Shift from Traditional to Modern Building Concepts and Designs in Ringim Town: A Comparative Study of Aesthetics, Values, Functions and Durability

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Abstract:- This study is part of an Undergraduate Project for the award of “B.Tech (Hons) Building Technology Education” at the “Abubakar Tafawa Balewa University”, Bauchi State, Nigeria, and is aimed to identify the contrasts between Traditional and Modern Buildings in Ringim Town, Jigawa State, Northern Nigeria, with respect to their “Purpose, Durability, Aesthetics and Values. The study’s subjects were the residents of Ringim Town, with 88 respondents drawn from ten cohorts of young people (under 40) and Adults (over 40) living in the Katutu, Galadanchi, Walawa, Majiyawar-Gari, and Marakawa Quarters. In order to better understand the shift from traditional to modern building concepts and designs in Ringim, the study used a quantitative approach, specifically a structured questionnaire that focused on groups of youths and adults and asked questions about functions, durability, aesthetics, and values. The answers to the research questions were analyzed using the simple mean and standard deviation. The study’s conclusions showed that while traditional buildings in Ringim had greater fire, acoustic, and thermal insulation, they also have poor water resistance, to name a few drawbacks. It is advised that experts in the fields of Architecture, Town planning, and Construction, among others, pay attention to the indigenous Design theory, Technology, Artisanship, and Craftsman ship connected to the emergence of Traditional Building. Additionally, recommendations indicated that, for comparative purposes, comparable studies had to be carried out at other tiers of educational establishments, such as Colleges, Polytechnics, and Universities, as well as in other parts of the State and Nation.

Keywords:- Traditional Building; Modern Building; Functions; Durability; Aesthetics; Values.

I. INTRODUCTION

- Study Background:

Even though Modern Building Designs are preferable in Ringim town, Traditional Building Construction is still simpler and less expensive because the materials used are primarily natural and locally available. Additionally, the craftsmanship involved does not require high-tech skills and equipment to process or install, unlike Modern Building Construction.

According to Rikko & Gwatau (2011), traditional refers to a cultural legacy that is inherited and upheld by the populace. As a result, the designs of traditional buildings and architecture serve as emblems of the locals’ cultural history and reflect their way of life.

According to Imaah (2008), depending on the type, function, material, and design, man has employed buildings made using local technology for his activities over the years. Northern Nigerian Hausa house designs are typically associated with courtyards that are surrounded by multiple rooms, which allows for the extension to accommodate additional occupants and married couples, including grandparents, fathers, mothers, and children (extended family).

The purpose of this study is to evaluate and compare a few of the functional needs of both traditional and modern structures, such as durability, fire safety, resistance to heat transmission, sound resistance, strength, stability, and resistance to weather and ground moisture.

The study also sought to examine the aesthetics of modern and traditional structures, focusing on the ways that beauty and design complement one another. Aesthetics is a discipline within philosophy that deals with the nature and manifestation of taste and beauty. The combined effect of a building’s shape, size, texture, colour, balance, unity, movement, decoration, space, symmetry, and other elements

The study also compares the values of traditional and modern buildings, taking into account all aspects of what constitutes a building. It also compares the values of the two types of buildings in terms of their social, use, environmental, and asset values, as well as which is thought to be the best value.

S.S Ubayi, 2024. Since the necessity for sustainability is seen as a notion that meets present requirements without impeding the advancement of future growth. In the northwest of Jigawa State, one of the Hausa-speaking and occupied regions of northwest Nigeria, is Ringim Town.

This paper served as inspiration for the necessity of conducting a survey research project and evaluating the functions, durability, aesthetics, and values of traditional and modern building concepts and designs. It is also one of the state’s five Emirates.

Statement of Problem:
According to Ruquayya Tofa (2011), Nigerian architecture has been characterized recently by the post-modern structures of the 1990s, a vast new design concept, and an obsession with new building materials, most of which are imported from China. Nowadays, you hardly ever see a traditional building being demolished or destroyed and rebuilt to its original design. Instead, some residents of Ringim town choose to demolish their existing traditional homes and replace them with modern ones. The majority of the old traditional structures have been rebuilt and replaced in their place by modern building designs.

