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100 YEARS OF URBANIZATION IN NIGERIA

CHAPTER TWENTY-TWO

Residents' Perception of Housing Unit Landscaping in Ibadan.

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Introduction

Housing is seen as the shell or structure of a dwelling, (comprising of the design and basic built-in equipment such as the amount of space, the heating, lighting, sanitary, and similar facilities (Agbola, 2005). This was also buttressed by Otegbulu (1996) who noted that housing encompasses the immediate environment, sanitation, drainage, recreational facilities and all other economic and social activities that make life worthwhile like the open spaces, streets, walks, utilities, nursery and elementary schools, shops and other neighborhood facilities. All these fall within the dwelling unit of man, although what makes up housing in various areas differ from one another.

The increasing agglomeration of people in space has over the years change the scenic view of both urban and rural environment. The numerous problems associated with urban population explosion have led to diverse creation of different landscape types. Urban and rural residents have different expectation, perception, and interpretation about what landscape should be like and what it should be used for. This is especially the case at the rural-urban interface, where the characteristics of rural and urban landscapes have become blurred (Soinia, Vaaralab, and Eija, 2011). The residents' aesthetic perceptions towards residential landscapes are significant to the protection and sustainable development of regional landscapes, especially in third world countries where residential landscaping is seen as a luxury. In view of the need for adequate awareness of protection and sustainability, the concept of eco-diversity was established to understand the trend, problems and solutions of residents' perception of residential unit

landscape. The significant ecological effects have made cities to be traditionally perceived as an aggression against the environment which can have a profound impact on ecosystems (Douglas, 1983). As evident in most literatures, the level of accessibility of urban populace to urban green, recreation spaces, and level of urban aesthetics in their day-to-day activities heighten their perception of environmental problems.

The concept of landscape in most studies has been attributed to be the artificial beautification of environment. However, Landscape is a complex phenomenon which evolves continuously through time and space. It is a reflection of both natural processes and cultural changes throughout time. Landscapes can be a product of either only natural processes (natural landscapes) or human intervention on natural ecosystems (cultural landscapes). It was based on this assertion of landscape that the European Landscape Convention (ELC, 2000) defines landscape as: "an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors". The definition puts an emphasis on the perceptual dimension of the landscape. Since landscape involves a subjective experience, it encompasses a perceptive, artistic and existential meaning (Antrop, 2005). In addition, the perception of planning and other environment related disciplines with much agitation for safety, livelihood, and aesthetics among others reflected in the growing interest in the functionality urban nature and optimal planning and development. Based on the growing interest, it was established that interactions between the biotic elements and abiotic element provides an avenue for improved quality of mans' life. The improved quality of life ranges from an avenue of ease from the ups and downs of the urban townscape and work load to providing an opportunity to interact with nature. The green environment is a combination of urban parks, gardens, courtyard gardens, and other section of soft landscape. Often times, residents attach great importance and appreciate neighborhood and dwelling units characterised by landscaping.

In recent years, more and more interest has been given to urban green space. Originally, merely a decorative element in towns and cities, green space has now taken on a new value and function, the importance of which is widely acclaimed within the parameters of sustainable development. Rapid changes in economic, cultural outlook and social composition have

changed in recent years in African cities and there has been a shift in the recognizing and rejuvenation in the cities' landscapes, and these changes are of great importance to the cities' environmental problem control.

Perception is communal and individual defined, thus, it is assumed that residents from one location to another carry various notions about housing unit landscape and these perceptions dictate their action towards the environment consciously or unconsciously. It has been recognized that people make decisions in their environment not the way the environment is but the way they perceive it. The issue of residents perception to housing unit landscape is particularly important considering the fact that green space support the survival of man. These importance ranges from the support to urban ecosystem, contribute to sustainable development, settlement landscape and environmental quality, residents health, and quality of life.

The perception of the physical environment is not merely a physiological phenomenon it is also influenced by the individual's experiences (both social and cultural factors). Knox and Marston (2003) stated that "different cultural identities and status categories influence the ways in which people experience and understand their environments". Thus, perception of our surrounding environment is learnt, selective, dynamic, interactive and individual (Lee, 1973). It based on this backdrop that this research presents an overview to resident's perception of landscape (environmental) in context of landscape planning and design. It discusses perception of the landscape based on individual accessibility to landscape resources.

A great and growing environmental problem in urbanized areas is a dramatic product of deteriorations in the quality and quantity of green infrastructures. Problems ranging from urban heat island, pollution, flooding, leaching, death of soil, deforestation, are all a function of loss and negligence to landscaping. In Nigeria the extent to which poor landscaping has affected city outlook have not been fully documented, but some of the problems resulting from poor and lack of negligence towards dwelling unit landscape and city landscape can be observed through desertification in the Northern Nigeria. Where as in the other parts of the country, deforestation is not a prominent problem, thus there is a need to study the perception and variation as relating to housing unit landscape. This paper is aimed at

studying the perception of residents to housing unit landscaping in Ibadan. The objectives are to identify the landscape types, the landscape elements and their variations in the different density areas and to map the landscape areas of the housing units.

Study Area

Ibadan is located in south-western Nigeria. Ibadan city is located approximately on latitude $7^{\circ}13'$ to $7^{\circ}27'$ North and longitude $3^{\circ}49'$ to $3^{\circ}57'$ East of the Greenwich Meridian (Ayeeni, 1994). It is the capital of Oyo State, and is reputed to be the largest indigenous city in Africa, south of the Sahara. Ibadan had been the centre of administration of the old Western Region, Nigeria since the days of the British colonial rule. It is 128 km inland northeast of Lagos and 530 km southwest of Abuja, the federal capital, and is a prominent transit point between the coastal region and the areas to the north. Ibadan total land area of Ibadan is 3.123km^2 , out of which 15% (463.33km^2) falls within the urban centre and the remaining 85% is in the Rural Ibadan (Fapojuwomi and Asinwa, 2013). Ibadan is made up of Eleven (11) Local Government Areas, five (5) of the Local Government constitute the Urban Local Government, while the remaining six (6) form the surrounding parts known as the Rural or Peri-Urban Local Government.

Methodology

Geospatial techniques were used in determining the landscape areas within the study area. Imageries for the densities under study were acquired for different years, that is, high density 2003 and 2014, Medium density 2003 and 2014 and Low density 2003 and 2014. Imageries of different years were acquired in order to ascertain and detect the level of changes that has occurred in the landscaped areas overtime. On each of the imagery acquired, the landscape elements were classified into "hard" and "soft" elements and areas of each of these elements were determined using Arcgis 10.2 software. To determine the landscaped area in each of the residential densities (Low, Medium and high) understudy, "shape files" were created for each of the elements of landscape on the "Arcatalog" Window of Arcgis 10.2. Landscape elements found in each of the residential densities were digitized, hence the area of each landscape elements were ascertained. All the Imageries used for the analysis were acquired on Google Earth application.

Data were also collected for the study through questionnaire administration and a total of 123 questionnaires were sampled to 123 housing unit randomly within the three density areas out of which (60) 48.8% were allotted to high density, (50) 40.7% to low density, and the remaining (13) 10.6% to Medium density. The areas considered are: G.R.A., Oke-Ado, Mapo, Beere, Bodija and Olubadan area. Questionnaire administration was adopted with the aim of establishing the factor that determines reasons behind housing unit landscape in Ibadan and also to identify the landscape elements in each of the sampled household. The data processing techniques adopted include, Geo-referencing, Digitizing, Data analysis and Map composition.

