



Assessment of Ueban Public Open Spaces in Mubi Metropolitan Area, Adamawa State Nigeria

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Abstract

Open Spaces whether public or private can increase the aesthetics appeal, amenity and value of a neighbourhood, town, city, suburb or regional area, apart from providing places to play, be it active in case of active recreation or relax in passive recreation, public open space afford many various benefits. Environmental benefits can be gained through protecting our local Flora and Fauna (i.e biodiversity) and visual landscapes, retiring ecological system and linkages, and management of urban water. Socially the benefits that can be derived by our communities from Public Open Spaces include interaction and recreation and enhancement of our cultural values. Economic benefits that can be derived from Public Open Spaces include provision of service supporting visitation for sport, recreation and tourism. The aim of this paper is to assess condition of existing Public Open Spaces in Mubi Metropolitan area. One hundred questionnaires were administered and retrieved and this represents 0.03% of the people in the study area. It was found that the area lacks these facilities and the few ones on ground are in bad shape due to poor maintenance. Recommendations proffered include provision of more these facilities and rehabilitation of existing ones by the state Government and the Planning Authority at Local Government level.

Introduction

Open Spaces whether public or private can increase the aesthetics appeal, amenity and value of a neighbourhood, town, city, suburb or regional area, apart from providing places to play, be it active in case of active recreation or relax in passive recreation, public open space afford many various benefits. Environmental benefits can be gained through protecting our local Flora and Fauna (i.e biodiversity) and visual landscapes, retiring ecological system and linkages, and management of urban water. Socially the benefits that can be derived by our communities from Public Open Spaces include interaction and recreation and enhancement of our cultural values. Economic benefits that can be derived from Public Open Spaces include provision of service supporting visitation for sport, recreation and tourism.

Public Open space for recreation is one of the social infrastructures required in any community. This is because it plays an important role in improving environmental ecosystem. This is why open spaces are recommended as focus point areas for

recreation and as social cultivation centres among societies. So it is important that we plan our urban open spaces to meet up with the need of our urban centres so as to optimize their positive effects to the entire metropolitan area.

In Mubi Metropolitan area (which is made up of Mubi North and part of Mubi South Local Government Areas), the existing public open spaces are inadequate going by increase in population and commercial activities in the defined area most especially after the insurgency (that is, between 2010 - 2019). As such there is need to improve the condition of existing open spaces and provision of even more to cater for the population.

Public open spaces are where public life takes place, where people from different backgrounds come together and interact as equal. These interactions take many different forms, including casual contact, socializing, community activities, entertainment, political expression and commercial exchange. Many Town Planners see public open spaces as important to building community

and fostering a democratic society. The problems of Public Open Space in Mubi metropolitan area include inadequate or absence of public open spaces, rapid Urbanisation of the region, inadequate infrastructure, erosion problems, poor drainage system and flooding.

The aim of this research is to assess existing Public Open Spaces in Mubi Metropolitan Area and review standards on the provision of Public Open Spaces in Urban Areas with a view of making recommendation for improvement. This was achieved through the following objectives:

- To examine existing Public Open space in Mubi Metropolitan Area
- To review standards on the provision of Public Open Space in Urban Areas

Conceptualization

The Charter of Public Space (A global forum for Public Space) defined Public spaces as all places publicly owned or of public use, accessible and enjoyable by all for free and without a profit motive (UN-Habitat 2013).

Types of Public Open Spaces

The United Nations Settlement Programme (UN Habitat 2013) categorised Public Open Spaces into five main groups. The first category includes the public spaces like Avenues, Boulevards, Streets, Bicycle paths, Squares, Sidewalks, Passages and galleries, Highways, Riverbanks and waterfronts. The second category comprised places like Parks, Gardens and Playgrounds. The third category comprised specialised urban spaces like sport facilities, beaches and museums. Fourth group include Public libraries, Civic Centres and Municipal Markets. Fifth category of Public Open Spaces is the City Space itself and the Cyber Space. However, for the purpose of this study only traditional Public Open Spaces are going to be assessed and these include Playgrounds, Parks, Gardens, Religious grounds, and civic centres

Importance of Public Open Spaces

The importance of Public Open Spaces lies in the benefits we derive from their use which can be Social, Environmental or Health benefits.

