

**LEKKI GOLF AND RECREATION CENTER,  
LAGOS**

**(UTILIZATION OF LANDSCAPE ELEMENTS AS  
INCENTIVE FOR RECREATION CENTERS)**

**BY**

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**AUGUST 2002**

## **DECLARATION**

I hereby declare that myself have composed this thesis, and that it is a record of my own research work. It has not been accepted in any previous application for a higher degree. It has been under the supervision of my supervisor, Arc. Musa Sagada.

All quotations are distinguished by quotation marks, and the sources of information are specifically acknowledged by means of references.

.....

OJOBO HENRY

.....

DATE

CERTIFICATION

This thesis entitled “LEKKI GOLF AND RECREATION CENTRE, LAGOS (Utilization of landscaped elements as incentive for recreation centers) meets the regulations governing the award of the degree of Master of Science in Architecture (M.Sc. Arc.) of Ahmadu Bello University, Zaria, Nigeria and is approved for its contribution to knowledge and literary presentation.

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Member, Supervisory Committee Date

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Head of Department Date

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Dean, Post Graduate School Date

# **DEDICATION**

**To God: for being a source of hope, wisdom, inspiration and strength.**

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## **ABSTRACT**

Golfing as a sport is not only a major social movement organized by volunteers for mutual production and consumption, or part of communal welfare provided by public service, but also a major service industry with commercial trading and associated functions like sponsorship viz a viz competition and entertainment. Suffice to say that golfing constitutes an interplay of sports, recreation and tourism, which can be harnessed through scenic natural environment. Several golf clubhouses and recreation centers have been constructed in the past, but in the urge to build quickly, the result have not always been architecturally distinguished or environmentally sympathetic.

This thesis will be an enlightened synthesis of active sports and passive recreation linked with nature. Aside the conservation of the fragile ecological environment, a key design determinant will be the provision of an environment which will facilitate the behavior needed or desired by people to achieve their goals.

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# **CHAPTER ONE**

## **INTRODUCTION**

### **1.1 INTRODUCTION**

Centuries ago, when visitors ventured into the area that subsequently became known and referred to as Nigeria; they expressed delight at the values they encountered and the natural resources that abound. Today, it has become a known fact that Nigeria is blessed with places of touristic significance, however, these tourist sports need to be strengthened and developed such that they would become culturally viable aspects of our environment and economy.

The terms “eco-tourism” and “sport-tourism” have a familiar ring in the tourism industry parlance, concept and concern, yet their full ramifications and the complex interrelationship between them are rarely embraced. Eco-tourism is nature-based tourism that involves education on and interpretation of the natural environment as it is managed to be ecologically sustainable. Conversely, Architecture of recreation (sport) in a unique environment must be firmly grounded in ecological principles, and by extension be both site and climate specific. In words of Frank Lloyd Wright “a building is appropriate to place if it is in harmony with its natural environment, with the landscape taking advantage of natural features”.

Suffice to say that, when sport and recreation in a unique environment (like the Lekki Beach) coupled with economic development (usually labeled tourism), then the associated developments can serve as a positive, valuable resource in our ‘struggle for significance’ in the tourism industry.

The ultimate value of recreation and sport is the contribution it can make to self-actualization and personal significance. The actualization process means the development or discovery of true self, and development of existing or latent potential to the maximum. The existence of a coastal recreation area should therefore be regarded as a natural gift needing to be preserved or treated with great care and skill. Encouragement of additional sports like golfing through the provision of a standard golf clubhouse and course alongside other recreational facilities is a natural step towards generating capital as well as taking maximum advantage of the land and water resources of the area.

Indeed, the recognition and utilization of landscape elements and appreciation of the landscape potentials of the existing water body either in its utilitarian, symbolic, therapeutic, metaphysical or leisure context forms the core design theme of the “Lekki Golf and Recreation Centre” is with the aim of unifying tourism, recreation and sport.

## **1.2 PROBLEM DEFINITION**

A wide range of recreational facilities (including golf clubs) had hitherto been the product of panic adoption of ill-considered facilities on unsuitable sites. Many if not all, are apparently lacking in unique architectural character that could be perceived as growing out of the environment with voids that make way for the utilitarian, symbolic, therapeutic leisure and visual elements of landscape.