Findings and Discussion

For the purpose of easy understanding and comprehension, the analysis is into sections such that it captures to a large extent different residential perceptions of landscaping. The objectives formulated for this study guided the finding presentations which focuses on the variables identified. The study findings were presented in figures, tables and summary.

Table 1 reveals the landscape elements within the sampled low density; G.R.A. and Bodija in Ibadan between 2003 and 2014. The study shows that in 2003, 9.75% and 90.25% of the area landscaped in G.R.A. were hard and soft landscape respectively (as indicated in figure 1 and figure 2). In 2014, the soft landscape area in G.R.A. reduced to 83.31% as against 90.25% recorded in 2014. The reduction in soft landscape elements can be ascribed to conversion of soft landscape elements into paved areas which is also a hard landscape element. This conversion was made by the residents of G.R.A. so as to meet the need gap in parking within their neighbourhood.

Table 1: Area Coverage of Landscape Elements for Low Density

LOCATION/DENSITY	YEAR	DENSITY	AREA	%
G.R.A (Low)	2003	Hard landscape	12642.18	9.75
		Soft landscape	117006.76	90.25
		TOTAL	129648.94	100
	2014	Hard landscape	27332.99	16.69
		Soft landscape	111495.69	83.31
		TOTAL	138828.68	100
BODIJA (Low)	2003	Hard landscape	2710	32.34
		Soft landscape	5669	67.66
		TOTAL	8379	100
	2014	Hard landscape	14113	54.48
		Soft landscape	11792	45.52
		TOTAL	25905	100

Source: Authors' field Survey, 2014.

Bodija which is also a low density area in Ibadan recorded 32.34% of hard landscape elements and 67.66% of soft landscape elements in 2003 (Table 1). As a result of residents' expedition and quest for space of several activities including parking space, some elements of soft landscape were converted to hard landscape which lead to a reduction in the area of the soft landscape in 2014. The soft landscape reduced from 67.66% to 45.52%, while the hard landscape area increased from 32.34% to 54.48% in the said year (figure 3 and figure 4). It was observed that the residents of these two areas (G.R.A and Bodija) do have regard for landscape. Thus, affluence and enlightenment can be attributed to their fondness for landscape.

Furthermore, Table 2 shows that Oke-Ado axis of the study area has relatively slight changes in its hard landscape and soft landscape within the study period of 2003 and 2014. Hard landscape recorded in 2003 and 2014 were 34.89% and 35.83% respectively, while the soft elements of landscape recorded in 2003 was 65.11% (figure 5, and figure 6). There was a slight

decline in the area (64.16%) of soft landscape in 2014 as against 65.11% recorded in 2003. However, the landscape characteristics vary a little at Olubadan axis (figure 7 and figure 8). Significantly, hard landscape elements (75.55%) were identified in 2003. Due to increase in developmental activities the hard landscape elements reduced to 38.29% in 2014, while the soft landscape elements increased from 24.47% in 2003 to 61.71% in 2014 respectively (table 2). Moreover, it could be deduced that there is no difference in the increment and reduction of hard landscape and soft landscape surfaces in both low and medium densities, given the years under study.

Table 2: Area Coverage of Landscape Elements for Medium Density

Location/Density	Year	Density		Area	%
		Hard landscape	Soft landscape		
OKE-ADO (Medium)	2003	Hard landscape		6587.09	34.89
		Soft landscape		12291.41	65.11
		Total		18878.50	100
	2014	Hard landscape		5613.15	35.84
		Soft landscape		10048.06	64.16
		Total		15661.21	100
OLUBADAN (medium)	2003	Hard landscape		8788	75.53
		Soft landscape		2847	24.47
		Total		11635	100
	2014	Hard landscape		7153	38.29
		Soft landscape		11530	61.71
		Total		18683	100

Source: Authors' field survey, 2014.

Subsequently, it has been revealed in Table 3 that no landscape elements were identified in Beere between 2003 and 2014. Evidently, there were indications that Beere residents do not have landscaped environment (figure 9 and figure 10). The indifference towards landscape in this area can be credited to the stiff competition for housing and demand for commercial

activities and income of the residents. Contrarily, there were fondness of landscape in Mapo residents (table 3). The study reveals that Mapo area has 100% of soft landscape elements in 2003 and 2014, while the hard landscape elements within this period were identified at Mapo Hall, Olubadan palace. Mapo post office and few residential buildings. The high percentage (100%) of soft landscape in Mapo between 2003 and 2014 owe to the fact the Mapo use to be an administrative area during the colonial era and elements of soft landscape left are been maintained (figure 11 and figure 12).

Table 3: Area Coverage of Landscape Elements for High Density

Location/Density	Year	Density	Area	%
BEERE (High)	2003	Hard landscape	Nil	0
		Soft landscape	Nil	0
		Total	Nil	0
	2014	Hard landscape	Nil	0
		Soft landscape	Nil	0
		Total	Nil	0
MAPO (High)	2003	Hard landscape	Nil	0
		Soft landscape	2076.49	100
		Total	2076.49	100
	2014	Hard landscape	Nil	0
		Soft landscape	3139.95	100
		Total	3139.95	100

Source: Authors' field survey, 2014.

