that affects all nations, not just those that are developed, developing, or less developed. Also, impoverished dwellings or slums accounted for 43.0 percent of the urban populace in all developing regions, compared to 60 percent in the developed world and 78.2 percent in the least developed countries. To buttress this, Ayeni and Bankole (2015) observed the sub-standard housing conditions in Ado urban's core neighborhoods, and inadequate basic housing amenities like waste disposal, bathrooms, and kitchens.

LITERATURE REVIEW

Effects of Population, urbanisation and migration trends on housing deficit
Bloch *et al* (2015) observed that a declining mortality and consistently high fertility were the main drivers of Nigeria's population growth. To further buttress this, the population of Nigeria was 45.14 million in 1960, As of 1970, there were 55.98 million, 73.42 million in 1980, 95.21 million in the year 1990, 122.28 million in 2000, 158.50 million in 2001, 208.33 million in 2020 and 2021 213.40 million. This resulted in an increased population growth of 372.8 percent in 61 years (Alawode, 2023). This had an influence on the quantity of urban housing that was previously measured. Consequently, the quantitative shortage of urban housing would increase to more than 18 million units (Oyedele, 2019).

Alawode (2023) noted that while Nigeria's wealth is not growing, the number of people consuming it, grew significantly. The researcher also emphasized that Nigeria and its urban areas faced a critical housing situation due to the country's over 213 million inhabitants, insufficient housing supply, and average urban household size of five people per family (Nigeria Living Standards Survey, 2020). Therefore, as a result of larger households, there was a greater demand for housing, as evidenced by the prevalence of overcrowding in the available housing stock and the existence of slum or squalor dwellings in most urban centers (Olotuah, 2015; Enisan and Ogundiran, 2013).

The Center for Affordable Housing Finance (2014), estimated that Nigeria had an urbanisation rate of 3.8% and a per capita income of US$3,000. This invariably led to majority of people on earth living in cities and slums (UN-Habitat 2007). Oriye (2016) further confirmed that Ado-Ekiti had experienced a significant growth in size with expanding population. The researcher further documented that Ado-Ekiti experienced an annual growth of 87.2 percent between 1996-2006. Presently, urbanisation rate in Ado-Ekiti had risen uncontrollably as a result of the presence of infrastructural facilities such as educational and health institutions, shopping facilities, hospitality centres and so on.

It is pertinent to note that, the migration of individuals from rural Ekiti to Ado Urban was typified by a growing rate of housing infrastructure and increased housing demand (Awe, Akinluyi, Oso & Taiwo 2022). Hove, Ngwerume, and Muchemwa (2013) ascertained that migration was responsible for more than 75 percent of Nigeria's urban congestion. This resulted in inadequate or scarcity of housing in urban areas such as Ado-Ekiti. Conclusively, Ajayi (2023) noted that urbanisation, population growth and migration had increased housing shortage significantly in Ado-Ekiti.

Moore (2019) revealed the trend of housing deficit in Nigeria from 1991-2019 and its causes over the years. This is shown in table 1. This confirmed that rapid population growth, increased urbanisation and migration had exacerbated housing shortage in Nigeria and invariably Ado-urban.

Table 1: Trend in Nigeria's Housing Deficit from 1991-2019.

Year	Housing deficit	Population	Cause
1991-1993	4-7 million	104 million	Ineffective mortgages system
2007	8-10 million	145 million	Demolition of slums and urban migration
2013-2015	16-17 million	178 million	Urbanization, overpopulation, and rising rates of poverty
2017-2019	18-22 million	184 million	Overcrowding, poverty rates rising and urban migration

Source: Updated by Moore (2019): Central Bank Economic and Financial Review Report

MATERIALS AND METHODS

The study area

The capital of Ekiti State, Ado-Ekiti, is situated in Southwest Nigeria. (Figure 1). The Local Government Areas of Ijero and Ekiti West to the west, Ikere, Igboyin, and Ekiti South West to the east, and Oye and Ido-Osi to the north all encircle it. (The Encyclopedia Britannica, 2021). It is located 148 kilometers (92 miles) east of Ibadan. The state capital, Ado-Ekiti, is located between latitudes $7^0 19^1$ and $7^0 29^1$ North of the Equator and longitudes $5^0\ 3^1$ and $5^0\ 22^1$ East of the Greenwich meridian. Ado-Ekiti was 2.5 square kilometers (sq. km) in 1956, but by 1996, it had grown to about 19.6 sq. km. (Oriye, 2016). The city has a tropical climate with two distinct seasons. The rainy season (April–October) and the dry season (November–March). Temperatures with high humidity fall between 69.80F (210C) and 82.40F (280C). Temperatures with high humidity fall between 69.80F (210C) and 82.40F (280C).

The North-East trade winds and the South westerly winds blow during the dry and rainy seasons, respectively. Also, Ayoba Hill, home of the state government house and other rounded, steep-sided hills formed by volcanic eruptions can be found in Ado-Ekiti. The highly undulating slopes were the source of many streams, including Ureje, Omiolori, Ajilosun, Awedele, and Amus (Government of Ekiti, State Nigeria, 2023). The National Population Census (2006) estimates that 516,000 people called the city home in 2022. However, the majority of people living in Ado-Ekiti were members of the Yoruba sub-ethnic group known as the Ekiti and the Edo people (Ado-Ekiti/Hometown, 2016). In 1950, Ado-Ekiti had 19,502 inhabitants. The current population of the city is 535,916 as of 2023. Compared to the population estimate of 516,000 in 2022, this is a 19,689 increase, or a 3.82 percent annual change (United Nations World Urbanisation Prospects, 2023). Similarly Olamiju (2021) ascertained that the dual role of Ado-Ekiti (State and Local Government Headquarter) had necessitated the convergence of government ministries and parastatals; attracted people from other neighboring towns and villages. This melted in increased population, urbanisation and consequent competition for housing and other facilities in the city.