Considering the heavy population, hustle and bustle of the city, there is therefore the need to create a more spacious, accessible, coherent, adaptable and sophisticated recreation center; a better deal for tourists.

### **1.3 MOTIVATION**

A fascination of the visual, atmospheric and climatic qualities of the coast coupled with a strong interest in the game of golf forms the core motivating factor in the quest to provide or create a place where people can escape the ordinary, relieve tired minds or block out distractions.

### **1.4 AIMS AND OBJECTIVES**

Materials and forms are used to communicate ideas and meanings in Architecture. When the fusion of architecture and water is treated carefully and creatively, the potential for meaningful expression is practically limitless.

The aim of this project is to create an avenue where the tourism potentials of the coast can be showcased and to incorporate the different facilities required.

#### **The objectives include: -**

- (a) Provision of an interceptor area where the availability of new sport and recreation facilities may reduce pressures in the city center.
- (b) It would act as an opportunity area where environmental improvement and landscape regeneration would encourage participation in sport recreation.
- (c) Providing a landmark for Lagos state while meeting the needs of local and international tourists alike.
- (d) The provision of maximum range of facilities for leisure, recreation, entertainment and opportunities, that meets up with a wide range of choice of different lifestyles, expression and taste.

## **1.5 SCOPE OF STUDY**

The scope of this thesis will be limited to the provision of facilities for social activities. This would include provision of services and information center, golf clubhouses, golf course, shops, allied sporting activities and miscellaneous with the detail landscaping of the center as a key design determinant.

## **1.6 SIGNIFICANCE OF STUDY**

Apart from aesthetic considerations, technique and functionality has a Major role to play in the control and improvement of the quality of the built environment.

A well-landscaped recreation environment acts as an intermediary that negotiates connection or separations between people and the built environment, thus communicating meanings through proper utilization of forms and materials.

## **1.7 RESEARCH METHODOLOGY**

The process of data collection and analysis shall be through the following sources.

- (a) **PRIMARY SOURCE:** This includes obtaining information from existing golf clubhouses and recreation centers through case studies and design reviews.
- (b) **SECONDARY SOURCES:** These include journals, periodicals, past thesis, the Internet e.t.c.

## **CHAPTER TWO**

### **RECREATION, LEISURE AND TOURISM**

#### **2.1 RECREATION AND LEISURE (RELATIONSHIP)**

For the majority of people recreation and leisure are more or less synonymous terms for things, which are done during free time. The two terms are related but with different definitions and concept. Broadly, recreation is said to encompass the function of relaxation and entertainment, while leisure is concerned chiefly with personal and social development.

#### **A. RECREATION**

- (i) As relaxation: a period in which the individual can rest mentally and physically from the demands of work and other necessary chores.
- (ii) As entertainment: an antidote to the boredom and repetition that are often involved in work in personal and domestic chores and in retirement.
- (iii) As a means of personal and social development: a conduit, which allows the individual to develop along lines which may contrast significantly with the often restrictive thoughts and actions that work and other chores may permit.

Hence, recreation may be defined as participation in it's broadest sense, in any pursuits other than those associated with work and necessary tasks of a

personal and social nature which a person undertakes freely for purposes of relaxation or entertainment or for his own personal or social development.

## **B. LEISURE**

- (i) As time: The time available to the individual when the disciplines of work, sleep and other basic needs have been met.
- (ii) As activity: Particular types of activity including palpable reward, be it enjoyment, rest and recuperation, diversion, excitement, companionship, escape or physical or mental recreation.
- (iii) As state of existence: A phenomenon, which is the mind of the participant; hence subject.

In view of the foregoing, leisure could be defined as free or discretionary time, time over the use of which a person may exercise choice.

## **2.2 THE OBJECTIVES OF RECREATION AND LEISURE.**

The objectives of recreation may be categorized under four groups. These include Health development, Human relaxation, Civic development and Self-development.

### **2.2.1 HEALTH DEVELOPMENT OBJECTIVES.**

There is no doubt that recreation has a considerable therapeutic value for people. It provides adaptive activities conducive to sound health. There are activities, which one may relax, escape from the tension, forget about problems and thereby

contribute to mental health. The variety of activities thus provided contributes to the integration and development of the whole individual.