This work was motivated by a critical examination of the contemporary society. Over the last fifty (50) years, a large number of houses have been built using low-cost materials due to inadequate globalization, economic position and activity, sociocultural factors, and technological advancements during that period. These resources consist of: dirt, a hut, and relatively few houses made of bricks or concrete.

However, in the modern era, due to economic globalization that encompasses other elements like politics, society, culture, new technologies, and climate change, these traditional or mud houses have been neglected because of cracks, ruination and destruction, or wear and tear from growing older or living a long life. Some of these houses have even been demolished, either on purpose or accidentally, by the weather. Furthermore, there hadn't been many writings by other authors addressing the issue of our traditional building designs and Hausa building practices being neglected.

In order to preserve the worth of our culture and use resources as little as possible, the study also intends to address the issue of our local materials, technologies, and designs.

Significance of the Study:
This research holds importance not only for the students studying Civil Engineering and Building Technology, but also for the people living in Ringim and the entire State. The results will be very helpful to students studying building technology and civil engineering because they will have marketable skills that will allow them to advance technology in this country and support themselves. They will also understand the differences in materials, durability, and functionality between traditional and modern building techniques.

When the study's conclusions are put into practice, the people of Ringim and the entire state will greatly benefit, especially those who own low-income homes. They will provide them with advice on how to improve the cheap building materials used during construction, adopt new methods and styles for adding value, and manage to be content with their traditional or local homes.

Objectives of the Study: The Research is Aimed to,
- Determine the differences in functions and durability between Traditional and Modern Buildings in Ringim Town.
- Determine the differences in Aesthetics and Values between Traditional and Modern Buildings in Ringim Town.

Research Questions:
- What are the differences in function and durability between Traditional and Modern Buildings in Ringim Town?
- What are the differences in Aesthetics and Values between Traditional and Modern Buildings in Ringim Town?

II. LITERATURE REVIEW

Functions of Traditional Building:
The concepts of form and function are intertwined and essential to understanding traditional architecture. The often-stated adage "form follows function" has some truth to it and is well phrased, but when it comes to conventional architecture, it falls short. The term "functional décalage" was created by French architectural researchers at the Museum of Folk Arts and Traditions in Paris in recognition of the numerous differences between form and function (Rivière 2010).

Furthermore, according to John Lloyd (2017), "buildings were differentiated by function rather than by form" in medieval Norway. Every farmstead was made up of several, uniformly standardized units, with the sole distinction between them being their respective functions. Conversely, Gerard Brans and Ronald Lewcock (2012) and Others have provided compelling evidence that if a house shape is robust enough within the society's cultural context, it can endure and be easily modified to serve a purpose.
Aesthetics in Traditional Building:
Architecture's aesthetics: How style and beauty complement one another. Aesthetics is a discipline within philosophy that deals with the nature and manifestation of taste and beauty. One of the main things that architects take into consideration while designing a structure is its beauty. The kinetics of material resistance-related responses and the strength of degradating agents can cause different changes in a material's appearance. etc. (Wikipedia).

Durability of Traditional Building:
The ability of a physical product to bear the rigors of everyday use during its design lifetime—such as pressure, wear, and damage—or to continue functioning without the need for extensive maintenance or repair is known as durability. Using traditional building materials and craftsmanship has undoubtedly demonstrated its resilience against the weather's onslaughts over time, helping to preserve a region's feeling of cultural history. One of the functional criteria for every building is durability, which varies depending on the materials and construction techniques used. The weather, or changes in it, can have an impact on a building's durability. Rainfall, storms, etc. (Wikipedia)

Functions of Modern Building:
The emergence of modern architecture coincided with the industrialization of machines to replace labor-intensive handiwork. Contemporary architects endeavored to reimage architectural forms that prioritized human habitation over aesthetics. (Wikipedia)

The purpose of Modern Buildings: Modern architecture prioritizes utility and a simple, streamlined design over adornment. Compared to more ornate and ornamented residences like those in the Queen Anne, Victorian, or Gothic Revival styles, this design aesthetic is different. Generally speaking, modern architecture has straight, clear lines. Just in the United States, there are numerous modern architectural styles. There are several subcategories of art from 1930 to 1970, including Expressionist, Constructivist, and Mid-Century Modern. etc. (Wikipedia)