(a) Environmental Benefits

Open space, especially green open space in our urban areas, provides environmental benefits which include:

- (i) Trapping air pollutants and cleaning the air for free circulation of oxygen which is very vital for human beings and the biodiversity.
- (ii) Improving ventilation and air circulation in densely built-up urban areas
- (iii) Reducing the urban heat island effect
- (iv) Absorbing storm-water run-off and reducing flooding and
- (v) Acting as a noise buffer in densely populated urban areas as a result of noise generated by streams of traffic and manufacturing activities.

(b) Social Benefits of Public Open Space

It is difficult to quantify the social benefits of public open spaces, but we can look at it from the angle of social and community functions it serves. These functions include:

- (i) Facilitates social interaction. In a study from the Netherlands, people who lived near public open space felt less lonely and said they had more social support. Having a free and accessible place for social interaction is especially important for people who do not have a lot of disposable income.
- (ii) Provides a space for community activities and events like marriage ceremonies, religious gatherings, etc, etc.
- (iii) Provides civic space for political expression, election campaigning, and social movements.
- (iv) Enables people to mix (directly or indirectly) with people from different social, economic, and cultural backgrounds. This may help people become more tolerant and understanding of each other.

(c) Health Benefits

There is relatively little research on the health benefits of open space in Nigeria, but overseas studies have found that:

- (i) Elderly people in Japan who live near walk able, green open space in Japan live longer than those who don't.
- (ii) In the Netherlands, people living in neighbourhoods with more green open space suffered from fewer illnesses after controlling for socioeconomic and demographic characteristics.
- (iii) Studies from several countries including the Netherlands and the UK found that people who live in areas with more green open space are happier and have lower rates of depression and anxiety.

Standards for the provision of Urban Open Spaces

The use of standards in the provision of Open spaces is believed to have begun in the United Kingdom as the pioneer country in adopting the standards

approach in the late 19th century. Since then, this approach has become the vital part in urban green space planning policy and delivery to ensure that each citizen has access to the use of urban green space and to fulfil their social needs particularly in a high density urban area (Maryanti, 2019). It is known that the provision of an urban green space is essential to improve the quality of life as it offers various benefits in terms of social, environment, economic and aesthetic aspects of urban living and surroundings. Thus, the provision of an urban green space is necessary to strengthen the efforts of the local authority to create a liveable city and encourage urban development towards a sustainability framework.

According to the World Health Organisation (WHO), every city is recommended to provide a minimum of 9 square metres of urban green space for each person, provided that it should be accessible, safe and functional. The World Health Organization also suggests that an ideal amount of urban green space can be generously provided as much as 50 square meters per person. From this viewpoint, a sufficient and generous provision of urban green space especially above the minimum requirement should be the aim of every city in the world. It is imperative because the most liveable city is the one that provide extensive green space for its population.

Types of Standards

Globally, there are five types of standards that have been commonly used. They are population-ratio, area percentage, catchment area, facility specification and local standards as described in (Table 1).

Based on the description in the table, population-ratio is the most common type of standards used by planners in many countries and remains as the major planning criteria for the provision of green space and recreation area. Through the population-ratio, the amount of urban green space per 1000 population or per person is usually fixed by the national or the state planning standards that should be achieved and maintained, no matter how high the rate of densification occurs in the city. The amount of urban green space per 1000 population or per person requires the calculation based on its specific formula or a set of rules that is applied uniformly to all situations.

Table 1. Showing Types of Standards

s/no	Types of Standards	Description
1	Population ratio/ fixed standards	A prescribed level of provision of open space related to the level of population – typically per 1000 population.

2	Area percentage standards	A specified percentage of land to be allocated for open space (e.g. 10% from the total development area is allocated for open space).
3	Catchment area based standards	Distances which residents should have to travel to gain access (e.g. ¼ mile walking distance from users' neighbourhood).
4	Facility standards	Specifications (size, markings and equipment for a sports field).
5	Local standards	Standards of provision specific to a local area based on local conditions and data, locally determined or expressed in any of the above formats

Source: Adopted from Maryanti, (2016).