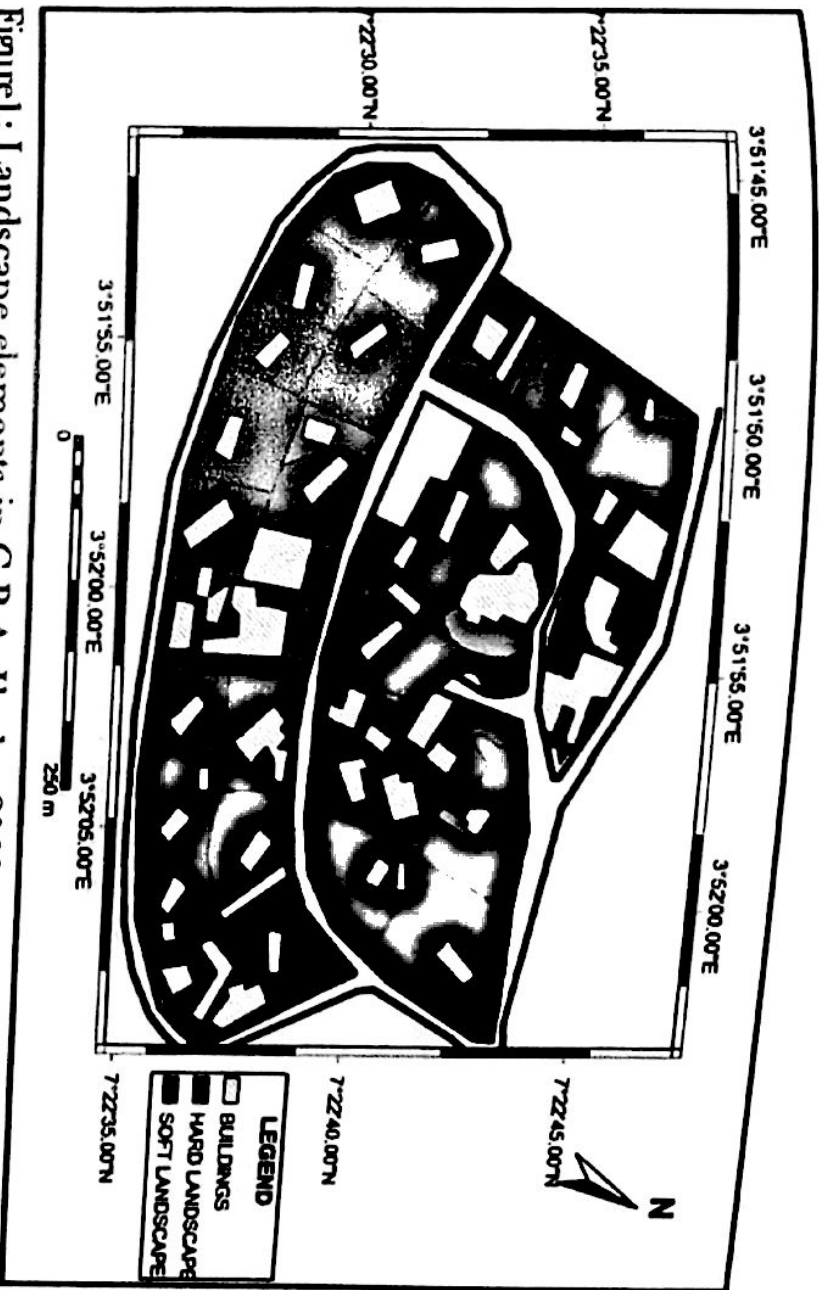


Figure 1: Landscape elements in G.R.A. Ibadan 2003
Source: Authors' field survey, 2014

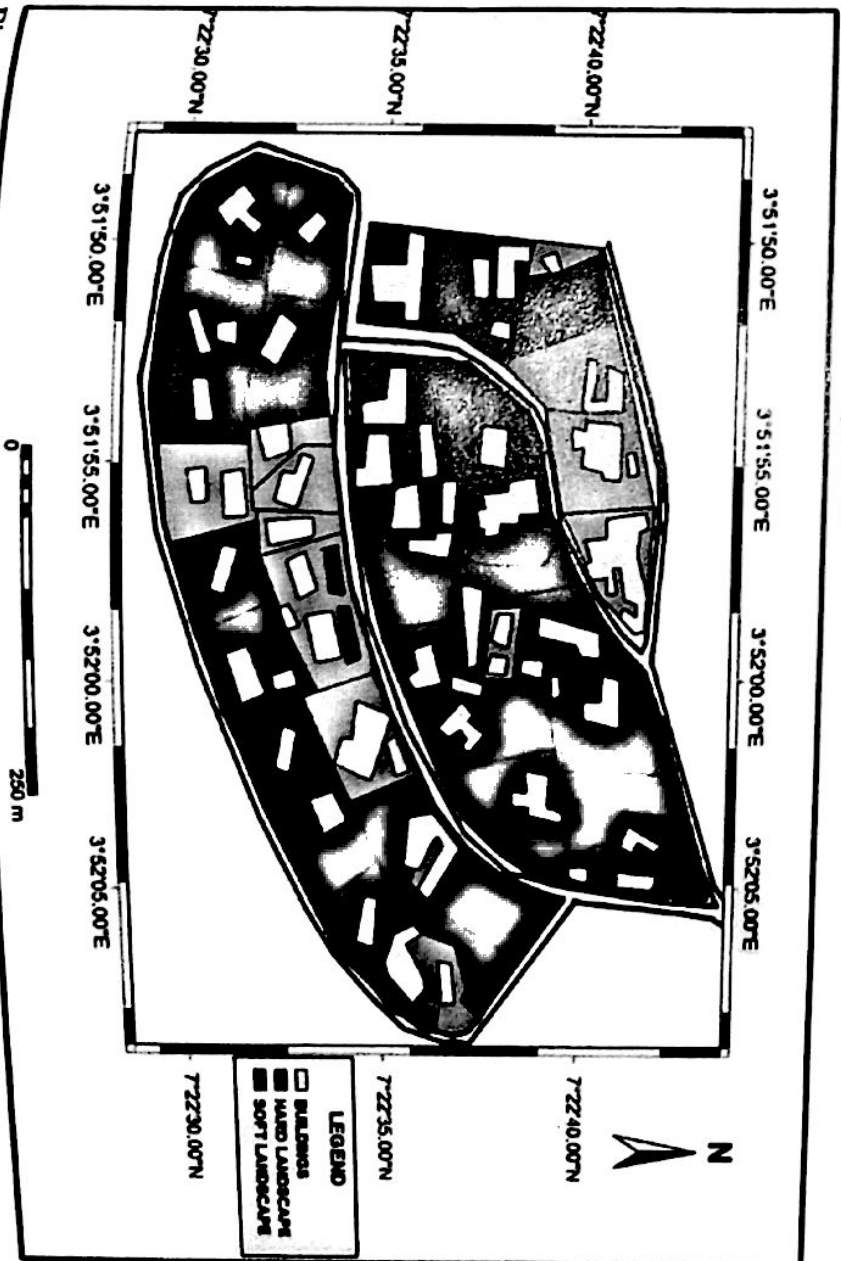


Figure 2: Landscape elements in G.R.A. Ibadan 2014
Source: Authors' field survey, 2014