Aesthetics in Modern Building:
Evaluation of the Aesthetics of Contemporary Architecture in the Southwest (Yoruba) Area of Nigeria
Form & Shape: Rectangular shapes and lines—both horizontal and vertical—are used in the architectural design. Depending on the size and shape of the land, the houses are sometimes connected boxes. The concrete enclosed parapet walls, flat roofs, and high horizontal massing highlight the structure located in southwest Nigeria as a city landmark that exemplifies modern architecture. Because there is more undeveloped land available in the Southwest, modern residences typically sit on large lots. As a result, they play with their façade's free forms, horizontal and vertical features, and shading mechanisms. Because of the region's significant rainfall, modern residential buildings have high pitched roofs to quickly flow off of rainwater. Etc. (Wikipedia)

Durability of Modern Buildings
One of the essential functions of any construction is durability, which refers to the ability of goods, materials, structures, and other built assets to withstand deterioration over time. It can be challenging to evaluate this quality since, although being tough to the touch, a tough material might become non-durable if it erodes or breaks down quickly. Contrarily, things can also be true. (Wikipedia)

Durability is influenced by a variety of elements, including the type of material used and how it was put together with other components. Concern over durability is growing as a result of the anticipated effects of climate change, including the increased frequency of extreme weather events, increasing water levels, and greater temperatures. Sometimes, in addition to being strong, buildings are made to be readily disassembled and repurposed when their useful life are coming to an end. The architecture and its materials became more modern as industry and revolution took hold. Steel, glass, concrete, bricks, and even aluminum became the norm for building materials in the modern era. (Wikipedia)

III. METHODOLOGY OF THE STUDY

Research Design:
The research design of the study was quantitative, meaning that a structured questionnaire was utilized to gather data from a well-defined population or a carefully chosen subset of the population in order to identify and ascertain the traits and features of the study's population.

Area of the Study:
Only five (5) specific quarters: Katutu, Galadanchi, Walawa, Majiyawar Gari, and Marakawa Quarters in Ringim Local Government of Jigawa State were used for the study. The selection was made since the task is more suited to them and they are the most populated historic quarters/age of settlement. Two distinct groups of teenagers under 40 and adults 50 and over from each chosen quarter each received a structured questionnaire.

Sample and Sampling Technique

Population of the Study:
All individuals who are related to the study and live in the designated town quarters make up the population for the study. A questionnaire was given to respondents who were at least 7–10 members of each group of youth and adults in the designated town quarters, or at least a total of 10 respondents from each group of adults and youth, and no more than 20 respondents from each quarter. The distribution of the population is shown in Table 1 below.

Sampling Method:
The particular set of people from whom you will gather data is known as the Sample. As previously mentioned, data for this study came from two groups (Strata) of youths and adults in five randomly chosen quarters that served as the sampling frame. The stratified random sampling method was the sample type employed in
this investigation. Using stratified sampling, the population is divided into “Strata,” or subpopulations or subgroups, which may differ significantly in response. On the other hand, random sampling ensures that every member of the population has an equal probability of being chosen.

Table 1 Distribution of Sample Population

<table>
<thead>
<tr>
<th>S/N</th>
<th>Respondents</th>
<th>Youths</th>
<th>Adults</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Katutu</td>
<td>9 members</td>
<td>7 members</td>
</tr>
<tr>
<td>2</td>
<td>Galadanchi</td>
<td>9 members</td>
<td>9 members</td>
</tr>
<tr>
<td>3</td>
<td>Walawa</td>
<td>10 members</td>
<td>8 members</td>
</tr>
<tr>
<td>4</td>
<td>Majiyawar Gari</td>
<td>9 members</td>
<td>8 members</td>
</tr>
<tr>
<td>5</td>
<td>Marakawa</td>
<td>10 members</td>
<td>9 members</td>
</tr>
<tr>
<td>6</td>
<td>Total</td>
<td>47 members</td>
<td>41 members</td>
</tr>
</tbody>
</table>

88 Members/Respondents

- **Instrumentation**
  - **Instrument for Data Collection:**
    The instrument used to collect the data was a structured items questionnaire with two sections (A and B). Section A asks for general information or demographic data about the respondents. Section B includes instructions for respondents on how to complete the 36 items, which are derived from research questions 1 through 2, respectively. The first research topic, which has twenty (20) elements, aims to ascertain the reasoning behind Ringim Town's transition from traditional to modern building concepts and designs. The second research topic, which has sixteen (16) items, asks about how to create plans for incorporating traditional architecture with modern Ringim Town homes.