Furthermore, land use patterns in Ado-Ekiti, according to Babajide, Solagbade, and Temitope (2021), showed a discernible increase in the spatial extents of built-up areas and non-vegetated regions. With its population growing from 156,122 in 1991 to 516,000 in 2022 and 535,916 in 2023, there is a greater need for housing, food, energy, and construction supplies. As a result, Babajide *et al* (2021) emphasized that Ado-Ekiti's developed areas, vegetated areas, and bare surface developments were mostly related to the city's population growth. Figure 1, showed the study area in its National and local settings and also the building population showing major streets and roads in Ado-Ekiti.
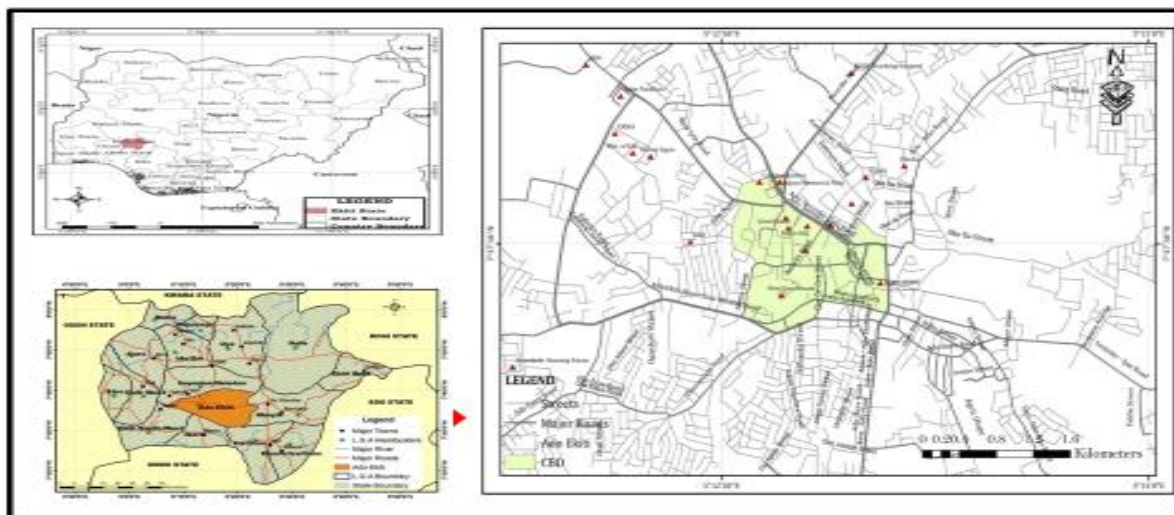

Figure 1: Ado-Ekiti at National, State level, and Ado-Ekiti Building Survey Map, showing major roads and streets.
Source: Ekiti State Ministry of Land, Housing and Urban Development (2016), Updated by Researcher, (2022)

METHODOLOGY

A combination of quantitative and qualitative techniques were used in the study's data collection process. The Afao-Ijan, Ijan-Odo-Ado, Odo-Ado-Ikere, Ikere-Ilawe, Ilawe-Iyin, Iyin-Iworoko, and Iworoko-Afao RDCs were the seven Residential Development Corridors in Ado-Ekiti where primary data was gathered. These RDCs served as the study's target population and formed the sectoral zones bordered by the main transport routes that connect Ado-Ekiti with the city's major towns. However, in order to support the literature review and offer useful connections to the study, secondary sources of data for this research included Ministries, Departments and Agencies (MDAs), published books, respectable journals, texts, dissertations, theses, seminar papers, and other pertinent materials.

The Geographic Information System building survey, provided the sampling frame (see appendix 1, fig 2). This calculated the number of buildings and the household population in the research area, by adopting the average family size of 7 in Ado-Ekiti (Sekumade, 2014; Olajuyigbe, 2011; and Fasakin, 2000). Also, this study adopted a sample size of 0.5% from each of the RDCs. This came to 1254 respondents out of which 1244 questionnaires were retrieved (see table 2).

Table 2: Sample Size Derivation in the Seven (7) RDCs of Ado-Ekiti

Zones	Sampled (Development Corridor)	Building Population	No of HHDs	Sample Size (0.5% of HHDs)
I	Afao - Ijan Road	4525	31675	158
II	Ijan - Odo Ado Road	1560	10920	55
III	Odo Ado - Ikere Road	4925	34475	172
IV	Ikere - Ilawe Road	6175	43225	216
V	Ilawe - Iyin Road	1598	11186	56
VI	Iyin - Iworoko Road	5680	39760	199
VII	Iworoko - Afao Road	11370	79590	398
	Total	**35,833**	**25,0831**	**1,254**

Source: GIS Building Survey (Fieldwork, 2022)

Furthermore, stratified random and purposive sampling techniques were used in delineating the study area into strata or development corridors which helped in selecting the key respondents. Cronbach's Alpha test was used to ascertain the validity of questionnaire for this study. Demographic factors responsible for housing deficit in Ado-Ekiti were defined, specified and coded in table 3.