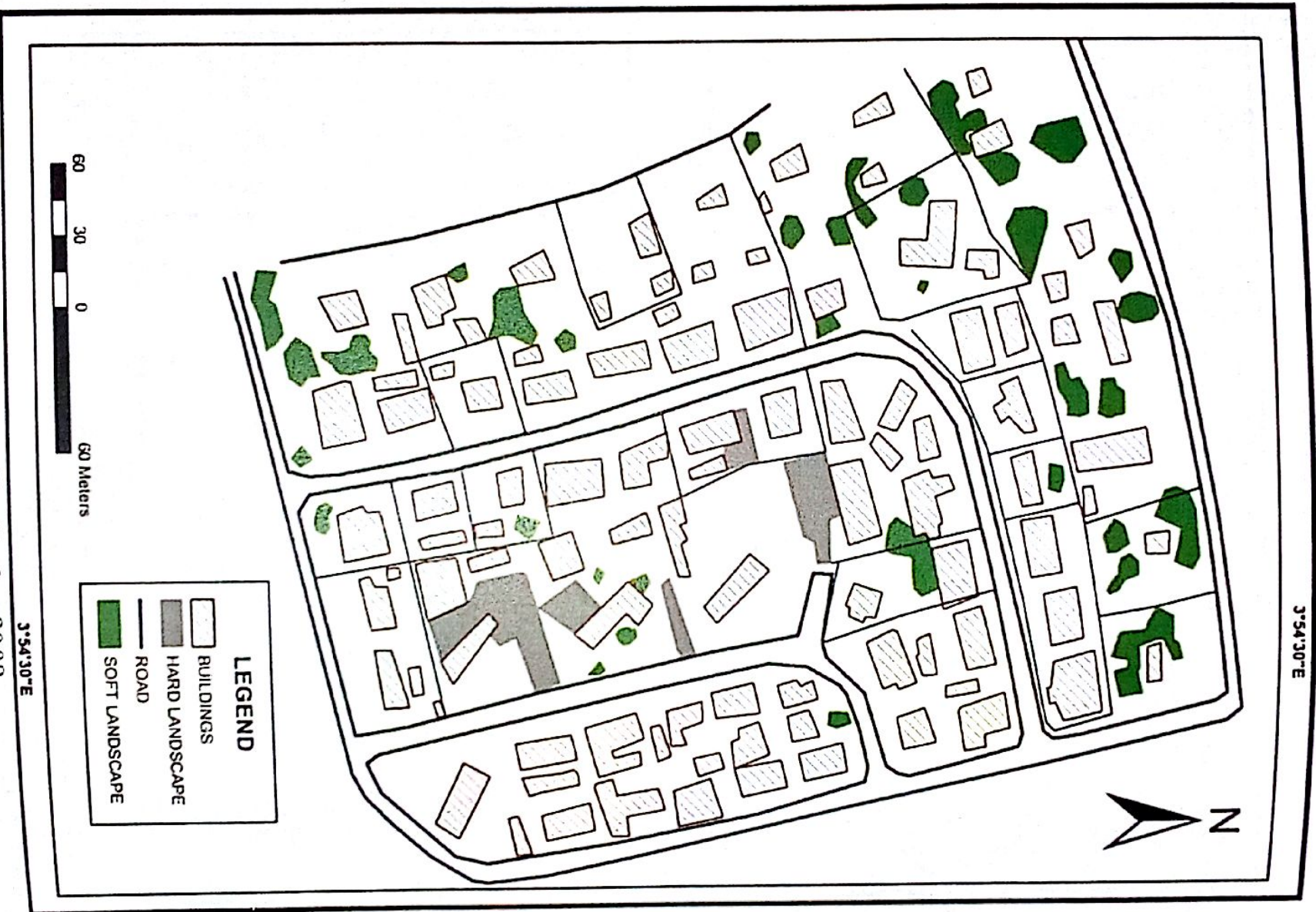


Figure 3: Landscape elements in Bodija, Ibadan 2003
Source: Authors' field survey, 2014

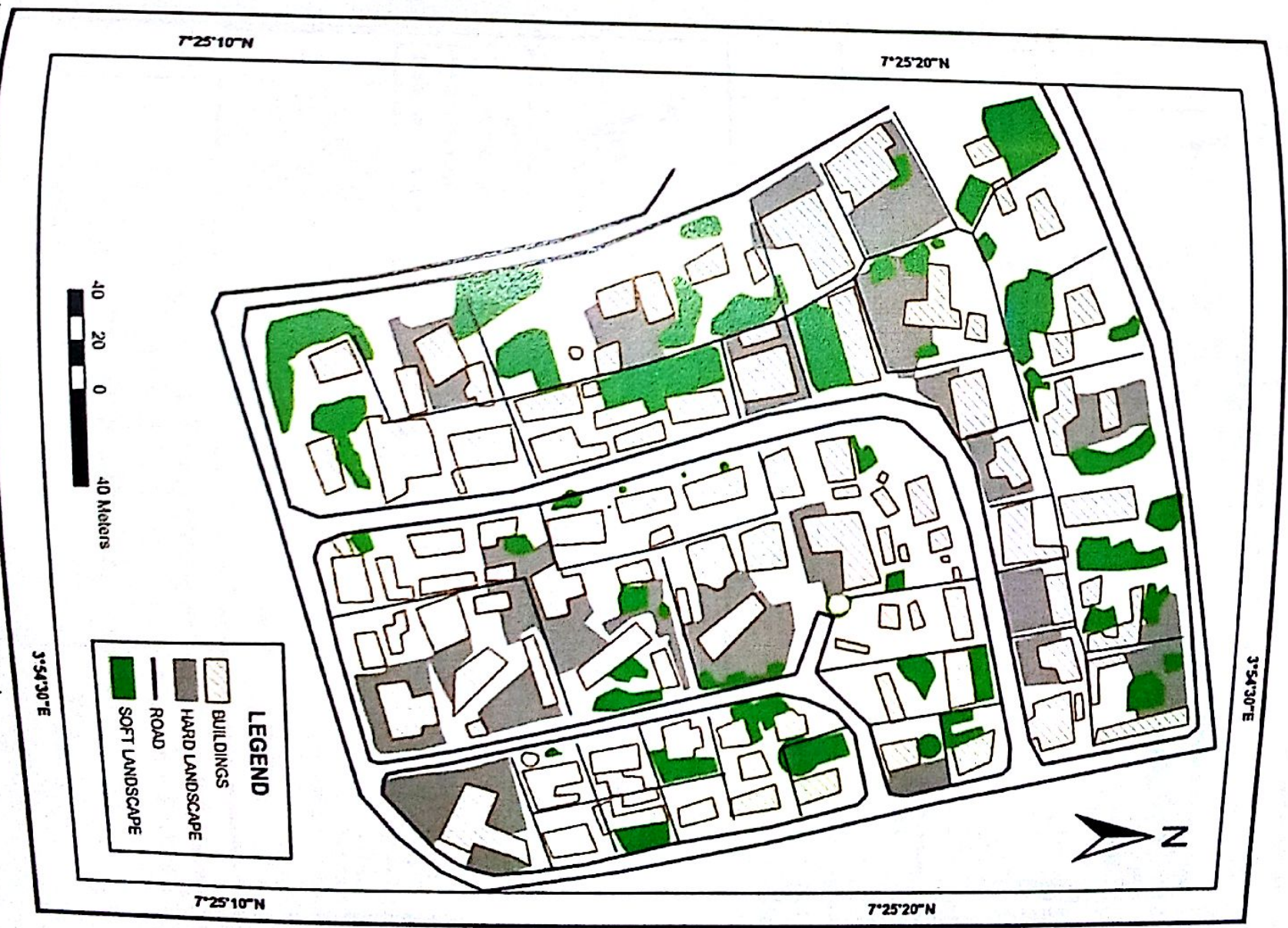


Figure 4: Landscape elements in Bodija, Ibadan 2014.
Source: Authors' field survey, 2014