There are several reasons why standards which have been developed as guidelines have also been adopted as set of rules. Wilkinson (as cited in Maryanti, 2016) explained that standards are clear and simple to assist planners or related agencies to apply them as an instant recommendation or solution to solve problems regarding the adequacy of urban green space provision. Standards are often established by national agency and recognized by experts. Thus this approach is considered to be valid and applicable. The original idea of standards is used as a benchmark among local authorities to evaluate the state or national progress in supplying the urban green space needs for its populations

The Study Area

Mubi is a fast growing urban area and one the commercial hub of Adamawa State apart from the state capital Yola. And it is the largest urban area in the Adamawa North senatorial District which comprised of five Local Government Areas of Mubi North, Mubi South, Michika, Maiha and Madagli. The Town is located close to Nigeria -Cameroun border. The urban area covered part of Mubi- North and Mubi -South Local Government Areas of Adamawa State. Major road network in the area is a trunk (A) road which links the town to the Cameroun through Kwaja and Sahuda in Mubi South Local Government Area. The town is connected to the National Grid through a 33kv line from Damboa in neighbouring Borno State. Major Health facilities in the area are the General Hospital Serving both Mubi- North and Mubi -South Local Government Areas. There are three other primary Health centres in Kolere Ward, Sabon Layi Ward and Sebore in Nasarawo Ward. Adamawa State University, The Federal

Polytechnic Mubi, and College of Health Technology are all sited in Mubi Metropolitan Area.

Major ethnic groups in the town include Fali, Gude, Higgi, Margi, Bura, Fulanis, Hausa, Igbo, Yoruba, and few other ethnic groups from South-south region of Nigeria. There are traditional industries in the area and they include wood carving, weaving, blacksmithing, pottery and calabash work.

Methodology

The data required for this study include existing Public Open Spaces in Mubi metropolitan area, Private Open Spaces, Community Open Space, existing facilities, utilities and service in the urban area and potential sites for the provision of public open spaces in the urban area.

These data were generated through two sources. That is primary and secondary sources. Primary data were obtained through administration of questionnaires to collect data from respondent residing in the Town. Interviews were conducted and observations were made. Pictures were taken to depict dilapidated existing Public Spaces. Secondary data were obtained from textbooks, journal, and magazines, especially from online sources, newspapers unpublished thesis and projects.

The population of the entire Local Government Area a revealed by the (2006) Population census is 223,857 people (Census 2006 projected). Sampling technique adopted for this study is systematic sampling technique. Sample size is 100 which is equivalent to 0.03 % of the population. Data collected were analysed using simple percentages.

Results and Discussion

(I) Sex Distribution of Respondents

The sex distribution of the people interviewed indicated that the dominant group is male which constituted 70% of the respondents and this means that this group based on the nature of the community involved (a muslim community), existing open spaces are dominated by men with a few women (30%) as indicated in Table 2 below.

Table 2: Sex Distribution of Respondents

S/no	Respondents	Frequency	Percentages
1	Male	70	70
2	Female	30	30
	Total		100

Source: FieldSurvey, (2019).

Age Distribution of respondents

The age distribution of respondents helps to determine the types and nature of public spaces to be provided. Age is one of the socio-economic characteristics of planning and design of public open spaces and serves very important role since the respondents are categorised into groups in the study area.

Table 3: Age Distribution of Respondents

S/no	Age	Frequency	Percentages
1	15 - 25	10	10
2	26 - 45	60	60
3	46 +	30	30
			100

Source: Field Survey,(2019).

Table 3 shows that 70% of the participants in this study fall within the productive age group and of course the active group. This implies that there is need for the provision of active recreational facilities to cater for this set of people. Recreational facilities that will enhance the physical and mental capacity of urban dwellers especially the health of our children and young people are crucial.

There is also the issue of the elderly (that is, those within the age limit 46+ years). From (Table 3) they constitute 30% of the participants in this study. The elderly need open spaces that will encourage them to walk more. Walking has been proven to reduce the risk of a heart attack by 50 per cent, diabetes by 50 per cent, colon cancer by 30 per cent, and fracture of the femur by up to 40 per cent (Grisso, (1991) as cited in CABE Space, 2003).

Marital Status of Respondents

The participants interviewed were categorised into five groups based on their marital status. These are Singles, Married, Divorced, Widows and Widowers.

Table 4: Showing Marital Status

s/no	Respondents	Frequency	Percentages
1	Married	70	70
2	Single	10	10
3	Divorced	10	10

4	Widow	10	10
5	widower	-	-
			100

Source: Field Survey, (2019).

Table 4 shows that majority of the respondents are married (this group constitutes 70% of the people interviewed). The high percentage of married respondents also confirmed the high value placed on marriage institution in the study area. Marriage Ceremonies in Nigeria and particularly in Northern Nigeria is accompanied with festivities and festivities require space. Another reason why this percentage is high Traditional religion and Islam as dominant religions in the area encourage polygamy. Social gatherings enhanced community interaction amongst different ethnic groups. Public Open Spaces when properly designed and cared for, they bring communities together, provide meeting places and foster social ties of a kind that have been disappearing in many urban areas. These spaces shape the cultural identity of an area, are part of its unique character and provide a sense of place for local communities.