Table 3: **Identification and specification of Research Variables on Economic Factors Promoting Housing Deficit in the Study Area.**

Serial No	Variable Name	Variable Specification	Measurement Scale	Type of Scale	Statistical tool for Analysis
1.	BUILDER	Year of building erection	1=1960-1969 2=1970-1979 3=1980-1989 4=1990-1999 5=2000-date	Interval	Descriptive statistics
2.	L-INFRA	Lack of Infrastructure	1=pipe borne water 2=electricity 3=drainage facilities 4=sanitary system 5=good road	Nominal	
3.	DESAC	Description of area residence in the city	1=CBD 2=Transition 3=Periphery	Nominal	
4.	SHAD	Sharing of dwelling	1=yes 2=no	Nominal	
5.	RESTAY	Reasons for staying in the area	1=improved infrastructural facilities 2=close to relative 3=close to work 4=greener pastures	Nominal	

Source: Fieldwork, (2023)

RESULTS AND DISCUSSION OF FINDINGS

Findings in this section were based on the demographic factors such as population growth, urbanisation and migration trends responsible for housing deficit in Ado-Ekiti. Also, Afao-Ijan, Ijan-Odo Ado, Odo-Ado-Ikere, Ikere-Ilawe, Ilawe-Iyin, Iyin-Iworoko and Iworoko-Afao RDCs were denoted with alphabets A, B, C, D, E, F and G respectively. The following sub-headings discusses the statistical findings in this study.

Population growth
Housing demand continues to outstrip its supply as a result of an upsurge in the population of Ado-Ekiti. However, the findings of Alawode (2023), a public health expert is in consonance with this assertion that Nigeria's urban population grows more than its economy. The implication of this, is that as wealth is not expanding, the people consuming the wealth kept expanding. Put succinctly, an increase in live births than

deaths in Ado-Ekiti, led to an increased housing demand. Akinyode (2018) agrees with this assertion that an increase in the birth rate led to an increase in the demand for housing. However, the majority of its respondents in this study were in the low-middle income groups and as such unable to meet their housing needs, thus occupying sub-standard, shanty dwellings. Table 4, revealed the number of live births and deaths in Ado-Ekiti from 2015-2018 and from 2020-2021.

Table 4: No of live Births and Deaths registered in Ado-Ekiti from 2015-2018 and live births registered in public health facilities in Ado-Ekiti from 2020-2021

Year	Live births		Total	% Distribution		Deaths		Total	% Distribution	
	Male	Female		Male	Female	Male	Female		Male	Female
2015	5,786	5,843	11629	49.8	50.2	110	51	161	68.3	31.7
2016	12,138	13,916	26054	46.6	53.4	105	49	154	68.2	31.8
2017	4,814	4,486	9,300	51.8	48.2	143	43	186	76.9	23.1
2018	5,848	5,769	11,617	50.3	49.7	156	62	218	71.6	28.4
2020	1282	1264	2546	50.3	49.6	2	271	273	0.73	99.27
2021	1084	1046	2130	50.9	49.1	333	3	336	99.1	0.89

Source: National Population Commission, Ado-Ekiti (Gender Based Statistics Report 2016-2019) & Ekiti State Bureau of Statistics, Digest of Health Report (2020-2021)

However, the fertility rate in Ado-Ekiti was further buttressed by the National Population Commission (2022). This report stated that the crude birth rate in Ekiti State was 31.57 per 1000 population in 2022 (see table 5). This figure showed a decline from 2015 crude birth rate due to the existence of harsh economic realities, increase in educational level of women and increased use of contraceptives (Alawode, 2023).

Table 5: Crude Birth Rate (per 1000 population) in Ekiti State from 2015-2022

Year	Crude Birth Rate (per 1000 population) %
2015	36.14
2016	36.25
2017	36.22
2018	36.06
2019	34.88
2020	33.72
2021	32.58
2022	31.57

Source: National Population Commission (2022)

The proportion of live birth to Ado-Ekiti 2022 population is given as;

CBR=Number of live births * 1000/ estimated population size mid-year (Study.com, 2023)

Therefore, proportion of live birth is shown as;

Number of live births=CBR * Estimated population size mid-year/ 1000

Where CBR= 31.57 percent

Estimated population of Ado-Ekiti for 2022 =516,000

Therefore, 31.57 * 516,000/100) = 162,901 (live-births for Ado-Ekiti 2022 Population)

Similarly, the number of deaths in Ado-Ekiti was calculated using the reports of the National Population Commission (2022). The crude death rate for 2022 was estimated at 8.73 percent (see table 6).

Table 6: Crude Death Rate (per 1000 population) in Ekiti State from 2015-2022

Year	Crude Death Rate (per 1000 population) %
2015	10.56
2016	10.44
2017	10.28
2018	10.02
2019	9.7
2020	9.39
2021	9.04
2022	8.73

Source: National Population Commission (2022)

The proportion of deaths for 2022 population is given as;

CDR=Number of deaths X 1000 divided by the estimated population size mid-year (study.com, 2023)

Hence, Number of deaths=CDR * Estimated population mid-year/ 1000

516000 * CDR for 2022 (8.73)/100= 45,046 deaths in Ado-Ekiti for the year 2022.