    The response options/Rating Scales of the Items or Questions are structured on four-point scale as follows: Strongly Agreed (SA) 4 points; Agreed (A) 3 points; Disagreed (D) 2 point and Strongly Disagreed (SD) 1 point.

    - **Validity of the Instrument:**
      The study adopted the construct validity, it evaluates whether a measurement tool really represents the thing we are interested in measuring. It’s central to establishing the overall validity of a method. It is also measured by observing other indicators that associated with a study.

    The validation of the items in this study was done by 4 experts, being that they were all PhD Holders, 2 of which were Chief Lecturers. Moreover, 3 of them were vocational technology education experts who were in the School of Secondary Education (Vocation and Technical) Departments of Building Technology Education, Wood Work Technology Education and Agricultural Technology Education. The other one was a science education expert in the Department of Integrated Science Education, Federal College of Education (Technical) Bichi, Kano State, in Affiliation with Abubakar Tafawa Balewa University, Bauchi State.

- **Method of Data Collection:**
  A Structured Questionnaire was used in generating data for the work. The researcher has identified the Research groups, one for adults-aged 50 to above, and one for youths below 40, in order to respond to the structured items in performing the research study.

- **Method of Data Analysis:**
  Since the population in this study is very small, the mean and standard deviation method of data analysis is the most appropriate one (Kothari, 2008). The analysis was conducted using the answers to the questionnaire items.

    The study's data were examined using the mean in order to respond to the research questions. The arithmetic mean, sometimes known as the mean, is the average of all numbers. The standard deviation is a statistical measure of the variance in a set of data, whereas the mean value, also known as the score, of a given set of data is equal to the sum of all the values in the data set divided by the total number of values. The standard deviation shows the average difference between the values in a given data collection and the mean. Items with mean scores of 2.50 or higher were approved, while those with scores below that threshold were rejected.

- **Scope and Limitation:**
  The study was delimited to determine both the differences in functions, designs and differences in aesthetics and values between traditional and modern buildings in Ringim Town.

IV. RESULT AND FINDINGS

- **Research Question One:**
  - What are the differences in Functions & Durability between Traditional & Modern Buildings in Ringim Town?
  - To answer this question, relevant Statements were developed & administered using Questionnaire.
Table 2 Differences in Function & Durability between Traditional & Modern Buildings

