- A PROJECT REPORT
- ON

PROPOSED RESTAURANT

- FOR

MR SOLA AKINWALE

- AT

ORI ERU, IWO, OSUN STATE, NIGERIA

BY

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MATRIC NO: ND/23/ARC/PT/0022

A PROJECT REPORT SUBMITTED TO THE DEPARTMENT OF ARCHITECTURAL TECHNO LOGY IN PARTIAL FULFILMENTS OF THE REQUIREMENTS FOR THE AWARD OF THE NA TIONAL DIPLOMA (ND) IN ARCHITECTURAL TECHNOLOGY

INSTITUTE OF ENVIRONMENTAL STUDIES

KRAWA STATE POLYTECHNIC, ILORIN, KWARA STATE

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DECLARATION

I declare that this project report is a product of my original research work. It has not been presented elsewhere for the award of any diploma, degree, or certificate. All ideas, findin gs, and contributions from other sources have been duly acknowledged in accordance wi th academic standards.

under the supervision of ARC OLANREWAJU F. ADEYEMI

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CERTIFICATION

This is to certify that this project titled "Proposed Restaurant at Ori Eru, Iwo, Osun State, Nigeria" was carried out by Adewale Ayomide Adebayo (ND/23/ARC/PT/0022) under my supervision and has been duly approved as meeting the requirements for the award of th e National Diploma in Architectural Technology, Kwara State Polytechnic, Ilorin. Under th e supervision of ARC OLANREWAJU F. ADEYEMI.

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DEDICATION

This project is dedicated to my beloved mommy siblings ,whose unwavering support, pra yers, and encouragement gave me the strength to persevere.

And to Almighty God, the source of all wisdom and understanding.

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I sincerely express my gratitude to the Almighty God for granting me life, strength, wisdo m, and the perseverance needed to complete this project successfully.

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Adewale Ayomide Adebayo

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ABSTRACT

This project report presents the architectural design proposal for a Proposed Restaurant at Ori Eru, Iwo, Osun State, Nigeria. The objective is to create a modern casual dining facility that combines functionality, aesthetic appeal, and environmental responsiveness to meet the increasing demand for quality food services in the locality. The design aims to provide a comfortable, hygienic, and welcoming environment for customers while ensuring efficient service delivery and operational flow.

The project incorporates essential architectural principles such as effective space planning, natural lighting and ventilation, accessibility, and sustainability. The proposed facility comprises key spaces including indoor dining areas, reception, kitchen, storage rooms, administrative office, staff areas, and male and female toilets. The spatial arrangement is designed to ensure smooth circulation and separation between customer and service areas, while maintaining visual and physical comfort.

To guide the design process, two existing restaurants were studied: Kilimanjaro Restaurant and Bit More Restaurant.

Kilimanjaro Restaurant, known for its efficient service, compact spatial planning, and appealing interior ambiance, provided insight into how a fast-growing Nigerian food chain integrates function and customer satisfaction in a busy urban setting.

Bit More Restaurant, which adopts a more relaxed and spacious dining layout, inspired the incorporation of ambient indoor spaces and a balance between private and open dining experiences.

Lessons from these case studies influenced decisions regarding layout organization, furniture arrangement, lighting, material selection, and workflow optimization. Additionally, climate-responsive design strategies were adopted, including the use of shaded windows, cross ventilation, and sustainable materials to reduce energy consumption and improve user comfort.

In conclusion, the proposed restaurant design is a response to both the social and environmental needs of the location. It is envisioned as a space that contributes to the architectural fabric of Ori Eru while fostering economic development through job creation and increased commercial activity. The final design solution is a fusion of modern design princ

iples with local context, resulting in a structure that is both. Functional and culturally rele vant

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1.1 Background of Study

Dining out is increasingly becoming a significant part of urban and semi-urban life in Ni geria. In towns like Iwo, Osun State, restaurants serve not just as eating places, but as ce nters for social gathering, cultural expression, and recreation. With the growing demand f or well-structured, aesthetically pleasing, and comfortable dining environments, there is a need to design restaurants that are both functional and culturally expressive.

As the Nigerian food industry evolves, there's a noticeable shift from informal eateries to modern hospitality spaces that meet environmental and experiential expectations. Howe ver, many existing local restaurants suffer from poor spatial organization, inadequate ser vices, and lack of cultural integration. This project aims to bridge that gap through an arc hitectural solution that enhances user experience while reflecting local identity.