It is noteworthy, that the number of deaths in 2022 (45,046) was lower than the number of live births for 2022 (162,901). Thus, the National Bureau of Statistics, Demographic Statistics Bulletin Report (2021) and Ekiti State Bureau of Statistics, Gender Based Report (2018) further corroborates this assertion that there is an increase in the number of live-births than deaths registered in Nigeria in general and Ado Ekiti in particular (see table 4.3.2.1.3) Similarly, Bloch *et al* (2015) noted that the rapid cause of population growth in Nigeria was driven by declining mortality and persistently high fertility.

Validation of hypothesis: There is no significant relationship between population growth for 2022 and housing deficit in Ado-Ekiti.

Lillyworth Homes Ltd (2023) observed that the primary obstacles facing Nigeria's housing sector were economic development, urbanization, and rapid population growth. The surge in Nigeria's population which is currently over 200 million had brought the demand for decent, affordable housing to a record high. Table 7 and 8 presents the results of a paired-samples T-test conducted to examine the relationship between population growth and housing deficit in Ado-Ekiti for the year 2022.

Table 7: There is a significant relationship between population growth for 2022 and Housing deficit in Ado-Ekiti.

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Population growth	35833.0000	7	23209.20560	8772.25516
	Housing deficit	5119.0000	7	3315.60080	1253.17931

Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	Population growth & Housing deficit	7	1.000	.000

Source: Field survey (2023).

Table 8: Paired difference between population growth for 2022 and Housing deficit in Ado-Ekiti.

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Population growth – housing deficit	30714	19893.605	7519.0759	12315.4842	49112.5158	4.09	6	0.006

Source: Field Survey (2023)

The mean population growth in the study area for the year 2022 was estimated at 35,833 while the mean housing deficit is 5,119 based on data on the residential building population and household population from the seven RDCs (see table 2). However, standard deviations for both variables provided insights into the variability within the data, with population growth showing a higher degree of variation (approximately 23,209.21) compared to housing deficit gap (approximately 3,315.60).

Furthermore, the core of the analysis lies in the paired samples test. The mean difference between population growth and housing deficit (35,833-5,119) which was estimated at 30,714, suggests that, population growth outstrips the available housing stock in Ado-Ekiti for the year 2022 (see table 7). This difference is statistically significant, with a t-value of 4.085 and a p-value of 0.006, which is lower than the conventional significance threshold of 0.05 (see table 8). Ajayi (2023) affirmed that population growth would continue to widen the housing deficit gap. Consequently, making a good number of residents in Odo-Ado- Ikere, Iworoko-Afao RDCs, to reside in slums, sub-standard, squatter settlements and overcrowded conditions. Okosun (2022) and Olotuah (2015), corroborate this assertion that urban areas were characterised with slums, squalor and over-crowded conditions. Therefore, demographic factors should be taken into consideration in housing supply (Taiwo & Misnan, 2020).

Urbanisation

Ado-Ekiti is within the 500,000–1 million city class size and the estimated urbanisation rate of most capital cities in Nigeria is 53.22 percent in 2022, according to Neill (2024) and the World Urbanisation Prospects (2018). This was estimated to increase by 0.82 percent by 2035. Building concentration, infrastructural deficiencies and urban sprawl issues, would be addressed in the following subsections.

Building Concentration in Ado-Ekiti

Construction of buildings in Ado-Ekiti had been pivotal to urban growth. Subsequently, there was an increase in building construction from 2000 to date. The results were 57.7 percent in 2000 till date, 25.0 percent in 1990-1999, 12 percent in 1980-1989, 3.3 percent in 1970-1979 and 1.9 percent in 1960-1969 across the seven RDCs in the study area (See fig. 3).
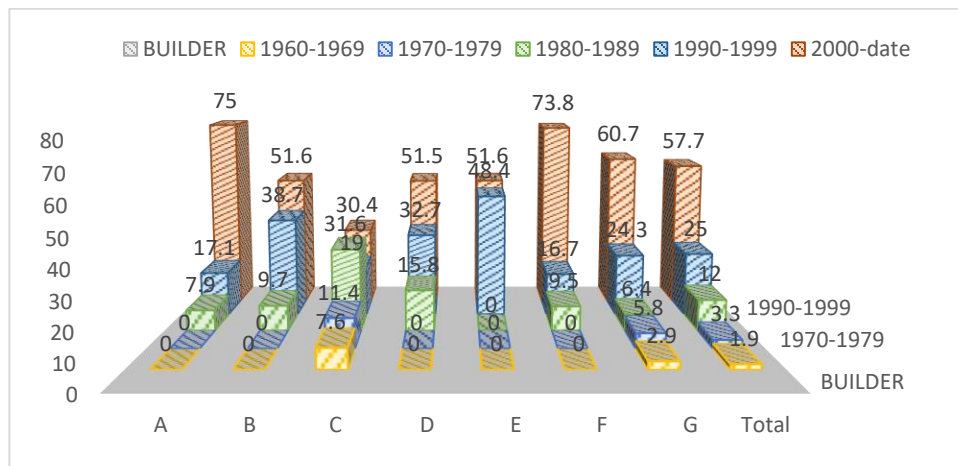

Figure 3: Year of building erection in the study area (BUILDER)
Source: Field Survey (2023)

Esan and Babatola (2015), findings on urbanisation and its environmental impacts in Ado-Ekiti concurs with the findings of this study that urbanisation resulted in an increased building concentration. However, despite an increased building concentration in the research area over the years, it had not been adequate in proffering a sustainable solution to housing deficit in Ado-Ekiti (Olotuah, 2015).