<table>
<thead>
<tr>
<th>S/N</th>
<th>STATEMENTS</th>
<th>YOUTHS (BELOW 40)</th>
<th>ADULTS (ABOVE 40)</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Traditional Mud Houses are more fire resistant than the Modern Block/Concrete Houses.</td>
<td>40 60 00 00 3.4 5.12 40 20 00 40 2.6 3.14</td>
<td>Agree.</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Mud Houses gives more Sound Insulation than Modern Houses.</td>
<td>60 40 00 00 3.6 4.37 40 20 00 40 2.6 3.14</td>
<td>Agree.</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Traditional Mud Houses are more resistant to water penetration &amp; Natural factors such as rain.</td>
<td>00 00 00 100 1.0 4.0 00 00 00 100 1.0 4.0</td>
<td>Disagree.</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Mud Walls provides more Thermal Insulation than Modern Concrete block walls.</td>
<td>60 20 00 20 3.0 5.36 60 00 00 40 2.8 6.53</td>
<td>Agree.</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>Traditional Mud walls last longer than the Modern Block/Concrete walls.</td>
<td>00 00 20 80 1.2 2.06 00 00 00 100 1.0 4.0</td>
<td>Disagree.</td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>Huts &amp; Thatch are more resistant to fire.</td>
<td>00 00 00 100 1.0 4.0 00 00 00 100 1.0 4.0</td>
<td>Disagree.</td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>Hut &amp; Thatch roof over Concrete Buildings provides more sound insulation.</td>
<td>00 20 00 80 1.4 2.16 00 00 40 60 1.4 2.16</td>
<td>Disagree.</td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>Hut &amp; Thatch are more resistant to rain &amp; water penetration.</td>
<td>00 00 00 100 1.0 4.0 00 00 00 100 1.0 4.0</td>
<td>Disagree.</td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>Huts and Thatch gives more warmth or thermal comfort during summers and winter.</td>
<td>20 60 20 00 3.0 3.56 60 00 40 20 2.2 4.37</td>
<td>Agree by Youth’s group only.</td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td>Huts and Thatch last longer than the Modern Block walls.</td>
<td>00 00 00 100 1.0 4.0 00 00 00 100 1.0 4.0</td>
<td>Disagree.</td>
<td></td>
</tr>
<tr>
<td>11.</td>
<td>Stones provide more resistance to fire over concrete.</td>
<td>40 60 00 00 3.4 5.12 40 60 00 3.4 7.23</td>
<td>Agree.</td>
<td></td>
</tr>
<tr>
<td>12.</td>
<td>Stone have more Sound Insulation than Concrete.</td>
<td>20 60 20 00 3.0 3.56 20 80 00 3.2 6.25</td>
<td>Agree.</td>
<td></td>
</tr>
<tr>
<td>13.</td>
<td>Stone work over Concrete gives more resistance to water penetration and Rain.</td>
<td>40 40 20 00 3.2 5.69 40 20 40 3.0 2.94</td>
<td>Agree.</td>
<td></td>
</tr>
<tr>
<td>14.</td>
<td>Stones over Concrete, gives more Thermal Insulation.</td>
<td>40 00 60 00 2.8 4.32 20 60 00 2.6 2.14</td>
<td>Agree.</td>
<td></td>
</tr>
<tr>
<td>15.</td>
<td>Stone lasts longer than Modern Concrete walls.</td>
<td>20 20 60 00 2.6 2.14 20 60 20 3.0 3.55</td>
<td>Agree.</td>
<td></td>
</tr>
<tr>
<td>16.</td>
<td>Timber Houses are more resistance to fire than the Concrete walls.</td>
<td>00 00 00 100 1.0 4.0 00 00 00 100 1.0 4.0</td>
<td>Disagree.</td>
<td></td>
</tr>
<tr>
<td>17.</td>
<td>Traditional Timber Houses over Concrete Provides More Sound Insulation.</td>
<td>20 00 00 80 1.6 2.4 00 00 00 100 1.0 4.0</td>
<td>Disagree.</td>
<td></td>
</tr>
<tr>
<td>18.</td>
<td>Timber over Concrete provides more resistance to rain and water penetration.</td>
<td>00 00 00 100 1.0 4.0 00 00 40 60 1.4 2.15</td>
<td>Disagree.</td>
<td></td>
</tr>
<tr>
<td>19.</td>
<td>Timber Houses over Concrete gives more comfort to Thermal or moderate temperature irrespective of season.</td>
<td>00 40 60 00 2.4 3.6 00 20 60 20 2.5 2.45</td>
<td>Agree by Adult groups only.</td>
<td></td>
</tr>
<tr>
<td>20.</td>
<td>Modern roofs requires regular Maintenance work and repairs as the Traditional Buildings like the Mud roofs Thatch, Azaara and Grasses.</td>
<td>00 00 00 100 1.0 4.0 00 00 00 100 1.0 4.0</td>
<td>Disagree.</td>
<td></td>
</tr>
</tbody>
</table>

Table 2 above, shows the results of the Questionnaires administered to ten group of Youths and Adults on the Differences in Functions and Durability between Traditional and Modern Buildings. The responses showed that, items number 12, 13, 15, 20, 22, 23, 24, 25 and 26 were agreed by both groups of Youths and Adults. While Item number 30 was disagreed by the youths, but was agreed by the Adult’s groups. However, the remaining nine items were both disagreed by the groups.