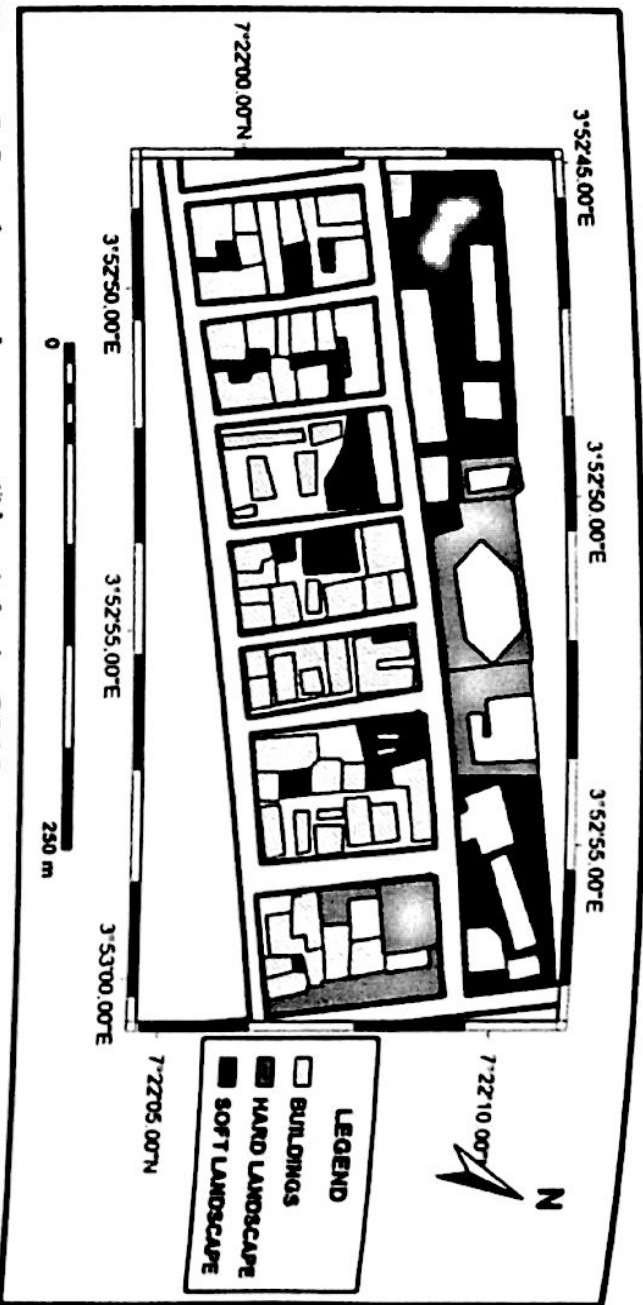


Figure 5: Landscaped area at Oke-Ado in 2003
Source: Authors' field survey, 2014

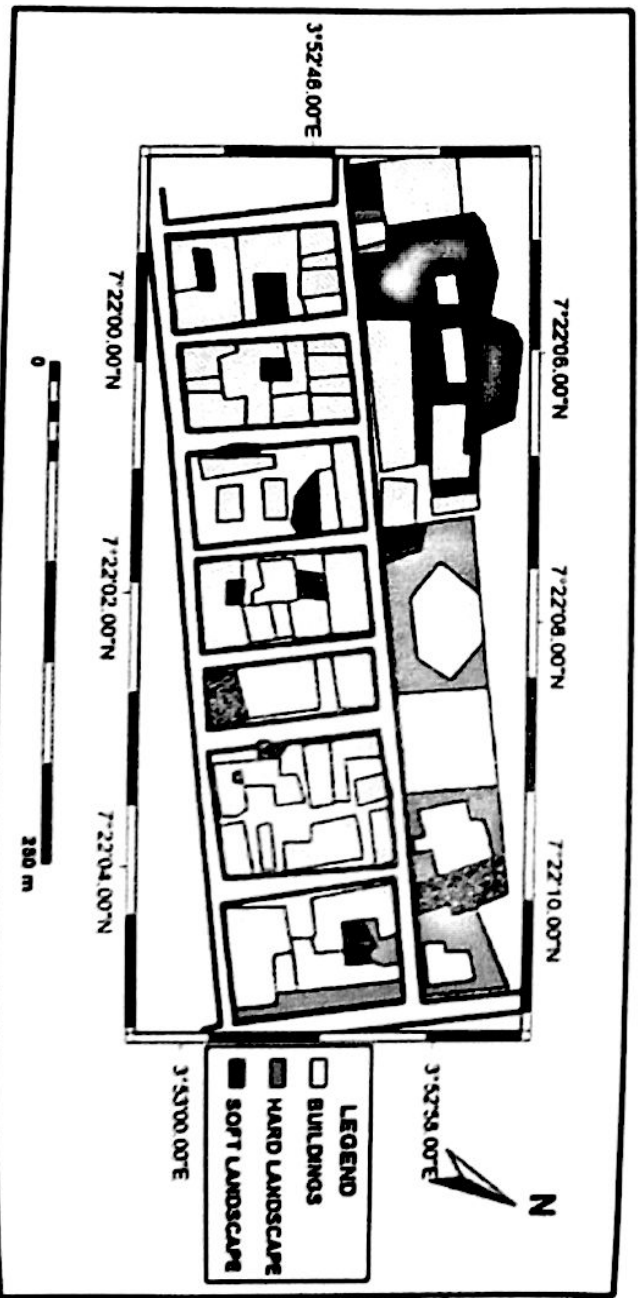


Figure 6: Landscaped area at Oke-Ado in 2014
Source: Authors' field survey, 2014



Figure 7: Landscaped area at Olubadan in 2008
Source: Authors' field survey, 2014



Figure 8: Landscaped area at Olubadan in 2014
Source: Authors' field survey, 2014