Furthermore, tables 9, 10, 11 and 12 (Appendix 2) showed the rate of building addition from 1999-2024 and its projection from 2024-2034. The National Population Commission (2006) 3.1 percent growth rate was used to derive the building addition from 1999-2021, using the Geographic Information System building survey conducted for this study. Hence, Borate & Sonar (2016) population projection arithmetic method was adopted to calculate the rate of building addition from 1999-2024 and also to project the building addition for the next ten years (2024-2034). This method calculates average increase in building population for each year after the last census. Therefore, an overall increase in an urban population led to a

physical expansion, building concentration and infrastructural development (Adeoti, Adelana & Agboola, 2021).

Estimated deficit in 2023 and its projection to 2034

Borate & Sonar (2016) population projection formula was adopted in estimating the household population and also the housing deficit across the RDCs in Ado-Ekiti. This is expressed as follows;

P (n) = P (current)*(1+r/100)
Where: P (n) = projected population
P (current): current population
r= growth rate as a percentage (GR)

For 1999-2021, the number of buildings for each RDCs gotten from the GIS building survey for this study in 2022 was substituted as P (current) minus (-) 3.1 percent growth rate (NPC, 2006). Also for 2023 to 2034, the number of buildings for each RDCs gotten from the GIS building survey for this study in 2022 was substituted as P (current) plus (+) 3.82 percent growth rate as adopted in this study (United Nations, Ado-Ekiti Macro-trends, 2024).

Succinct to say that the annual population of Ado-Ekiti in 2023 was 536,000 at 3.88 percent growth rate (Borate and Sonar, 2016; United Nations, Ado-Ekiti macro-trends, 2024). Thus, the number of buildings in Ado-Ekiti RDCs in 2023 was 37,181. Also, the household population in Ado-Ekiti RDCs was 260,267. This was adopted from Sekumade (2014), Olajuyigbe (2011) and Fasakin (2000) who observed that the average family size in Ado-Ekiti is estimated at 7. In estimating quantitative housing deficit for this study, Moore (2019) argued that housing deficit could be calculated as the difference between the quantity of available houses and the quantity of households. The formula was stated as:

HD = HP-AB
Where HD = Housing Deficit
HP = Household population
AB = Available buildings (Updated by Abe, 2024)

Consequently, a quantitative housing deficit of 223,086 housing units was seen in 2023. Stanojoska & Petrevski (2016) noted that an increased housing demand due to urbanisation and a limited supply of housing units would lead to a deficit in housing. Similarly, annual population projection of Ado-Ekiti in 2034 is expected to be at 810,336 at 3.82 percent growth rate (Borate and Sonar, 2016). Thus, the number of buildings in Ado-Ekiti RDCs by 2034 is expected to be 55,759. Hence, the household population across the seven RDCs in Ado-Ekiti is expected to be 390,313 (Sekumade, 2014; Olajuyigbe, 2011 & Fasakin, 2000). Therefore, there will be a quantitative housing deficit of 334,554 housing units in 2034.

Infrastructural deficiency in the study area

Findings from this study revealed that the modal infrastructural deficiency, was the lack of good roads within the streets of Ado Urban. This constituted 22.7 percent. This is evident in the urban periphery areas

such as Ilawe-Iyin road, Ijan-Odo-Ado road, Iyin-Iworoko RDCs. Analysis on infrastructural facilities deficiencies in Ado-Ekiti is shown in table 13.

Table 13: Infrastructure facilities deficiency in the study area (L-INFRA)

Variables	Afao-Ijan road		Ijan-Odo-Ado road		Odo-Ado-Ikere road		Ikere-Ilawe road		Ilawe-Iyin road		Iyin-Iworoko road		Iworoko-Afao road		Total	
	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
L-INFRA																
Pipe-borne water	21	13.3	11	20.0	86	50.0	52	24.1	4	7.1	31	15.6	64	16.5	269	21.6
Electricity	45	28.5	13	23.6	7	4.1	37	17.1	13	23.2	40	20.1	117	30.2	272	21.9
Drainage facilities	16	10.1	5	9.1	24	14.0	36	16.7	9	16.1	30	15.1	104	26.8	224	18.0
Sanitary system	34	21.5	9	16.4	25	4.5	40	18.5	11	19.6	19	9.5	58	14.9	196	16.0
Good road	42	26.6	17	30.9	30	17.4	51	23.6	19	34.0	79	39.7	45	11.6	283	22.7
Total	**158**	**100.0**	**55**	**100.0**	**172**	**100.0**	**216**	**100.0**	**56**	**100.0**	**199**	**100.0**	**388**	**100.0**	**1244**	**100.0**

Source: Field Survey (2023)

The lack of good roads predominates over other facilities such as pipe-borne water, electricity, drainage facilities and sanitary system in Ado-Ekiti because the ease of mobility is very vital in human activities. This had led to several damages on the economic, health, social and physical activities in these areas (Adeyemi, Ayeni & Aruna, 2022). Findings of Yoade, Adeyemi and Adeyemi (2015) that bad road network exists within the neighborhoods of urban areas is true. Inadequate electricity supply and pipe-borne water, drainage facilities and sanitary system constituted 21.9, 21.6, 18.0 and 16.0 percent respectively.