Research Question Two:
- What are the differences in Aesthetics & Values between Traditional & Modern Buildings in Ringim Town?
Table 3 Differences in Aesthetics & Values between Traditional & Modern Buildings:

<table>
<thead>
<tr>
<th>S/N</th>
<th>STATEMENTS</th>
<th>YOUTHS (BETWEEN 40)</th>
<th>ADULTS (ABOVE 40)</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>SA %</td>
<td>A %</td>
<td>D %</td>
</tr>
<tr>
<td>21.</td>
<td>The Texture of Traditional walls are more attractive than that of Modern buildings.</td>
<td>00</td>
<td>00</td>
<td>20</td>
</tr>
<tr>
<td>22.</td>
<td>Traditional compared to Modern Buildings are considered to be the best value asset (expensive).</td>
<td>00</td>
<td>00</td>
<td>00</td>
</tr>
<tr>
<td>23.</td>
<td>Traditional Finishing and outlook appear more gorgeous and beautiful than that of Modern.</td>
<td>00</td>
<td>00</td>
<td>40</td>
</tr>
<tr>
<td>24.</td>
<td>Engravings (such as the Dagin Arena) are pleasing on both Mud and Concrete Block Walls.</td>
<td>40</td>
<td>40</td>
<td>00</td>
</tr>
<tr>
<td>25.</td>
<td>Traditional Mud Plaster (Yobe) is more durable than Modern Cement Plaster.</td>
<td>00</td>
<td>00</td>
<td>40</td>
</tr>
<tr>
<td>26.</td>
<td>Mud Plasters (Yobe) is as attractive as Modern wall Finishes, e.g. Tiko, Cement screed, etc.etc.</td>
<td>00</td>
<td>00</td>
<td>00</td>
</tr>
<tr>
<td>27.</td>
<td>Mud Plasters (Yobe) is more beautiful than Cement Plasters.</td>
<td>00</td>
<td>00</td>
<td>40</td>
</tr>
<tr>
<td>28.</td>
<td>Traditional Finishing Materials are cheaper than that of Modern.</td>
<td>100</td>
<td>00</td>
<td>00</td>
</tr>
<tr>
<td>29.</td>
<td>Traditional Floor Finishes such as (Daben Kasa), erected with Mud and Birji Mortars are more durable and appealing than Modern Floor Finishes like the Tiles, Terrazo and Cement Screed.</td>
<td>00</td>
<td>00</td>
<td>00</td>
</tr>
<tr>
<td>30.</td>
<td>Zanko and Mural Painting is more attractive than Modern Paintings.</td>
<td>00</td>
<td>20</td>
<td>00</td>
</tr>
<tr>
<td>31.</td>
<td>Traditional over Modern Finishes have ease of application, use and installation.</td>
<td>00</td>
<td>100</td>
<td>00</td>
</tr>
<tr>
<td>32.</td>
<td>Modern Roofing Materials are difficult to fashion than Azara, Thatch, Grasses and Mud Roofs.</td>
<td>00</td>
<td>00</td>
<td>20</td>
</tr>
<tr>
<td>33.</td>
<td>Conical Roof or the Curvilinear Conical Designs are equally attractive and durable with the Modern Roofing styles.</td>
<td>00</td>
<td>00</td>
<td>20</td>
</tr>
<tr>
<td>34.</td>
<td>Traditional Building Materials such as the Mud, Thatch and Grasses are recycle able, whereas Modern are not.</td>
<td>40</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>35.</td>
<td>Traditional Mud plaster (Yobe) is more resistant to water penetration than Modern Concrete plaster.</td>
<td>00</td>
<td>00</td>
<td>00</td>
</tr>
<tr>
<td>36.</td>
<td>Traditional Roofing styles are easier than that of Modern Roofing.</td>
<td>40</td>
<td>40</td>
<td>20</td>
</tr>
</tbody>
</table>

Table 3 above revealed that, Items 35, 39, 42 & 47 were both agreed by the groups of Youths & Adults. However, Items 32, 33, 34, 36, 37, 38, 40, 41, 43, 44 & 46, were disagreed by the two Groups. While the remaining item 45, was agreed by the Youths only & Rejected by the Adults.

V. SUMMARY

- It is established that Traditional Buildings in Ringim have better thermal insulation, good sound insulation and fire resistance; on the other hand, it has poor water resistance.
- It is established that Traditional Buildings in Ringim have better thermal insulation, good sound insulation and fire resistance; on the other hand, it has poor water resistance.
- The Modern Construction methods and finishing materials like cement, Modern paintings and plaster, rendering, tiling is much more expensive, more valuable, durable and attractive, but engravings (such as the Dagin-Arena) are pleasing and attractive on both the Mud and Concrete walls.