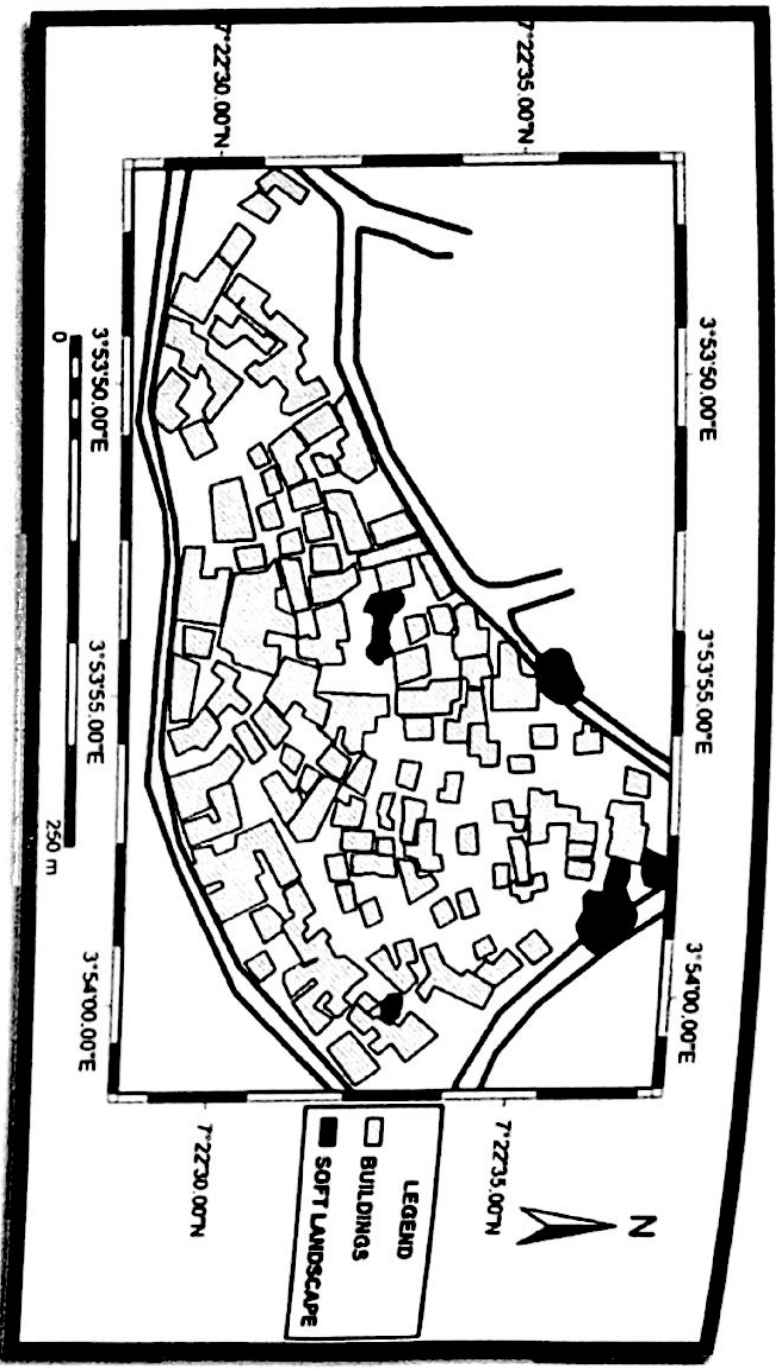


Figure 9: Landscaped area at Mapo in 2003
Source: Authors' field survey, 2014

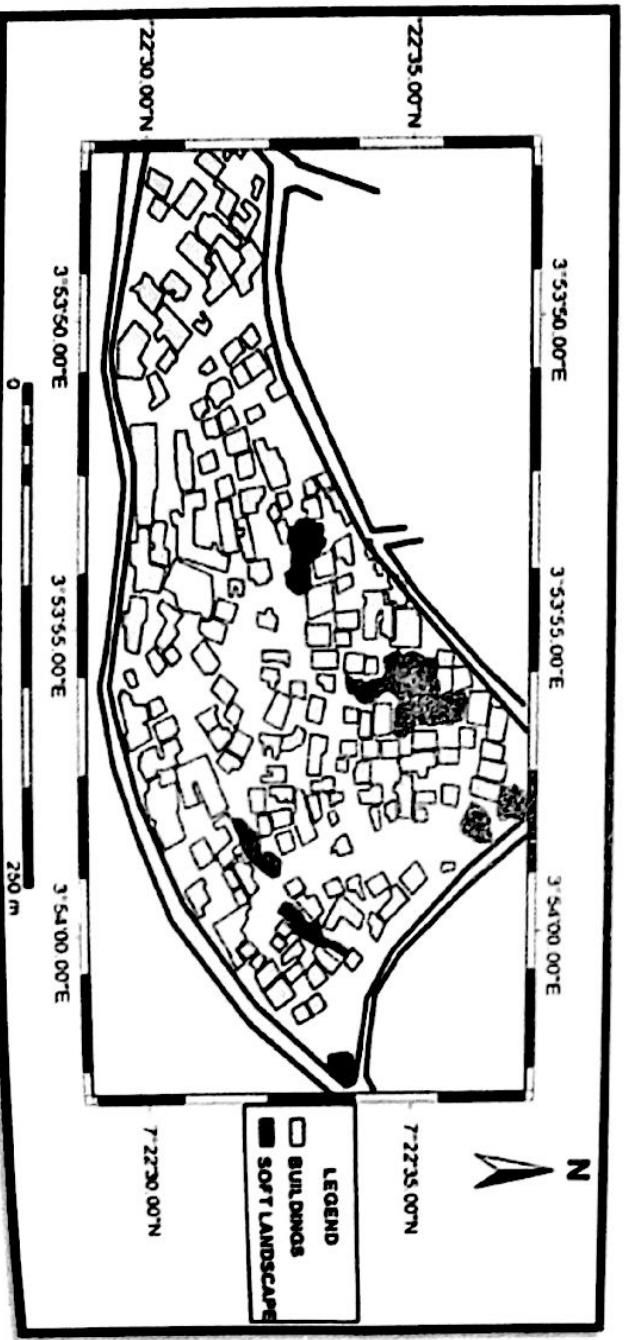


Figure 10: Landscaped area at Mapo in 2014
Source: Authors' field survey, 2014

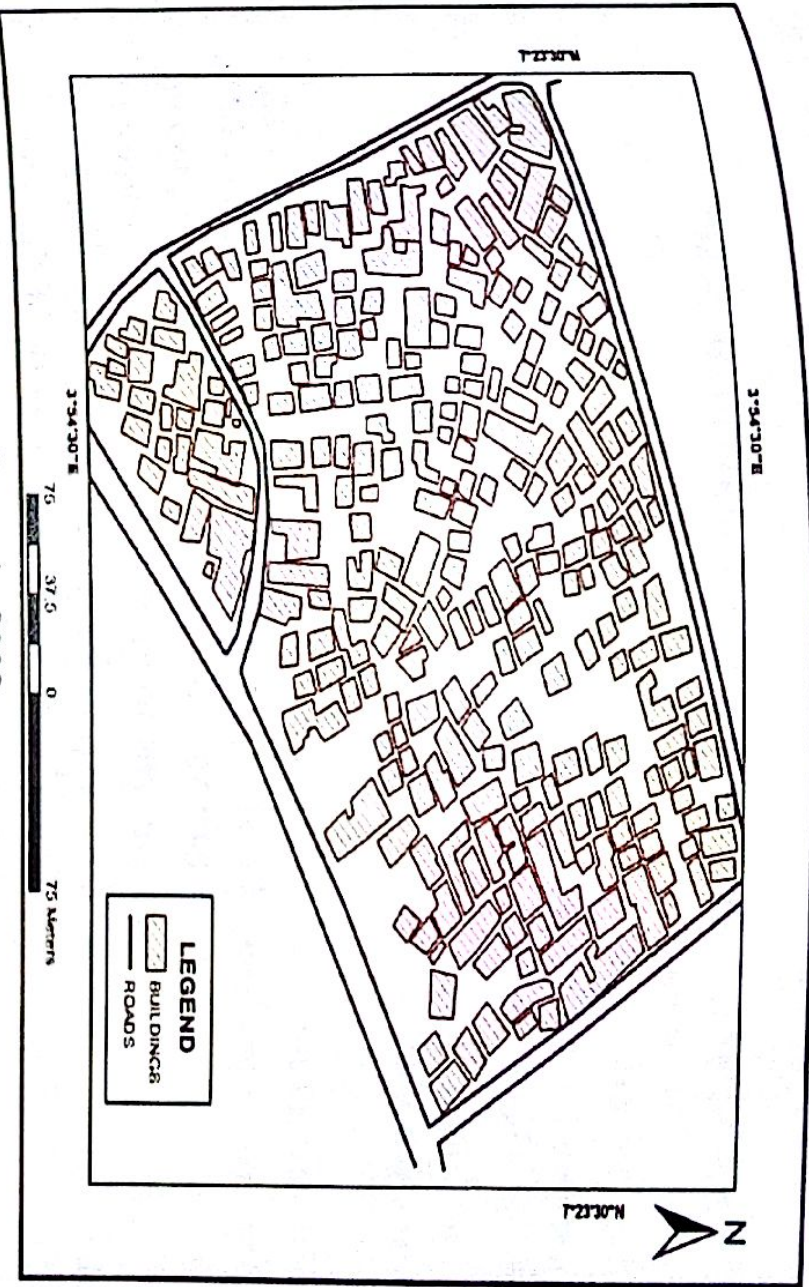


Figure 11: Landscaped area at Beere in 2003
Source: Authors' field survey, 2014

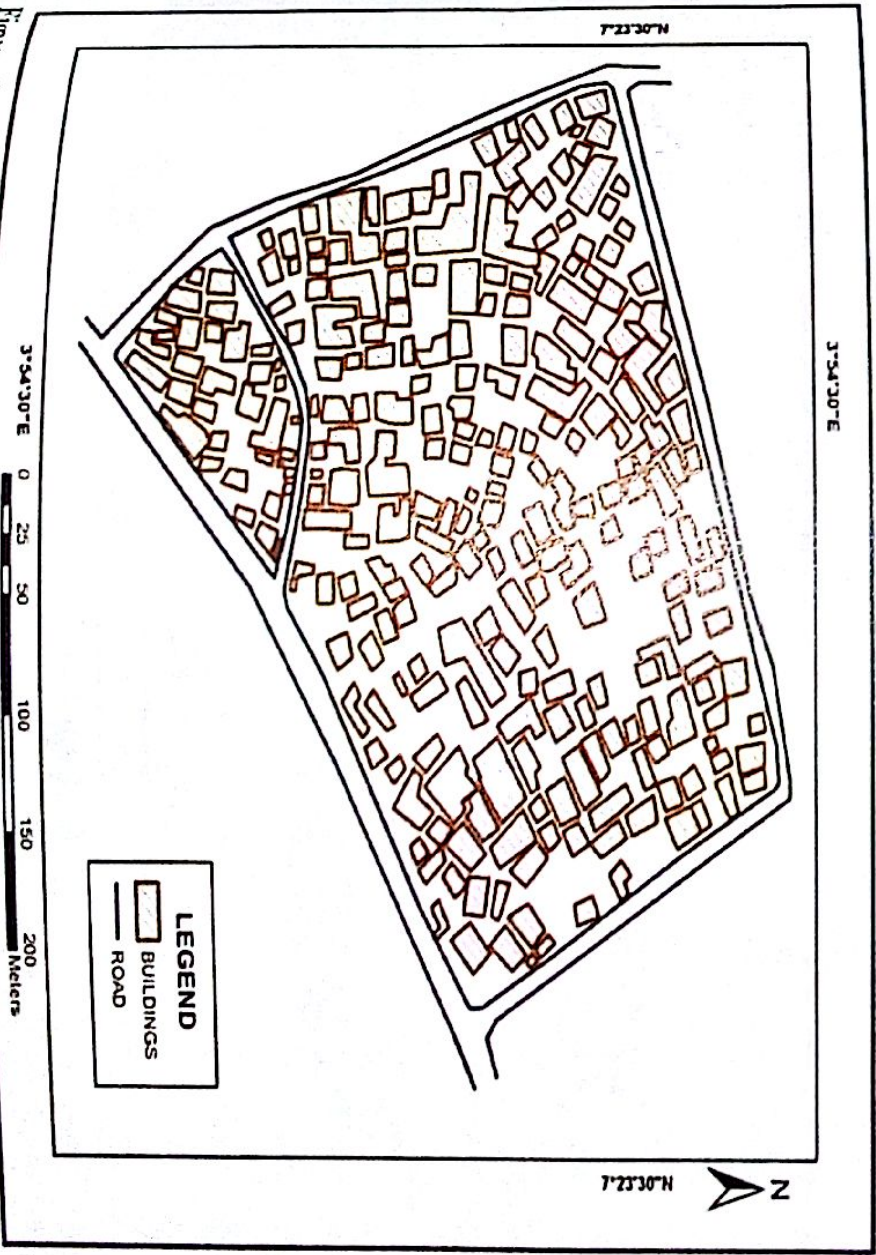


Figure 12: Landscaped area at Beere in 2014
Source: Authors' field survey, 2014

The variation in density of residents is a measure to observe individual understanding of landscape practicing irrespective of spatial setting. Out of the housing unit sampled, the study revealed that 65.9% of the respondents live in flats, 17.1% of the respondents live in bungalows, 4.9% of the respondents live duplexes while the remaining 12.2% indicated that they live in other forms of houses which includes face-face you, self contain apartment.