Urban sprawl in Ado-Ekiti
Popoola (2017) observed that lateral and structural settlement growth as well as related issues like urban sprawl and peripheral development had been brought about by population growth in cities. Consequently, Popoola (2013) documented that Ado-Ekiti's ongoing unchecked growth had forced planners and stakeholders to acknowledge that the development plans for the area have not produced the desired favorable outcomes.

However, findings from this study corroborates the existence of urban sprawl especially in peripheral areas in Ado-Ekiti. A total of 44.1 percent of the respondent's in the study area resides in the periphery areas of the RDCs. This was followed by 36.4 percent in the transition and 19.5 percent in the central business district (CBD). This distribution is shown in figure 4.
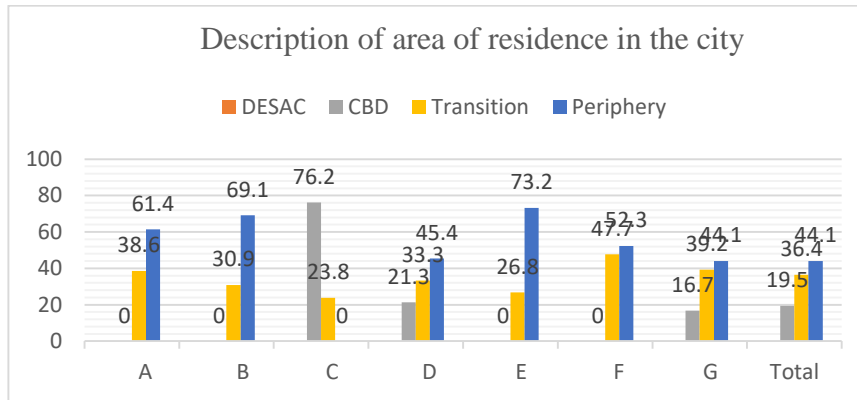
Figure 4: Description of area respondent's resides in the study area (DESAC)
Source: Field Survey, (2023)

It is noteworthy that majority of the respondent's across the RDCs resides in the periphery such as Ago-Ebira along Ijan-Odo-Ado RDC (see figure 5). Agboola (2019) affirmed that the growth in the population of Ado-Ekiti, increased demand for housing and land for infrastructural facilities had led to urban sprawl in Ado-Ekiti. Okikiola and Alo (2020) is in tandem with this assertion that the expansion in Ado Urban periphery had also led to the depletion of green areas.

Figure 5: Slum settlements at Ago area (Ijan-Odo Ado RDC, Ado-Ekiti)
Source: Field survey (2023)

Migration
A major consequence of urbanisation is rural-urban migration. This had an impact on housing supply in the majority of Nigerian cities (Nwalusi, Okeke, Anierobi, Okeke & Nwosu, 2022). It is important to remember that most urban areas experience internal migration, as movement within the urban area (Oyeniyi, 2013). Migration trends in Ado-Ekiti were expressed under the following sub-headings.

Sharing of dwelling with other households (SHAD)

Figure 6 reveals that 43.4 percent of the respondents across the seven RDCs shared their dwellings with other households and 56.6 percent did not share their dwellings with other households. Okeke, Eziyi, Udeh & Ezema (2020) noted that sharing of dwellings is a major effect of migration as migrants may not be able to afford decent housing, thereby compelling them to share dwellings with other households or reside in sub-standard, squalor settlements. Owoeye and Ogunleye (2015) also observed that migrants from rural Ekiti move away from their former abode as a result of inadequate infrastructural facilities, employment opportunities and the quest for a modern lifestyle.

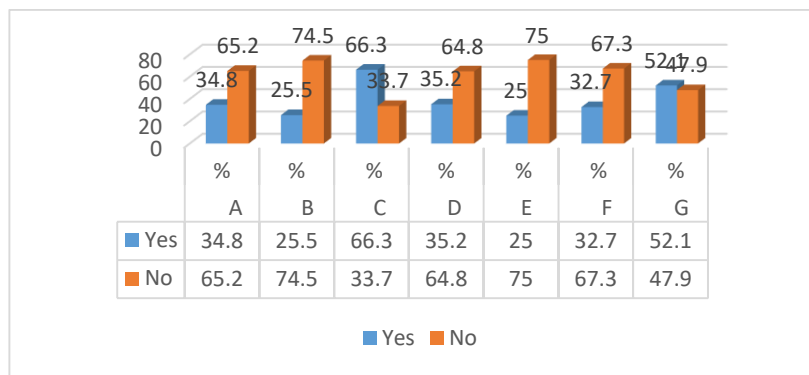|	% A	% B	% C	% D	% E	% F	% G
Yes	34.8	25.5	66.3	35.2	25	32.7	52.1
No	65.2	74.5	33.7	64.8	75	67.3	47.9

Figure 6: Sharing of dwelling with other households (SHAD)
Source: Field Survey, (2023)

Reasons for staying in the study area (RESTAY)

Nwalusi *et al* (2022), noted that increasing urbanisation and a large scale rural exodus or migration to urban areas in search of greener pastures, a modern lifestyle, access to education, and employment opportunities were the primary causes of the growing urban population. Oyedele (2019) contends that migration from rural areas had resulted in an urban concentration and a quantitative urban housing deficit. Table 14 illustrates reasons for staying in the research area.