1.2 Statement of the Design Problem

Restaurants within Iwo often lack a well-thought-out architectural layout. Common issue s include:

Inadequate ventilation and lighting

Poor service circulation between kitchen and dining

Limited comfort for both staff and guests

Lack of staff facilities like changing rooms

Absence of culturally relevant aesthetics

These problems affect not only the functionality of the space but also the commercial s uccess of such establishments. The challenge is to design a restaurant that solves these issues while providing an engaging and comfortable environment.

1.3 Aim and Objectives

Aim:

To design a functional, culturally inspired, and environmentally responsive restaurant at Ori Eru, Iwo, Osun State.

Objectives:

To analyze spatial and functional requirements of a mid-scale restaurant

To incorporate Yoruba cultural elements in the design

To enhance comfort through good ventilation, lighting, and material choices

To provide necessary back-of-house facilities (changing rooms, storage, service bay)

To optimize user flow and operational efficiency in the layout

1.4 Justification for the Project

This project is necessary to respond to the changing dining culture in Iwo. As people bec ome more conscious of comfort and experience, there's a need for purpose-built restaura nt facilities. Additionally, showcasing cultural identity through architecture contributes to local pride and tourism.

By designing a climate-responsive, user-centered restaurant that includes both functional and symbolic elements, this project will contribute positively to the community and pote ntially serve as a benchmark for future hospitality designs.

1.5 Client's Background, Philosophy, and Goal

The client, Mr. Sola Akinwale, is a young entrepreneur passionate about food and Yoruba culture. He envisions Ayo Foods & Lounge as a place where people can enjoy local and c ontinental meals in a space that feels both modern and rooted in tradition. His philosoph y emphasizes customer satisfaction, cultural expression, and operational efficiency.

1.6 Scope of the Study

The project will cover the architectural design of:

Main indoor dining area (40–50 seats)

Lobby and reception

Kitchen with dry and cold storage

Staff changing rooms (male and female)

Delivery and service bay

Manager's office

Public toilets (male and female)

Landscaping and external dining options

It will include conceptual development, spatial planning, and environmental consideratio ns. Detailed structural or MEP design is outside the scope.

1.7 Limitations of the Study

Structural calculations and BOQ costing are not included

Real-life client interviews and surveys are simulated

Design assumes access to utilities (power, water, sanitation)

1.8 Research Methodology

Literature Review: Studying past works, architectural theories, and restaurant typologies

Case Studies: Reviewing existing restaurants locally and internationally

Site Analysis: Studying the environmental and contextual characteristics of Ori Eru

Conceptual Design: Developing sketches, space programming, and bubble diagrams

Environmental Integration: Exploring sustainable and climate-responsive strategies

CHAPTER TWO: LITERATURE REVIEW

2.1 Evolution of Restaurant Architecture

The concept of dining establishments dates back to ancient civilizations, where inns and communal eating areas served travelers and merchants. In modern times, restaurant arc hitecture has evolved into a specialized discipline combining hospitality, interior design, and environmental psychology. Restaurants today are classified based on service styles —fast food, casual dining, fine dining, and hybrid models—each with distinct spatial and functional characteristics.

2.2 Typology and Classification

Restaurants can be classified by:

Cuisine type (local, continental, fusion)

Service method (self-service, table service, buffet)

Target market (family, elite, youth, travelers)

Architectural scale (small kiosks, mid-scale restaurants, franchises)

Each typology demands different layout considerations and technical requirements. The se classifications influence design choices such as space allocation, kitchen design, aes thetics, and customer circulation.

2.3 Spatial Relationships and Functional Planning

A well-designed restaurant organizes its spaces for smooth operation. Typical areas incl

ude:

Entrance/Lobby – First impression and customer flow control

Dining Area – Flexible seating for groups and individuals

Kitchen – Divided into prep, cooking, washing, cold/dry storage

Staff Rooms – Changing and rest areas

Service Areas – Toilets, delivery bay, manager's office

Functional planning ensures efficiency, safety, and comfort for both staff and customer s. Zoning and circulation pathways must minimize conflict between kitchen staff and pa trons.

2.4 Technological and Environmental Design Considerations

Modern restaurants adopt various strategies to optimize performance and sustainability:

Ventilation & Lighting: Natural ventilation and daylighting improve comfort and reduce e nergy use. Skylights and clerestory windows can enhance ambiance in the dining space.

Materials: Sustainable, durable, and easy-to-maintain materials such as polished concre te, recycled wood, or terrazzo are preferred.

Acoustics: Sound control through acoustic panels improves the dining experience.

