
EFFECTIVENESS OF ANTHROPOMETRICAL LANDSCAPE ON CIRCULATION PATTERN OF PUBLIC BUILDINGS; A CASE STUDY

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ABSTRACT

Most public buildings are sadly landscape or not landscape at all. Even those landscaped are neglected and not maintained. The importance and the need to have an adequately design of anthropometric landscape in public building was evaluated to determine if the landscaping use suit it purpose which includes; effective for both pedestrian and vehicular circulation. This evaluation assists to determine better suggestion on how to enhance effective landscaping of public building. Questionnaires were distributed to the staff and visitors and statistically analysed by the use of bar-chart, the result shows that 50% of the respondents agreed that the flowering plants play a great role aesthetically, 42.6% respondents agreed circulation is good, and 42.6% responded that the walkways in the complex are good enough in providing good movement. 19.7% responded fair and 13.5% responded poor. The complex is aesthetically sound, the walkways are effective and the drainage pattern and the soil cover help to reduce the effect of soil erosion, this shows that anthropometrical landscaping has a good effect on public buildings.

Keywords: *Anthropometrical-landscape, circulation, effectiveness, public-building.*

INTRODUCTION

Landscapes we know play a vital role in our environment. Ranging from aesthetic value, assist one in good circulation environmental control and even our health. The users of the public buildings need all these elements listed above to live a healthy life. Most public buildings lack this characteristic of landscaping and definitely will affect the users one way or the other. Landscape can be defined as the art and science of developing, redesigning land and what is on it for greater human use and enjoyment (Soyi 2006). They are categories as; Natural landscape and Anthropometrical landscape. Natural landscape: is derived direct from the nature, habitat or region that occurs in their pure forms, (Eckbo 1997) e.g. landforms, wind precipitation and temperature, highland or lowlands, soil condition etc. while, anthropometrical landscape: is the landscape that has been deliberately and totally formed by man, e.g. outdoor furniture (seat sculpture, street lamp holder), Hard surface – roads (arterial local) pavement, soft surface – grassed part garden, lawn, turf. Anthropometrical landscape elements are; outdoor furniture, decorative elements, hard surfaces, soft surfaces and water bodies (Ogunrayewa, Agbo & Aguntoye 2004).

Function of Landscape

Landscape can be used to control environment as follows: control of wind, control of erosion, reduction of solar radiation, provision of privacy and enclosure enhancing health purpose, aesthetic purposes and for socialization. Social functions of landscape are aimed at upgrading the environment. Landscape creates beautiful scenes that help man in appreciating his immediate environment or surroundings. Social relationship around people like sits out to have good views, walks under shades and interact with each another. The importance and the need to have an adequately design of anthropometric landscape in public building was evaluated to determine if the landscaping use suit it purpose which includes; effective circulation for both pedestrian and vehicular. The evaluation will assist to determine make better suggestion on how to enhance effective landscaping of public building users. It was discover that the complex is aesthetically sound, the walkways are effective and the drainage pattern and the soil cover help to reduce the effect of soil erosion, this shows that anthropometrical landscaping has a good effect on public buildings.

METHOD

Questionnaires were distributed to the staff and visitors, statistically analysed by the use of bar-charts and the instruments that were used for the collection of data are non-testing instrument which are questionnaire and observation. The Questionnaires were administered, with the aid of a research assistant, both staff and visitors of the complex fill in the questionnaire. The data were analysed from my observations and questionnaire distributed. The results were generated as shown below.

Table 1: Sit out on the complex enhance effective relaxation spot for staff and visitors.