In corroborating the analysis of the Satellite imageries with the questionnaire analysis, the study reveals that residents within study area engaged more in soft landscape with 46.3% of the residents practicing soft landscaping, 34.1% of the respondents practice hard landscape; the remaining 19.5% of the respondents practice both hard and soft landscaping. What constitute the landscape elements of the housing unit varies from courtyard farming which includes vegetable farm, small orchard within the housing unit, grass, flowers, shrubs and some the landscape elements are mainly paved surfaces (figure 13).

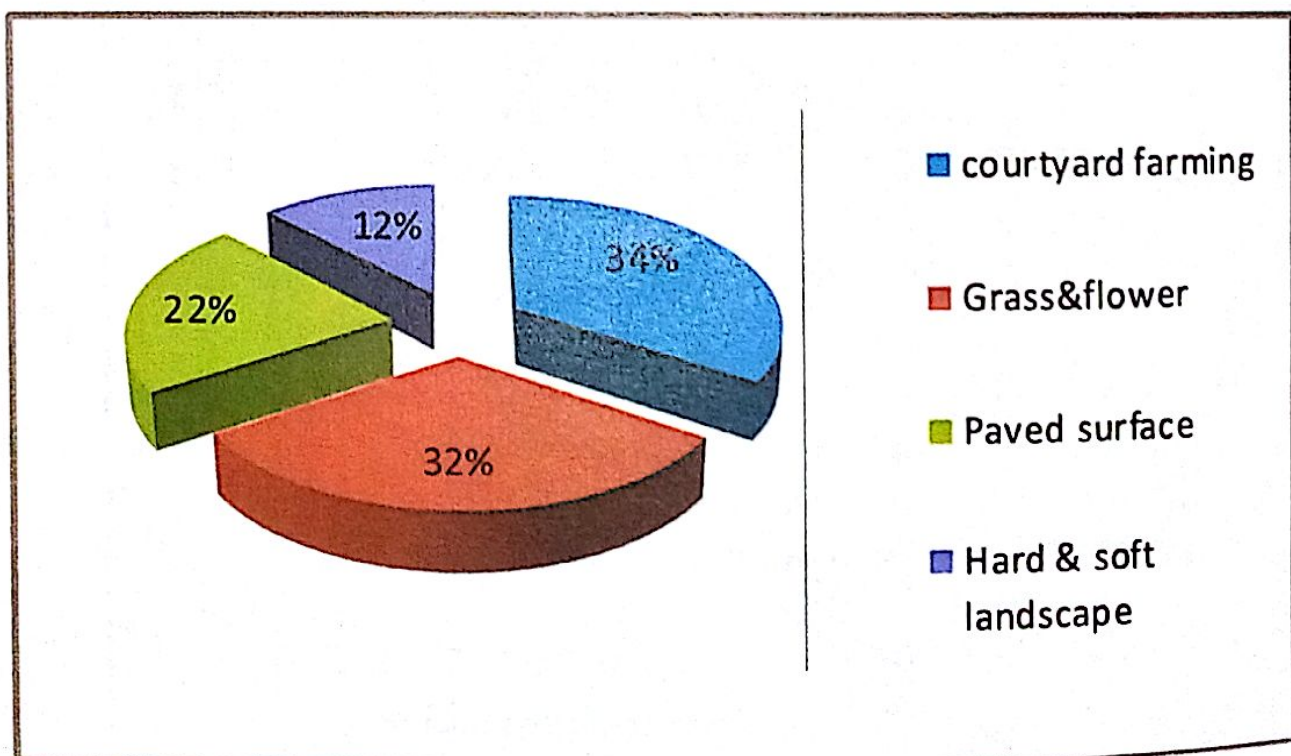


Figure 13: Elements of Dwelling Unit Landscape
Source: Authors' field survey, 2014

In the developing world, a number of factors have been observed by different scholars, which affects the prospects of landscape practiced within residential unit. Based on the study carried out in Ibadan, some of the factors that accounted for variation in landscape elements and practice of landscape are presented in table 4.