Fire & Waste Management: Proper zoning ensures safety and hygiene, with fire exits, ext inguishers, and waste collection points integrated into design.

2.5 Cultural and Aesthetic Considerations

Restaurant design serves as a canvas for cultural storytelling. Incorporating indigenous motifs, local artwork, and traditional patterns into the architecture creates identity and e motional connection.

In Yoruba architecture, typical features like earthy colors, open courtyards, carved woode n screens, and symmetrical patterns can influence restaurant layout and decor. These el ements not only add aesthetic value but also deepen the cultural experience of the spac e.

2.6 Sub-Topic Review: Cultural Identity in Hospitality Architecture

Globally, hospitality architecture is shifting toward localized experiences. Studies show t hat culturally themed environments improve customer satisfaction and brand loyalty.

In Nigeria, restaurants like Terra Kulture and The Yellow Chilli integrate cultural design wi th modern hospitality standards. These examples show how local art, materials, and arc hitectural styles can be incorporated to create a memorable dining environment.

This project seeks to draw from such examples, emphasizing spatial comfort, service eff iciency, and cultural symbolism to create a unique restaurant experience in Ori Eru, Iwo.

CHAPTER THREE: CASE STUDIES

3.1 Introduction

Case studies provide real-world insight into how similar restaurant buildings functional a rchitecturally. This chapter presents five relevant examples—both local and international —to draw lessons in spatial planning, aesthetics, materials, and operational efficiency. T hese case studies help inform the design decisions for the proposed restaurant at Ori Er u, Iwo.

3.2 Case Study One: The Yellow Chilli Restaurant – Lagos, Nigeria

Location: Victoria Island & Ikeja, Lagos

Type: Mid-range Nigerian and continental restaurant

Design Features:

Traditional African patterns blended with modern finishes

Indoor and outdoor seating zones

Warm lighting, wall art, and cultural décor elements

Functional Layout:

Reception/Lobby leading to main dining area

Kitchen at rear with cold/dry stores

Separate male/female restrooms

Merits:

Strong cultural identity

Good use of space and customer flow

Comfortable ambiance

Demerits:

Limited parking space

Acoustics can be poor during peak hours

3.3 Case Study Two: Nando's Restaurant – Johannesburg, South Africa

Type: International Afro-themed fast-casual chain

Design Features:

African art and recycled materials

Colorful murals and open-plan layout

Use of sustainable finishes

Functional Layout:

Entry with order counter and self-service stations

Kitchen and staff areas clearly separated

Flexible seating for various group sizes

Merits:

Strong brand identity through architecture

Efficient service circulation

Use of local materials

Demerits:

Some locations lack adequate ventilation

Layouts may be too standardized across branches

3.4 Case Study Three: Kilimanjaro Restaurant – Ilorin, Nigeria

Type: Fast-casual Nigerian and continental meals

Design Features:

Bold color branding and modular design

Compact, functional interior

Counter-ordering with dine-in space

Functional Layout:

Front counter with food prep behind

Seating area arranged for quick turnover

Rear access for waste and staff

Merits:

Highly efficient floor plan

Clean and functional design

Demerits:

Limited ambiance and cultural elements

Basic material palette

3.5 Case Study Four: Bit More Restaurant – Osogbo, Nigeria

Type: Casual dining with semi-luxury touch

Design Features:

Neutral tones, indirect lighting

Indoor and shaded outdoor spaces

Structured kitchen with walk-in cold room

Functional Layout:

Entry lobby and segmented dining zones

Kitchen separated from public space

Staff rooms and office included

Merits:

High user comfort and clear zoning

Strong aesthetic appeal

Demerits:

Heavy dependence on artificial lighting

Sound reflection in large halls

3.6 Case Study Five: Chicken Republic – Ibadan, Nigeria

Type: Quick-service restaurant

Design Features:

Bold red and yellow brand color scheme

Small footprint design for fast construction

Open plan for fast service turnover

Functional Layout:

Order and payment counter at front

Seating for short-term users

Compact kitchen with staff-only access

Merits:

Speed of service and low overhead

Uniform brand recognition

Demerits:

Minimal cultural value

Less comfort for dine-in customers

CHAPTER FOUR

STUDY AREA/ PROJECT SITE

(ENVIRONMENTAL AND IMPACTANALYSIS)

4.1 Introduction of Study Area

The study area, Ori Eru in Iwo, Osun State, Nigeria, is a semi-urban locality experiencing g radual development. Iwo is a major town with cultural significance and expanding urban needs. Ori Eru is located near residential homes, educational institutions, and commercia l activities, making it suitable for a hospitality project like a restaurant.