Occupation

Table 5: Occupation of Respondents

S/no	Occupation	Frequency	Percentages
1	Civil Servants	30	30
2	Farmers	20	20
3	Businessmen	30	30
4	Students	10	10
5	Others	10	10
			100

Source: Field Survey, (2019).

This presentation in (table 5) indicates that 80% of the respondents are productive. This is possible because Mubi is a border Town, a commercial hub of Adamawa State and a house to three major institutions in the State (Adamawa State University, Federal Polytechnic Mubi and college of health Technology). These sets of people need facilities and services that will improve their living standards.

Occupancy Ratio

Table 6: Number of persons per Household

S/n	Households	Frequency	Percentages ¹
1	1 – 5	40	40
2	6 – 10	30	30
3	11 +	30	30
			100

Source: Field Survey, (2019).

The presentation in (Table 6) above indicates that the study area is densely Populated because 60% of respondents occupancy ratio is above average (Average number of persons per household is 6 according to Standards). This implies that there is congestion and overcrowding in the study area. This is a common characteristic of most urban areas in Nigeria. Open Spaces such as Parks, Squares and Play grounds are needed in this type of arrangement in order serve as areas where we can play games, appreciate nature, and relax so as to reduce tension from the bustle of a busy daily life.

Existing Open Spaces in Mubi Urban Area

The Open Spaces in Mubi Town are owned Government and religious group. These open spaces include Abubakar Isa Ahmadu Square in Kwaccham neighbourhood (popularly known as Filin Ball), the Eid Ground in Lokuwa Ward, the Emirs Palace and the open market square at Gipalma Vimtim a, Mubi North Local Government Area. These open spaces as mentioned have been encroached upon by many activities as a result negligence on the part of authorities concerned and lack of awareness on the part of the public. These problems are portrayed in the plates below.



Plate (a)I



Plate (a)II

Plates (a) I and (a)II show the entrance to and the premise of Abubakar Isah Ahmadu Square in Mubi Town. As seen many informal activities are taking place by the entrance to this square and the area is converted to Parking lot by truck drivers (plate (a)ii).The fence has collapsed and the area is full of potholes due to poor maintenance.



Plate (b) I



Plate (b) II

Plates (b) I and II show the Eid Praying ground (Filin Eidi in the native language). This Eid ground has been eroded as we can see deep gullies in the background (Plate b (I)). Many schools were sited in this location both public and private as this can be seen in the background (Plate b (II)). Six schools were identified and they include Darul Hikma, Mubi 1 Secondary school, Lokuwa 1 primary School, Demonstration Secondary School, Bin Fodio Primary /Secondary School, Government Girls Secondary School and Fitiyanu Secondary



Plate (c) I



Plate (c) II

Plate (c) is the abandon mini stadium at Gipalma vintim. This abandoned mini stadium needs to be rehabilitated so that it can be utilised for recreation. We can see how it is put into agricultural use by intruders..



Plate (d) I



Plate (d) II

Plate (d) is the Emir's palace which is made up of the Emir's compound, the Central Mosque and an Open Space. This arrangement portrays the three basic elements (Emir's Palace, Mosque and dandali) of a typical Hausa/Fulani community.

Conclusion

Cities become great when they develop a great public space system. In addition, the personality of all great cities is not solely determined by their buildings. Beauty, for example, is the result not only of great features but also of harmony and order. These qualities, in cities, often correspond to the patterns according to which streets; the public spaces have been planned. In conclusion, there is need for improvement in the area of Public Open Space provision and management Mubi Urban Area since the provision of this facility will have a great impact on the physical, economic and social wellbeing of the people.

Recommendations

Based on the findings of this study the following recommendations are hereby proffered:

- According to the constitution of Federal Republic of Nigeria and the Land use Act of (1978) Public Open Spaces are within the jurisdiction of Municipal Authorities which in this case are Local Planning Authorities at Local Government level. Mubi North and Mubi South Local Governments have a key role to play in the areas of management of existing and acquire land for provision of more public open spaces.
- Individuals and Religious Group can also come in the area of establishment of private Open Spaces or Community Open Spaces at Community Level.
- Adamawa State Government can come in to help in the area of rehabilitation of existing Public Open Spaces especially in the state capital and all the (21) Local Government Headquarters in the state as regards to the important roles these facilities play in the wellbeing of the people.

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