S/N	OPTION	FREQUENCY	PERCENTAGE	REMARK
i	Agreed	102	57.3%	Agreed
ii	Strongly agreed	23	12.9%	
iii	Disagreed	32	17.9%	
iv	Strongly disagreed	21	11.7%	

Source: - Field Survey (2007)

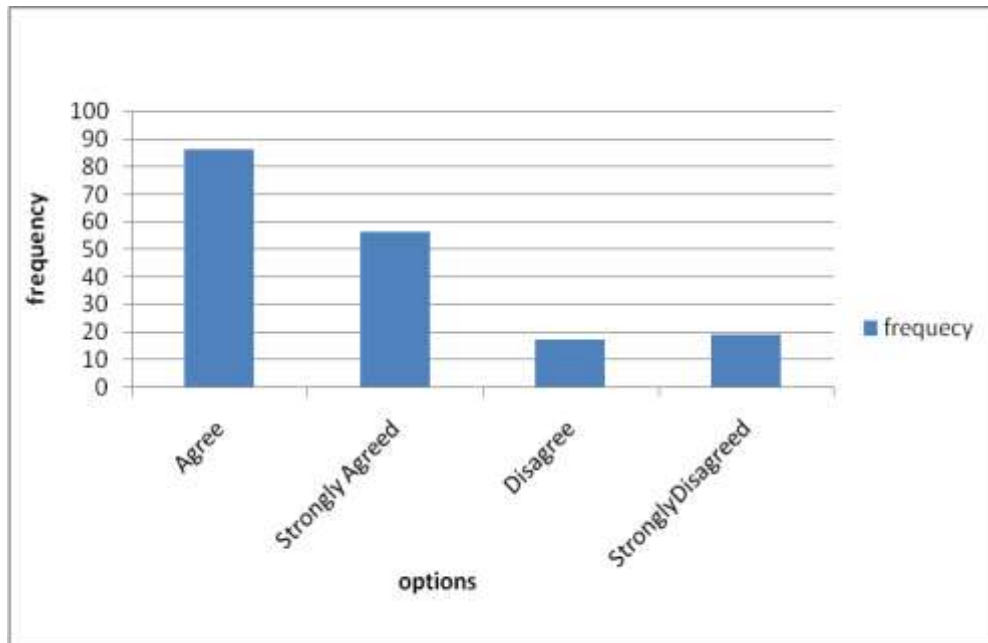


Fig1. Bar chart representation Source: Field Survey (2007)

Table 2: How convenient are the walkways in providing good movement?

S/n	Option	Frequency	Percentage	Remark
I	poor	24	13.5%	
Ii	Fair	35	19.7%	
Iii	Good	76	42.6%	Good
Iv	Very good	43	24.2%	

Source: - Field Survey (2007)

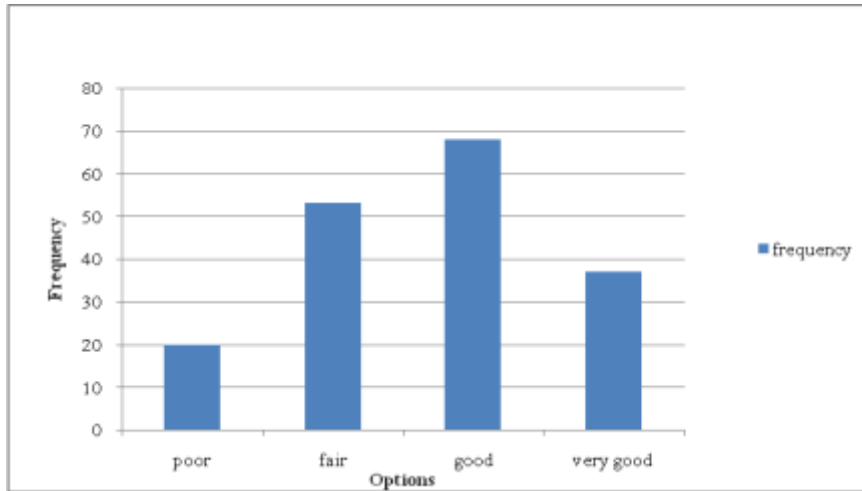


Fig 2. Bar chart representation Source: - Field Survey (2007)

Plate 1 Drainage pattern



Plate 2 Vehicular cover



Plate 3 Pedestrian part



Plate 4 Courtyard and



Plate 5 Communal meeting place



Plate 6 Pedestrian part and walkway



Table 3: The courtyard creates a communal relationship among staff of the complex.