4.2 Site Location and Description

The proposed site is situated along Why Worry Street, Ori Eru, Iwo. It lies on relatively flat terrain, facing a secondary access road with good vehicular and pedestrian traffic. The t otal area is approximately 1,000 square meters, sufficient for a single-story restaurant wi th designated parking, service bay, and landscape buffer.

4.3 Site Inventory and Analysis

Topography: Gently sloping, easy to level

Soil Type: Lateritic, good bearing capacity for shallow foundation

Vegetation: Sparse grass cover, few trees

Adjacent Land Use: Residential buildings, a church, and small retail shops

Utilities: Water supply, power lines, and sanitation access are nearby

4.4 Climatic and Geographical Data

Climate Zone: Tropical wet and dry (Aw – Koppel classification)

Temperature: 21°C – 34°C annually

Rainfall: 1,000 – 1,500 mm per year

Prevailing Winds: Southwesterly direction

Sun Path: Morning sun from the east, harsh afternoon sun from the west

4.5 Environmental Conditions and Site Constraints

Advantages:

Quiet environment, ideal for dining

Close to residential communities (target customers)

Good daylight potential and cross-ventilation

Constraints:

Western exposure needs solar protection

Irregular boundaries may affect building shape

4.6 Project Design Goals (Client Brief)

Create a culturally inspired and functional dining space

Serve 40–50 guests at a time with indoor seating

Provide separate male and female staff changing rooms

Include cold and dry storage for kitchen use

Add a delivery bay and back-of-house service path

Incorporate Yoruba motifs and sustainable design elements

4.7 Functional and Spatial Criteria

Space Area (sqm)

Reception12

Dining Area90

Kitchen45

Cold Room10

Dry Store8

Staff Changing Rooms20

Toilets (M/F)12

Manager's Office8

Delivery Bay18

Circulation/Service30

4.8 Appraisal of Proposed Scheme

The proposed layout supports:

Clear public/private zone separation

Efficient circulation paths for staff and service

Visual openness in the dining space

Secure rear access for supplies and waste management

4.9 Equipment and Performance Requirements

Kitchen Equipment: Cooking range, sinks, prep tables, fridges

Ventilation: Natural cross-ventilation and ceiling fans

Lighting: Daylighting and energy-efficient LED fixtures

Water Supply: Overhead tank, tap systems in toilets and kitchen

Waste Management: External bin location, service exit

Fire Safety: Fire extinguishers and sand buckets placed strategically

4.10 Functional Relationship and Conceptual Development

Reception leads directly to the main dining area

Dining space opens to external shaded seating zone

Kitchen is located behind the dining area for easy service

Changing rooms and toilets are located in the staff-only section

Delivery access connects to the kitchen and store areas

Concept inspired by Yoruba courtyard style with natural airflow and culturally themed fin ishes

- **CHAPTER FIVE: APPROACH TO THE DESIGN / DESIGN REALIZATION**
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5.1 **Introduction**

This chapter outlines the architectural development of the proposed restaurant at Ori Eru, Iwo. It presents the design philosophy, planning process, material choices, environmental considerations, and building services. The approach balances culture, comfort, and sust ainability to create a functional dining space.

5.2 **Design Concept and Philosophy**

The design concept draws inspiration from traditional Yoruba courtyard architecture, em phasizing openness, cultural identity, and comfort. The idea is to create a centralized dini ng experience enclosed by service zones, incorporating natural light, local motifs, and si mple circulation patterns.

Cultural expression is shown through wall patterns, colors, and spatial arrangement.

Comfort is achieved through open ceilings, cross-ventilation, and warm finishes.

Efficiency is embedded in zoning, services layout, and modular design.

5.3 Design Development Stages

Conceptual Sketches: Bubble diagrams and adjacency planning

Zoning: Public vs. private and service separation

Site Integration: Considering wind direction, solar orientation, and access

Spatial Planning: Functional spaces connected by simple paths

Material Expression: Blending local textures with durable construction methods

5.4 Site Planning

Entrance is directly accessible from Why Worry Street

Landscape buffer separates the building from the road

Front area includes signage, parking (for 5–7 cars), and an outdoor seating option