### **2.2.2 HUMAN RELATION OBJECTIVES.**

Such attributes as courage, justice, patience, tolerance, fairness and honesty are some of the qualities that evolve when individuals play and recreate together. Attributes of good human relation are always developed, wholesome attitude of social co-operation, loyalties to the group, recognition of the right of others are the ideas one conceives in direct proportion to what he gives to the group.

### **2.2.3 THE CIVIC OBJECTIVES**

The objectives of recreation derive not only from quantity alone but also from its intimate interconnection with the quality of people's lives. It contributes to community solidarity by uniting people in common projects regardless of race, creed, economic status or other discriminatory factors. It helps to build the moral of the members of the community; it is a contributing factor in reducing crime, in that it provides setting and activities in which youths and other individuals may engage in constructive, worthwhile activities, rather than destructive antisocial activities, thereby developing the individual to become a more valuable citizen in the environment.

### **2.2.4 THE SELF-DEVELOPMENT OBJECTIVES**

An individual's quality of life and sense of well-being can be greatly enhanced through the sheer fun and enjoyment, which can be derived from participation. It allows for the development of skill and abilities, which are latent and dormant in the individual until

they are aroused by leisure hours with proper setting and educational experience, because the participations learns new skills, techniques, and new abilities.

### **2.3 CLASSIFICATION OF RECREATION AREAS.**

Recreation areas are referred to in variety of names-parks, forests, and nature Preserves, monuments, historical areas, playgrounds, wildlife refuges, waysides and many others. These names are based on the physical characteristics of site, its chief users, its history or on the system of administration. Because of the differences in the physical areas used for recreation, classification of such areas into fewer groups becomes necessary to enhance clear understanding and analysis. This classification is in three part, user-oriented, resources based and intermediate areas.

#### **2.3.1 USER ORIENTED AREAS**

This includes city parks or playgrounds. Accessibility to users is the

Main plus of this class. The main time of use is after school for children, after work for adults, and during the day by mothers and small children. Hence, it is essential that such areas should be close to users, both in order to keep the travel time down and to permit some users to go unaccompanied.

#### **2.3.2 RESOURCE BASED AREAS**

The dominant characteristic of resource-based areas is there outstanding physical resource. Although resource quality for recreation is largely a subject matter, some areas are inherently more attractive and outstanding than others. This applies to historical as well as natural sites, which includes swamp areas (Areas that usually lie at considerable distance from concentrations of population). Except for the historical sites, which are often small, most resource based recreation areas are fairly large units, generally of several thousand acres or more.

**2.3.3 INTERMEDIATE AREAS.**

This lies between the extremes of the areas mentioned earlier both geographically and in terms of use.

Such areas should be carefully located with respect to users at least

Within an hour's drive and should be on the best site available. Visit to

Them involve less travel time and expense than resource based area.

Example includes state parks and federal reservoir areas. Areas of this

Type often include a few hundred acres, much larger than typical

User-oriented area, but much smaller than the typical resource based Area.

**TABLE 2. 1 CLASSIFICATION OF RECREATIONAL USES AND RESOURCES**

TYPES OF RECERATION AREAS

ITEM	USER ORIENTED	RESOURCE BASED	INTERMEDIATE
1. General location	Close to users; on whatever resources	Where Outstanding Resources	Most not be too Remote from users; on best resources

	available	can  Be found;  may be  distant from	Available within
2. Major  Types of activity	Games,  such  As golf,  tennis,  Swimming,  Picking,  Walks,  horse  Riding,  zoos  Playing for  Children  e.g.	Major sight  Seeing,  Scientific  and  Historical  Interest,  hiking  And  mountain  Climbing,  Camping,  Fishing and  Hunting.	Camping, pick-  Nicking, hiking,  Swimming,  Hunting, fishing.
3. Period of	After Hours	Vacations	Day outings and

Major use.	(School or Work)		Weekend.
4. Typical  Sizes of  Areas.	One to a  Hundred, or  at most a few hundred  Acres.	Usually  some  Thousands of acres  perhaps  Many  Thousands.	A hundred to  Several thousand  Acres.
5. Common  Types of  Agency  Responsibility	City,  Country  Or other local  Government  Private.	National  Parks  And  National  Forests  Primarily,  State Parks  in	Federal reservoir,  State parks;  Private.