Table 4: Analysis from questionnaire showing factors influencing dwelling unit landscape in Ibadan.

Determining factor identified	Agree		Disagree		Total	
	No	%	No	%	No	%
Home environment/location	114	92.7	9	7.3	123	100.0
Residents' interest/perception	120	97.6	3	2.4	123	100.0
Physical environment	108	87.8	15	12.2	123	100.0
Income	96	78	27	22	123	100.0
Educational level	87	70.7	36	29.3	123	100.0
Food security	60	48.7	63	51.3	123	100.0
Increase environment quality	105	85.3	18	14.6	123	100.0
Occurrence of disaster	66	53.7	57	46.4	123	100.0
Workers	63	51.2	60	48.8	123	100.0
Legislation	51	41.5	72	58.5	123	100.0
Land availability	99	80.5	24	19.5	123	100.0
Relaxation	111	90.3	12	9.7	123	100.0
Climate	78	63.4	45	36.6	123	100.0

Source: Authors' field survey, 2014

The table 4 shows that 92.7% of the residents sampled agreed that the geographical location of the houses often influence the practice of landscaping within the housing unit, while 7.3% disagree. This study reveals that the residents within the sampled housing unit agreed to the major factors that dictate the practice of landscaping within a housing unit. They are: residents' interest and understanding of green landscape (97.6%), land availability (80.5%), Increase environment quality (85.3%), income of residents (78%), Education level of residents (70.7%), need for a relaxation spot accounted for (90.3%). Respondents disagree that certain factors such as food security, occurrence of disaster, workers to tidy the landscape up, and government legislation doesn't have anything to do with the practice of landscape within a housing unit.

This study also reveals (figure 14) that 66.9% of the total 123 respondents stated that 20% of the entire open space within all their dwelling unit were been used for soft housing unit landscape and it was identified that most residents do wish to engage in housing unit landscape, as 87.8% of the respondents indicated that they do like to engage in resident landscaping. While 2.4% of the respondents said they are not interested. Whereas, 9.8% of the resident indicated that they have not yet decide whether they will or will not participate in landscape practice.

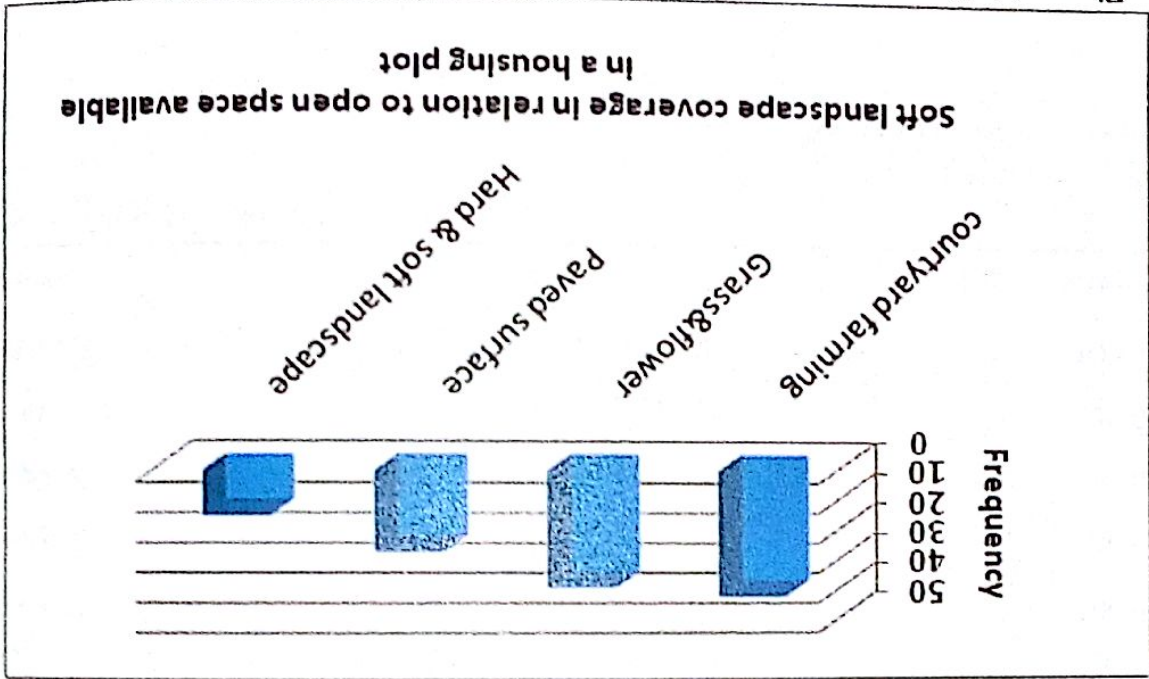


Figure 14: Percentage of Soft Landscape in Relation to Total Open Space Source: Authors' field survey, 2014

Conclusion and Recommendation

The study found out that large percentage of residents in low and medium density location of the study areas tends to partake in residences landscaping ranging from ordinary flowers to trees and courtyard farm

This achievement is yet to spread to high density areas, most of which still constitute more of ancient architecture as far as building is concerned. However, the level of awareness of the need for greenery in our residences over the past few years has positive impacts on the life of dwellers in most of the high densities of the study area as majority of them imbibe the act of planning greenery.

It was also discovered that there is improvement in building legislations such that there is space for landscaping in the study area. The Urban and Regional Planning Board of the Ministry of Physical Environment of Oyo state has produced a copy of building and planning guide with much emphasizes on spaces expected of developers in different residential densities to leave as for adequate ventilation (setbacks).

For there to be sustainable living within a particular housing unit, there is a need to promote housing unit landscape as this will help reduce the impact of climate change and variability and also serve as a tool to supporting an eco-friendly environment. Thus, the study recommends that housing unit landscape should be encouraged and government policy should be in place to support and green and eco-friendly dwelling unit. Ibadan Metropolis has, for a long time, being identified with different names because of its dirtiness, this would be put to a stop if the residents have a change of attitude and imbibed in themselves the culture of green spaces; Hence, the area studied requires concerted and decisive actions to prevent future devastating re-occurrence of city defamnation at the same time promoting social, economic, and cultural well-being of the people..

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