Service access is provided at the back for deliveries and refuse removal

Building footprint maximizes usable land while preserving open space

5.5 Floor Plan Description

Reception & Lobby: Centrally located near the main entrance

Dining Area: Large open space with clerestory windows for natural light

Kitchen: Connected to the dining via service window/pass-through

Cold Room & Dry Store: Located within the kitchen zone

Changing Rooms (M/F): Located beside kitchen for staff privacy

Toilets (M/F): Near the dining area, with accessible entrance

Manager's Office: Small room near the entrance with security visibility

Delivery Bay: Rear area with access to kitchen and waste zone

5.6 Construction Methodology and Materials

Foundation: Strip foundation using reinforced concrete

Walls: 150mm sand Crete blocks, plastered and painted

Roof: Long-span galvanized aluminum sheets with steel trusses

Floor Finishes: Terrazzo for public areas; ceramic tiles in kitchen and toilets

Windows/Doors: Aluminum framed with mosquito net and security proofing

Ceiling: POP ceilings in dining; PVC in kitchen/toilets for moisture control

5.7 Building Services

Lighting: Natural (windows, skylights) and artificial (LED ceiling lights)

Ventilation: Cross-ventilation with windows on opposing walls; ceiling fans in dining

Water Supply: Overhead tank, plumbing network to kitchen, toilets, and outdoor tap

Sanitary Services: Soak-away and septic tank system

Fire Safety: Fire extinguishers, sand buckets, visible exit signage

Waste Disposal: External waste point with access for pickup

5.8 Environmental Design Features

Orientation: Longer sides face north-south to reduce heat gain

Overhangs: Shading devices protect from west sun

Daylighting: Clerestory windows and large side windows reduce electrical load

Rainwater Harvesting: Gutters connected to collection tank for garden use

Cooling Strategy: Courtyard cooling with shaded outdoor zones

5.9 Legal and Regulatory Compliance

Setback and boundary regulations in line with Kwara State Building Laws

Design follows fire escape, sanitary, and accessibility codes

Public toilets and accessible ramps included for universal use

5.10 Behavioral and Cultural Considerations

Dining layout allows for family, individual, and group seating

Background music zones and cultural artworks improve ambiance

Cultural wall patterns, materials (e.g., timber paneling), and furniture arrangement reflect Yoruba heritage

5.11 Performance Standards

Ventilation and natural lighting meet comfort thresholds

Fire safety and kitchen hygiene are integrated into spatial planning

Material finishes selected for durability, low maintenance, and aesthetics

Dining noise levels managed via acoustic ceiling design

5.12 Summary

The proposed restaurant is not just a place for eating—it is a cultural and social experien ce. Every design decision reflects an understanding of context, function, and user expect ations. The result is a climate-conscious, aesthetically rich, and highly functional space f or the people of Iwo.

CONCLUSION AND RECOMMENDATIONS

6.1 Conclusion

The proposed restaurant project at Ori Eru, Iwo, Osun State, presents a culturally infused and functionally efficient design tailored for a growing urban environment. This project b ridges the gap between traditional identity and modern hospitality needs by incorporatin g spatial flexibility, environmental responsiveness, and cultural aesthetics into its archite cture.

Through systematic research and design processes—ranging from literature review, envir onmental analysis, and case studies to spatial programming and concept development—the project identifies solutions to key issues in local restaurant architecture. These includ e poor layout planning, inefficient service flow, underwhelming ambiance, and lack of cu ltural identity.

The design proposal strategically integrates

Clear functional zoning

Culturally relevant architectural expression

Comfort-driven dining experience

Environmentally sustainable strategies

By applying the lessons from real-world examples and contextual analysis, the final desi gn promotes not only commercial viability but also social and cultural impact.

6.2 Recommendations

To ensure continued improvement in architectural restaurant design, the following recom mendations are made:

1. Renewable Energy Integration:

Future designs should incorporate solar power systems and energy-saving devices to red uce operating costs and environmental footprint.

2. Cultural Collaboration:

Engaging local artists, craftsmen, and historians can further enrich cultural themes and s trengthen community engagement in design processes.

3. Behavioral Research:

More detailed study of customer habits and dining behavior across age groups and inco me levels can help refine spatial layouts and user comfort.

4. Flexible Space Planning:

Future restaurants should be adaptable for event hosting, takeout expansion, or seasona l variation in customer volume.

5. Design for Expansion:

Provisions should be made for modular growth or vertical additions, especially in develo ping neighborhoods where commercial demand may rise.

6. Material Innovation:

Emphasis should be placed on sustainable, low-maintenance, and cost-effective materia ls suitable for tropical climates.

This project stands as a model for future hospitality designs that aim to blend culture, co mfort, and creativity in a rapidly evolving Nigerian built environment.

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