		Some cases;  Privates,  Especially  for  Seashore  and  Major lakes	

SOURCE: Marion C. and C.H. Stoddard, (1960).

#### 2.4 **PERSPECTIVES ON SPORT AND RECREATION.**

According to the web star’s sport dictionary, sport is “a recreational or competitive activity, which involves a degree of physical exertion, or which requires skill in the playing of an object”. Sport and recreational activities can also become the focus mega-events. These events are capable of raising the profile of a country, region or city and enhance its international competitiveness. Golfing falls within the bracket of recreational, competitive and professional sport. Today, it has become a major interest in modern society with more people taking part than ever before, most purely for enjoyment, some for fitness, and others to attain international excellence or to living as professional, Summarily, golf as a sporting and recreational activity is grounded in three fundamental human drives; namely; to seek challenges; to complete and play.

#### **2.4.1 HISTORICAL BACKGROUND OF GOLF.**

The Royal and ancient club of St. Andrews, Scotland, founded in 1754, has become the recognized seat of authority for all aspect of the ancient game of Golf. It was from this club that the 18 holes round originated. The club also set down the first written rules of the game. These rules were developed to help govern play and settle disputes.

Played in the beginning on seaside links with their crisp turf and natural hazards and afterwards on downs, moorland, and parkland courses of various lengths and characteristics, it combines with its open air and exercises an intrinsic fascination. Golfers played with a leather-covered ball stuffed with feathers, called the feathery, until the gutty was introduced in 1848. The gutty was a solid ball made from rubbery substance called gutta-percha. The rubber-cored ball invented in 1898 by U.S golfer Coburn Haskell later replaced it. Its players participated at every level, from recreation golf to popular televised professional tournaments.

#### **2.4.2 MODE OF PLAY**

The game of provides a continuous challenge even to the most highly skilled. Each participant, using a variety of clubs, attempts to drive a small ball into a succession of 9 to 18 holes on a specially laid out course in as few strokes as possible. Play is usually in-group of two to four people who move around the course together each taking turns playing his ball. Each person plays his own ball, and all strokes must be with one of the maximum 14 clubs that a player is permitted to carry. The ball must be played as it lies except in virtual circumstances where the rules provide for improving the lies of the ball. The total number of strokes taken to drive the ball from the tee into the holes, plus any penalty strokes incurred by the player, is recorded as the player score for that hole.

Competition is either stroke plays or match play in stroke play each player's score is the total number of strokes taken to get round the course and the player with the lowest total is the winner. In the match played the scores are compared at every hole and a player wins, loses, or halves each hole. The player or side winning the most holes win the rounds. Every pro-am competition are for four days minimum and upward of 50 days.

### **2.4.3 EQUIPMENT**

Golfers main equipment consists of the ball, and a set of clubs. Other equipment required includes, a bag, trees, golf glove sand golf cart.

### **2.4.4 TREND AND TOURNAMENTS IN NIGERIA**

Established in 1921, the Kaduna golf club is known to be the first golf club in Nigeria. Professional golfing started in 1969 with the birth of the professional golfers association of Nigeria (P.G.A.N). Since the NIGERIAN open Golf championships were debuted in 1969, the yearly event has been missed four times. In 1972, 1987, 1996, and 2000. The trend is that each break ushers in a significant change either in the stocks of winners or in the mode of packaging. For instances the Europeans professionals establish their dominance of the title from 1973 to 1986.

It is believed among golf buffs that the most striking changes was witnessed in 1988 when Fijian Vijay Singh ended the era of white man dominance of the event with four day score of 281. A feat he repeated the following year. He was the first "Blackman" ever to lift the Nigerian open trophy.

Following this precedent closely is Africa's first victory through James Lebbie of Sierra Leone in 1991 and a Nigerian triumphed through the double-headed effort of Lateef Lasisi and peter Akakasiaka in 1995.

Meanwhile, Ikoyi club 1938 course in Lagos was the venue changed to the exotic IBB international Golf and country club, Abuja. The change of the open venue influenced a change in the structure of the organization. Government became provider of prize and sponsorship fund in conjunction with the public and private sector. Today, several sponsored tournaments are being promoted in various clubs across the country. (The Guardian newspaper, Jan.20, 2001).