VI. DISCUSSION

Any building must meet certain functional standards, regardless of the reason for which it is intended to be used. These needs include thermal insulation, fire resistance, sound insulation, and resistance to moisture and water penetration. These functional criteria made up the durability factor, and longer-lasting buildings are the result of durability.
The data analysis result for study question one showed that traditional and modern buildings varied in function and durability in the following ways:

- Modern block/concrete houses are less fire resistant than traditional mud houses. The decision point stipulated that any item with a mean score of at least 2.50 would be allowed, while any item with a score of less than 2.50 would be rejected. This item is one of the findings based on the two study groups’ replies, which had mean scores of 3.4 and 2.6.

- Compared to modern homes, mud houses offer better sound insulation. With mean ratings of 3.6 and 2.6, the study's juvenile and adult groups both concurred on this.

- Conventional mud houses are more resilient to natural elements like rain and water intrusion. This was disapproved of or in disagreement with the 1.0 mean scores obtained from each of the two groups.

- Mud walls offer superior thermal insulation compared to contemporary concrete or block walls. Considering the study’s decision point again, it was also approved with mean scores of 3.0 and 2.8.

- Modern block/concrete walls are not as durable as traditional mud walls. This is rejected because its mean scores are 1.2 and 1.0.

- Because thatch and huts have mean fire resistance scores of 1.0 and 1.0, respectively, both the adult and youth groups from the entire population disagreed with this statement.

- Modern concrete buildings with hut and thatch roofs offer superior sound insulation. Based on the replies provided by both groups, the mean scores are 1.4, indicating that the item is rejected. That is, they didn't agree.

- With a mean score of 1.0, huts and thatches are more resilient to rain and water intrusion, respectively.

- In the summer and winter, huts and thatch provide greater warmth or thermal comfort than concrete. Only the study's adolescent groups, with a mean score of 3.0, agreed with this item, while the adult groups, with a mean score of 2.2, rejected it.

- Thatch and huts are more durable than the walls of modern blocks. The mean response scores for this are 1.0, respectively. As a result, the choice was rejected.

- Compared to concrete, stones offer greater fire resistance. The choice was accepted by both the adolescent and adult groups, whose mean scores were 3.4 and 3.4, respectively.

- Compared to concrete, stone has more sound insulation. The average scores for this are 3.0 and 3.2. They are thus both agreed upon and approved.

- Stone work provides increased protection against rain and water intrusion over concrete. The decision was likewise agreed upon, and the mean scores for this are 3.2 and 3.0.

- Stones provide more thermal insulation over concrete. The ruling was also adopted, and the mean scores for this were 2.8 and 2.6.

- Stone walls outlast barriers made of modern concrete. The decision was approved based on the mean scores of 2.6 and 3.0.

- Concrete walls are less fireproof than traditional timber houses. It received mean scores of 1.0 for each, and the decision was not accepted.

- Conventional Timber Houses Offer Better Sound Insulation than Concrete Structures. The item was rejected by both groups, and its mean scores are 1.6 and 1.0.

- Timber houses are more resistant to water intrusion and rain than concrete ones. The choice was made based on respondent mean scores of 1.0 and 1.4.

- Regardless of the season, thermal or temperate temperatures are more comfortable in timber houses than in concrete. The decision was rejected by the youth group while the adult groups accepted the item, with mean scores of 2.4 and 2.5.

- Just like traditional buildings with thatch. Azara, and grass roofs, modern buildings also need routine maintenance and repairs. The corresponding mean scores for this are 1.0. This indicates that neither group agreed with the choice.

- Nonetheless, the data analysis results for research question two showed that traditional and modern buildings differ in their aesthetics and values in the following ways.

- The walls of traditional buildings have a more appealing texture than those of modern ones. The study's youth and adult groups had mean scores of 1.2 and 1.4 for this; nonetheless, the decision point was disregarded, indicating that the modern walls' texture is more appealing.

- Traditional buildings are thought to be the best value asset (expensive) when compared to modern buildings. It is untrue that modern buildings are more costly. Due to the fact that the mean scores on this item are 1.0, the decision was likewise denied.