Table 14: Reasons for staying in the study area (RESTAY)

Variables	A		B		C		D		E		F		G		Total	
	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
RESTAY																
Improved infrastructural facilities	58	36.7	22	40.0	83	48.3	107	49.5	7	12.5	44	22.1	100	25.8	421	33.8
Close to relative	22	13.9	3	5.4	42	24.4	18	8.3	12	21.4	19	9.5	113	29.1	229	18.4
Close to work	40	25.3	16	29.1	26	15.1	11	5.1	5	8.9	47	23.6	36	9.3	181	14.5
Greener pastures	38	24.1	14	25.5	21	12.2	80	37.0	32	57.1	89	44.7	139	35.8	413	33.2
Total	158	100.0	55	100.0	172	100.0	216	100.0	56	100.0	199	100.0	388	100.0	1244	100.0

Source: Field survey, (2023)

The modal reasons for staying in the study area is the quest for improved infrastructural facilities, this constituted 33.8 percent, it was followed by the search for greener pastures which accounted for 33.2 percent across the seven RDCs in Ado-Ekiti (see table 14).

World Food Programme (WFP), migration pulse report (2019) noted that the root cause of migration in Nigeria were search for quality educational facilities (41%), job opportunities (35%), re-unification of family and meeting food needs (17%). Consequently, Esan and Babatola (2015), Aderamo and Ayobolu (2010) documented that rural-urban migration is the major cause of housing deficit in Ado-Ekiti, thereby putting a strain on the limited housing stock and existing infrastructural facilities.

CONCLUSION AND RECOMMENDATIONS

This paper had discussed the demographic factors responsible for housing deficit in Ado-Ekiti. The study concluded that high population growth, increased urbanisation and migration were the major demographic factors that increased housing deficit in the research area. Therefore, these necessitated the need for the incorporation of demographic factors in housing deficit reduction framework in Ado-Ekiti. This study now proffers sustainable policy guidelines in reducing housing deficit in the study area.

Effective Family Planning Methods (FPMs) would control the increase in live-births in Ado-Ekiti. Also, there is need to create empowerment programmes to provide employment opportunities for the ever increasing young age population in the research area.

Regional distribution of resources such as electricity, pipe borne water, relaxation centres and so on at all regions in Ekiti would reduce the high rate of urbanisation and migration experienced in Ado-Ekiti. Also, regular maintenance of infrastructural facilities across the RDCs in the research area should be encouraged. This would reduce the pressure on existing facilities. Thus, leading to an increased sustainability of these facilities and effective housing delivery in the study area.

Furthermore, under-utilized lands in Ado-urban should be converted to affordable, quality housing units for all. This would eradicate the existence of slum or squalor settlements that had sprang up in Ado-Ekiti as a result of urbanisation. Also, slum areas should be upgraded to affordable, quality housing for low-middle income earners that cannot afford a decent housing

Future Research

There is need to explore an effective urban renewal strategy in core and transition areas in Ado-Ekiti. These would further reduce the effects of economic and demographic factors responsible for housing deficit in the research area.

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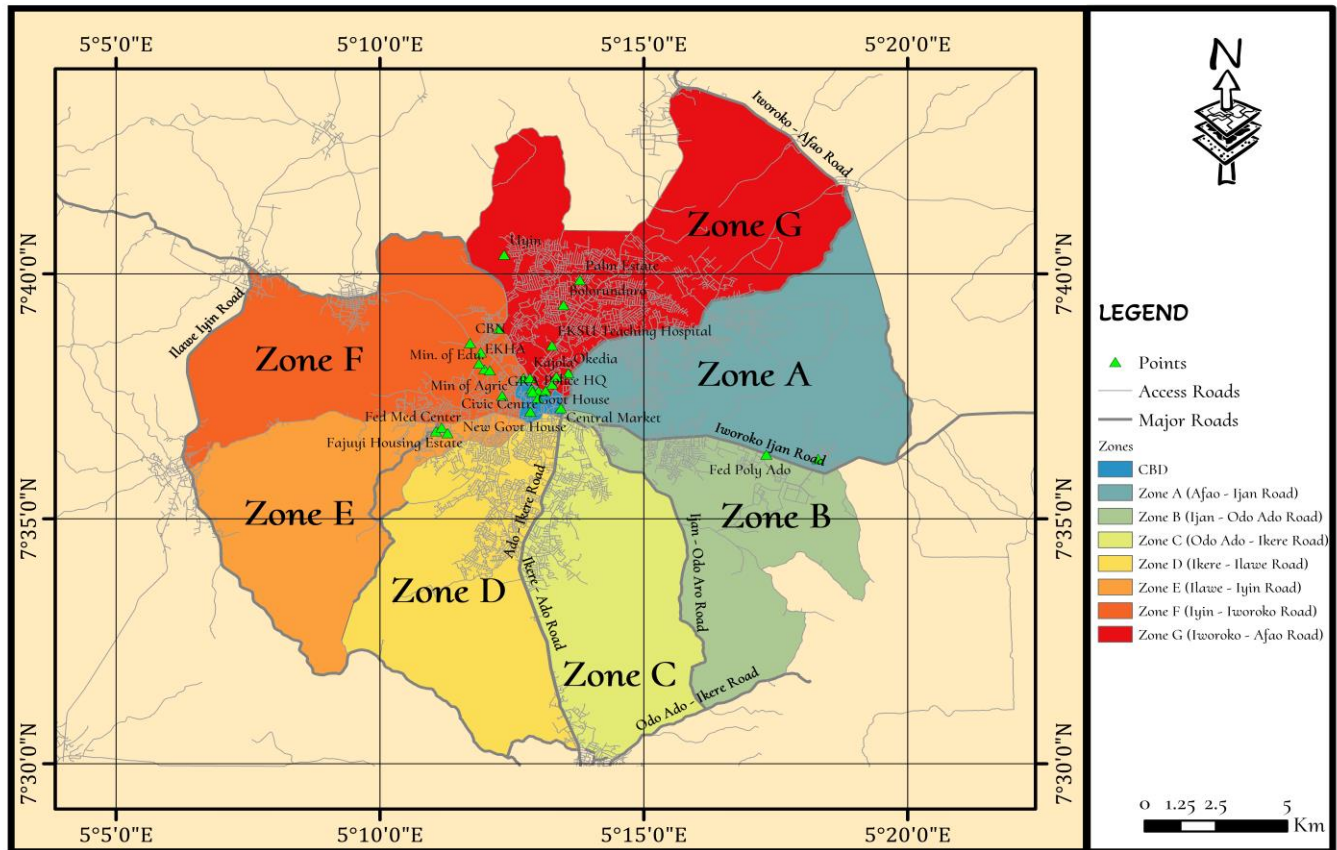
Appendix 1