## **MAJOR TOURNAMENTS IN NIGERIA**

- Nigerian open championship.
- Shell trophy tournament.
- The president open championship
- P.A.N open championship.
- M.T. N virgin golf classic tournament.
- Cadbury cup interclub championship.
- N.I.N.G club open championship.
- Habib Nigeria bank Ltd.Open championship.
- DORNIER/A.I.E.P. Pro-am competition.
- Niger insurance plc. Amateur tournament.

#### 2.4.5 THE GOLF COURSE.

The site largely determines the character quality and cost of the Golf course. The traditional home of golf on seaside links remains the modes and some aspect of land is generally echoed in a good inland course made of a reasonable cost. The following points constitute the basic design and construction principles.

- a) **SIZE:** from 100 to 150 acres. On average ground, 120 acres will do very well.
- b) **Shape:** Avoid necks or salient less the 400 feet wide prefer a single unit to one divided by roads.
- c) **Slopes:** steep uphill holes are never popular unless the ascent is short Gentle undulation on a broad scale should predominate.
- d) **Soil:** Sandy soil is preferable but fine, silty sands can course trouble. Natural drainage is to prized.

Length		Par Rating
Yards	Meters	
0-250	0-230	3
251-475	231-435	4
476 and above	436 above	5

Source: Haw tree F.w. (1996)

#### e) Tees

- Should be 40-60 yards (36-55m) to one side or the other of the last green.

- Should be placed on level parts of the course with a slight slope upward in the direction to be played.
- 10-x 35m tee is ideal.
- Tee length from the hole should reduce by 15% for ladies.
- Teeing grounds must be placed absolutely at right angles to the line for the holes.
- Number 1 with the 10<sup>th</sup> should be close to clubhouse.

f) **Putting greens.**

- Should never be quiet round or square. Pear shape is more desirable.
- The shorter approach the smaller the green.
- 30-40 Yards (27-36m) radius is okay. Maybe smaller in flat lands.

g) **Bunker**

- Averagely, bunkers should be 10- 12 yards (9-11m) wide and 4-5 Yards (3-4m) in breadth
- Should be fairly sparse

h) **Fairway and rough.**

- A broad fairway is 50 yards (45m) wide and a narrow one 25 yards (22m). 30 to 40 yards (27-36m) is a useful average
- The pattern could provide a comfortable width of 45 yards (41m) at 150yards (137m) from the tee, 40yards (36m) at 200yards (182m), 35yards (32m) at 250yards(228m) and above
- Fairway centers should not be closer to each other than 70yards (64m) at critical points

**i) Trees.**

- They are better sited away from the greens, tees, and bunkers and as a single specimen group of tree.
- Contrast trees with an open head against those with denser foliage.
- The choice of trees for planting should be related to the landscape generally
- Exotic subjects can be planted between the clubhouse and the first tee, but from that point on the landscape should be naturalized.
- Spacing can be from 5m up to 15m for big trees.

**j) Water**

- Landscaping the golf course with water features must form part of the original concept.
- Water body with a minimal dept of 4 1/2ft(1.35m) is desirable
- The water body must be visible.

#### **2.4.6 TYPES TO CLUB SPONSORSHIPS**

There is different type of club ranging from social. Political; Game or sport club, academic clubs e.t.c. However they are generally classified under two main types based on sponsorship.

i.i. **The private club:** This is usually a cooperatively owned club, which social, recreational needs, facilities for the exclusive use of its owner-members. Here, an attempt is made for every conceivable social, recreational needs, its members can afford.

In private clubhouses functions break down as follow : social, golf and other sports, food service, storage, administrative office e.t.c. The individual components of functions will vary from club to club, depending upon the size and class of operation involved.

ii. **The public club:** This is owned by government institution, and provides adequate and accessible facilities for as many persons as possible at reduced prices

#### **2.4.2 GOLF CLUBHOUSE**

Location of the clubhouse, entrance drive, parking spaces, tennis courts, swimming pools, golf practice and lesson tees, fairways and traps and practice greens, is a job that requires a great deal of thought. The best location for the clubhouse generally is convenient to but removed from the highway. Road construction and maintenance costs must be kept in mind when location the clubhouse.