- The view and finishing of the Traditional style seem more exquisite and lovely than the Modern style. By taking into account the decision points, which were 1.4 in this case, the item was likewise rejected. To put it briefly, modern finishes and outlooks are more elegant.

- Mud and Concrete Block Walls with Engravings (like the Dagin-Arewa) look good. With mean scores of 3.0 and 3.6, the youth and adult groups both accepted this item.

- Modern Cement Plaster is less durable than Traditional Mud Plaster (Yabe). According to the two groups' respective mean scores of 1.4, this is untrue.

- Yabe mud plasters are just as beautiful as contemporary wall finishes like cement screed, tiles, etc. Both groups rejected this as well, with corresponding mean scores of 1.0. It would be more accurate to say that traditional mud plasters are more aesthetically pleasing than modern wall treatments (Yabe).
Yabe’s mud plasters are more elegant than cement plasters. Since both groups disagreed with the mean scores of 1.4, respectively, this was also rejected. Accordingly, mud plasters are less elegant than cement plasters (Yabe).

Finishing materials made traditionally cost less than those made nowadays. The two groups, with mean ratings of 4.0 and 3.4, agreed with this.

Compared to modern floor finishes like tiles, terrazzo, and cement screed, traditional floor finishes like Dabembaka, which are built with mud and Birji mortars, are more aesthetically pleasing and long-lasting. 1.0 and 1.6 was the typical score for rejecting this item. Traditional floor finishes are less attractive and less long-lasting than modern floor treatments.

Murals and Zanko paintings are more visually appealing than modern artwork. This was similarly disapproved, with average ratings of 1.0 and 1.4. It might also be argued to be true because modern paints are more visually appealing than murals and Zanko paintings.

Traditional finishes are easier to install, utilize, and apply than modern finishes. With mean ratings of 3.0 and 2.6, both groups agreed and accepted this item.

It is more difficult to fashion modern roofing materials than azadara, thatch, grass, and mud roofs. This proposal was turned down. This indicates that creating mud, straw, azara, and thatch roofs is more challenging than creating modern roofing.

Conical roofs or curvilinear conical designs are just as beautiful and long-lasting as modern roofing patterns. The item gets mean scores of 1.2 and 1.8. The Mean ratings of 1.2 and 1.8 also disagreed with this and were dismissed. Not surprisingly, modern roofing styles are more visually appealing than conical roofing.

Unlike modern materials, traditional building materials like mud, thatch, and grass can be recycled. This item contains some misconceptions and arguments since there are certain recyclable materials in both of the building types, even though they may not be present in all of them. Unlike thatch and grass, mud can be recycled. As a result, windows, doors, and modern roofing sheets are recyclable. This explains why the statement received agreement from the youth groups exclusively and rejection from the adult groups, who had mean ratings of 2.0 and 2.8.

Compared to modern concrete plaster, traditional mud plaster (Yabe) is more resistant to water penetration. Both groups disagreed with this, with mean scores of 1.0 apiece.

Compared to modern roofing, traditional roofing is easier to maintain and simpler to design. With mean scores of 3.2 and 3.4, both groups accepted this item. The necessity of high-tech during an erection was the cause of this.

VII. CONCLUSION

Although modern building designs are still preferred in Ringim town, traditional building construction is easier and less expensive because the materials used were primarily natural and local. Additionally, the craftsmanship involved does not require high-tech equipment and skills to process or install. This is due to the fact that the functions, durability, aesthetics, and values of contemporary vs traditional buildings differed, demonstrating the superiority of modern structures and contributing to the transition from traditional to modern architecture. According to the responses that guided the analysis of the research questions, some types of traditional buildings—particularly those related to research question one—have advantages over modern buildings that are on par with or even greater than those of the former. Examples of these advantages include the warmth and durability of stones, the comfort and warmth of mud walls in the summer and winter, and so forth.

In summary, an assessment was conducted to compare the functional requirements, durability, aesthetics, and values of traditional and modern buildings. The results showed that modern buildings had greater levels of these attributes.

SUGGESTIONS FOR FURTHER STUDY

- Research of a similar nature ought to be carried out at various university, polytechnic, and college levels.
- For comparative purposes, similar investigations ought to be conducted throughout the state and the entire nation.

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