S/N	OPTION	FREQUENCY	PERCENTAGE	REMARK
i	Agreed	86	48.3%	Agreed
ii	Strongly agreed	56	31.4%	
iii	Disagreed	17	9.5%	
iv	Strongly disagreed	19	10.7%	

Field Survey (2007)

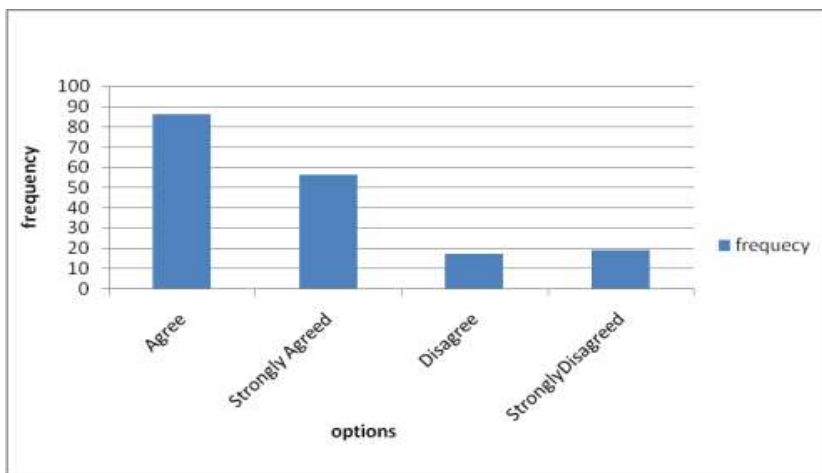


Fig 2: Bar chart representation Source: - Field Survey (2007)

RECOMMENDATION

This study was intended to evaluate the landscaping in public building in particular to Adamawa State Secretariat so as to ascertain the effectiveness of landscaping on public buildings.

Based on the findings of this study, the following recommendations have been made.

- a. Adequate parking should be provided.
- b. The walkways should be covered so as to protect the users from the element of weather.
- c. The elements of landscaping both natural and artificial should be maintained adequately to enable a better aesthetical view rather than eye-saw.

CONCLUSION

Based on the result of this study which 60% of the users of building are both staff and visitor of other public buildings, responded that; the complex is aesthetically sound, the walkways are effective and the drainage pattern and the soil cover help to reduce the effect of soil erosion. Therefore proper practice of anthropometrical landscaping should be encouraged.

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REFERENCES

Adebayo, A. A. and Tukur, L (1999), *Adamawa in maps*.

Mbale, L. (1999), "*Brief history of Adamawa state secretariat*"

Appleton, J. (1975) "*The experience of landscape*" Chichester, John Wiley and sons.

Carpenter, P. K. and Walker T.D (1990) "*plant in the landscape*" 2nd edition New W.H Freeman and company.

Cliff, T. (1981) "*Handbook of urban landscape*" consultant editor, The Architectural press London

Crichaga, F.J (1983) "*Landscape plant in Design*" west port, Connecticut. AVI publishing company.

Eckbo, G. (1997) "*The nature of landscape design*" London Architectonic press.

Inbels, J.E. (1997) "*Landscape Principle and Practice*" Albany, New York. Delmar publishers.

- Lauri, M. (1975) *"An Introduction to landscape Architecture"* Nairobi, Pitman.
- Musa, L.S. (2004) "Landscape potentials of Nigerian cities" *Journal of association of architectural education in Nigeria* Pp (23-26)
- Ogunrayewa, M.O., (2004) *"An analysis of landscape structure in Jos metropolis"* Agbo, N.O and Aguntoye, A Pp (17, 18)
- Soyi, D. (2006) *"Effects of landscape on Administrative Buildings: a case study of Government House Yola Administrative block"* Pp (4, 5, 8, 10, 11, 12, 13) unpublished thesis (B tech) Federal university of technology Yola.
- Ugah, A. (2005) *"A critique of the landscape of Federal University of Technology Yola: a case study of Academic Areas"* Pp (6) Unpublished thesis (B tech) Federal university of technology Yola.