Often the clubhouse site is a prominent hilltop, although elderly golfers may bemoan this choice because this means the finishing hole of the course must of necessity be uphill; they do not like a heavy climb at the end of a strenuous day of golf. Generally, a convenient, and practical site can be found at a less elevated spot.

#### **2.5 TOURISM DEFINED**

Tourism is an important but not well- defined concept. It is considered to be multi-disciplinary activities. This includes the various forms of vacation and business travels, which has its main purpose connected with leisure (i.e. recreation holiday, sport heart, study and religion) or business, family visits and conferences.

Hunziber and krupf defined tourism as the relationships arising from the travel and stay of non-residents, in so far as they do not become permanent residents and are unconnected with any earning Activity (Journal of tourism studies. Vol, no1 1990).

However the W.T.O (world tourism organization) describes tourism as an in discretionary travel by individuals and families for business, military, education, sport or family visitation that involve a stay of at least one night, but less than one year, away from home. This definition obviously emphasis the purpose of the visit to which the Tourist embarks on. It also refers to the type of activities one would expect in a particular destination.

### 2.5.1 THE TOURIST

A tourist is a voluntary temporary traveler, traveling with the expectation of pleasure from the novelty and change experienced on a relatively long and non- recurrent round trip.

The character tics of tourists include;

- People who undertake a journey to, and stay in, various destinations.
- Their destinations are distinct from their normal place of residence and work, so that their activities are not the same as those of the resident and working populations of their destination.

There are however, different types of tourists, these includes:-

- **International tourist:** describes a visitor who travels to a country other than that in which he has his usual residence. The main purpose of whose visit is other than the exercise of an activity remunerated from within the country visited and who is staying for a period of one year or less. The main purpose of visiting can be classified under:
  - Pleasure; holidays, culture, active sport, visits to friends and relatives.
  - Professional; meetings, conferences, exhibitions and business.
  - Other tourist purpose; studies, health, pilgrimage.

- **International excursionist:** - is the same with the international tourist but involves the stay of less than a day in the country visited. Pilot and airhostesses fall into this group.

### 2.5.5 TOURIST DESTINATIONS.

These are countries, cities, towns, or areas that offer unique and interesting settings for tourists. A particular destination may be known for special features. It could be natural or artificial. Some areas may be romantic; some may offer fantasy, some tranquility, as is the case with beautiful natural settings. Destinations such as Paris and Rome are considered to be very romantic cities. Paris also offers varied products such as good food; infact Paris is considered as “the food capital of the world” because of its much exquisite cuisine. Cities such as London and New York are major business centers and are important destinations for business tourists. Countries like Egypt, Saudi Arabia and Israel contain many ancient archeological sites, and they are major countries for religiously inclined pilgrims. Countries such as Kenya and South Africa are major tourist destinations because of their game reserves and wide life. In East Africa, tourists Watch the spectacle of the great animal migrations across the plains. The Caribbean Island offers the most colorful carnival events in the world. Important artificial features such as the Great Wall of China, the Pyramids of Giza, the Tajmaha in India and other important features (including the 7 wonders the world) are important tourist destinations.

**TABLE 2.3 TOP TOURIST DESTINATIONS IN AFRICA**

RANK	COUNTRY	ARRIVAL (000)
1	Morocco	4,027
2	Tunisia	3,656

3	South Africa	3,343
4	Algeria	1,132
5	Kenya	783
6	Zimbabwe	750
7	Botswana	452
8	Mauritania	375
9	Swaziland	285
10	Ghana	233

**Source:** W.T.O. (Daily Times of 30-12-94)

### **2.5.3 TOURIST MARKET.**

These are geographical areas where large numbers of tourists are attracted. The attraction is as a result of important features present in the tourist destinations. The country with the largest number of tourists is the United States of America (U.S.A.).

There are various aspects of a geographical location that encourages the Growth of tourism. This obviously includes both natural and man-made attractions, accessibility, transportation, communication and services. The natural attractions are the physical features with distinct and unique characteristics, such as, waterfalls, water bodies, climatic qualities, exotic scenery, land forms, hills, mountains, volcanoes and wildlife.

The man-made attractions include features created for man's leisure or convenience. These features include hotels, entertainment and recreation centers, parks, museum, palaces, art and crafts etc.