Figure 8: Map showing the sectoral zones obtainable along the Residential Development Corridors in Ado-Ekiti

Source: Ministry of Land, Housing and Urban Development (2016), Updated by Researcher (2022)

Appendix 2

Table 9: Rate of Housing Addition in Ado-Ekiti RDCs from 1999-2009 @ 3.1 percent (NPC, 2006) growth rate

RDCs	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Afao-Ijan	2247	2310	2375	2375	2512	2584	2660	2739	2822	2912	3005
Ijan-Odo-Ado	762	785	809	809	860	887	915	944	974	1005	1037
Odo-Ado-Ikere	2432	2504	2578	2578	2732	2812	2895	2982	3072	3170	3271
Ikere-Ilawe	2937	3039	3144	3144	3363	3478	3597	3721	3850	3973	4100
Ilawe- Iyin	785	808	832	832	883	910	938	967	996	1028	1061
Iyin-Iworoko	2631	2732	2836	2836	3055	3170	3289	3413	3541	3654	3771
Iworoko-Afao	5287	5492	5703	5703	6141	6369	6603	6843	7089	7316	7550

Source: Borate & Sonar (2016) and updated by Researcher, (2024)

Table 10: Rate of Housing Addition in Ado-Ekiti RDCs from 2010-2020 @ 3.1 percent (NPC, 2006) growth rate

RDCs	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Afao-Ijan	3101	3200	3302	3408	3517	3629	3745	3865	3989	4117	4249
Ijan-Odo-Ado	1070	1104	1139	1175	1213	1252	1292	1333	1376	1420	1465
Odo-Ado-Ikere	3376	3484	3595	3710	3829	3951	4077	4207	4342	4481	4624
Ikere-Ilawe	4231	4366	4506	4650	4799	4953	5111	5275	5444	5618	5798
Ilawe-Iyin	1095	1130	1166	1203	1242	1282	1323	1365	1409	1454	1500
Iyin-Iworoko	3892	4017	4146	4279	4416	4557	4703	4853	5008	5168	5333
Iworoko-Afao	7792	8041	8298	8563	8837	9120	9412	9713	10024	10345	10676

Source: Borate & Sonar (2016) and updated by Researcher, (2024)

Table 11: Rate of Housing Addition in Ado-Ekiti RDCs from 2021-2031 @ 3.82 percent growth rate

RDCs	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Afao-Ijan	4385	4525	4709	4904	5109	5325	5548	5782	6027	6284
Ijan-Odo-Ado	1512	1560	1619	1680	1743	1808	1875	1944	2016	2090
Odo-Ado-Ikere	4772	4925	5113	5309	5514	5727	5949	6180	6420	6671
Ikere-Ilawe	5984	6175	6414	6662	6919	7185	7462	7748	8045	8353
Ilawe-Iyin	1548	1598	1653	1710	1769	1830	1892	1956	2022	2090
Iyin-Iworoko	5504	5680	5883	6100	6324	6556	6795	7042	7297	7561
Iworoko-Afao	11018	11370	11790	12223	12668	13125	13595	14078	14575	15086

Source: Borate & Sonar (2016) and updated by Researcher, (2024)

Table 12: Rate of Housing Addition in Ado-Ekiti RDCs from 2031-2034 @ 3.82 percent growth rate

RDCs	2031	2032	2033	2034
Afao-Ijan	6553	6834	7127	7400
Ijan-Odo-Ado	2166	2244	2325	2414
Odo-Ado-Ikere	6933	7206	7490	7776
Ikere-Ilawe	8673	9005	9349	9706
Ilawe-Iyin	2160	2232	2306	2394
Iyin-Iworoko	7833	8113	8402	8723
Iworoko-Afao	15612	16153	16708	17346

Source: Borate & Sonar (2016) and updated by Researcher, (2024)