- **Tourism supplies;** is defined in terms of the demand (the buyer) rather than is usual in other industries, in terms, of the properties of the product and it's promotion .for instance, ice cream bought in a city, would have nothing to do with tourism if bought by a local inhabitant, but would be part of the tourism industry if bought by a visitor (tourist) .by and large, the tourism benefits and marketability of a game as popular as golf coupled with other recreational facilities in unison with a natural (good scene) environment is not far –fetched.

## 2.6 TOURISM INDUSTRY

Tourism constitutes one of the world's largest industries, with a total annual output of \$3.6trillion and has an employment estimated to be 255 million people in different travel related jobs like tour guides, hotel clerks, airplane pilot, customs officers, computer programmers for airline reservation and photo shops. Tourism in essence is the biggest job-creator in the world. For instance, in the United States of America, approximately 255 million people, nearly the entire US population is employed directly in travel related jobs (Time magazine 16th June, 1997).

It's economic influence cuts across both poor and rich countries. Worthy of note is the fact that African countries like Ghana, the Gambia, Tanzania, Malawi, Zimbabwe, Botswana, south Africa etc. all have developed a comprehensive tourism master plan, and today the business is sustaining their economy, creating more jobs in the job spectrum. (Daily champion Sept 17<sup>th</sup>, 2001).

In Europe, the world's top tourist region, nearly 12% of the economy involves taking care of Americans in Paris, German holidaymakers in canary islands, Japanese shoppers in London, Swedish archaeology buffs in Greece. France has more foreign visitors than any other country, with 61.5 million in 1996. (Time magazine 16<sup>th</sup> June 1997).

The world Tourism organization (W, T, O) estimates that by 2010, international tourism will double to more than a billion tourists annually. More than half will be to Europe and East Asia. The pacific region will receive an estimated 229 million foreign visitors and there will be an increase in manpower in feeding and housing them Employment will also increase in either area. This growth would boost global revenues to tourist and its spin off 7.1 trillion and drive new investments worth \$ 1.6 trillion.

**TABLE 2.4: INTERNATIONAL TOURISM RECEIPT OF SOME SELECTED COUNTRIES  
(US \$M)**

<b>Country</b>	<b>Tourism Receipt</b>	<b>%</b>
<b>Egypt</b>	<b>1,586</b>	<b>36.4</b>
<b>Nigeria</b>	<b>78</b>	<b>1.1</b>
<b>Morocco</b>	<b>933</b>	<b>33.0</b>
<b>Kenya</b>	<b>344</b>	<b>35.8</b>
<b>Gambia</b>	<b>36</b>	<b>-</b>
<b>Mali</b>	<b>37</b>	<b>14.2</b>
<b>Togo</b>	<b>40</b>	<b>18.2</b>
<b>Mexico</b>	<b>3,479</b>	<b>16.9</b>
<b>Spain</b>	<b>14,760</b>	<b>43.2</b>
<b>United Kingdom</b>	<b>10,255</b>	<b>7.8</b>
<b>USA</b>	<b>23,174</b>	<b>10.4</b>
<b>Italy</b>	<b>12,174</b>	<b>10.4</b>
<b>France</b>	<b>11,870</b>	<b>8.3</b>

Source: WHO compendium of Tourism Statistics, 10<sup>th</sup> Edition 1984-1988

## **2.7 TOURISM IN NIGERIA.**

Nigeria is already well known for its strong political posture on African Affairs but this has to be complimented by a stable and sound economic system. Tourism offers a good alternative to our dwindling oil fortunes.

The country boasts a myriad of many gripping tourist destinations and its development blue print, vision 2010 projects that by the year 2005 Nigeria will be the “ultimate Tourism Destination in Africa”. This still remains a fact to be proved, for even though tourist spots abound across the country, the proved, for even though tourist spots abound across the country, the tourism sector remains rather underdeveloped.

The growth of tourism in Nigeria could be traced to the pre-colonial and post-colonial periods to the present day.

### **2.7.1 PRE-COLONIAL.**

Farmers and the nomadic pastoralists who spent more time in farms devoid of fixed working periods controlled the economy. Socialization, dancing, drumming and folk tale. Tourism was at its lowest ebb in this case because of the absence of the “spice” which education and wide travel would have added.

### **2.7.2 COLONIAL ERA.**

Colonization brought about improvement in standard of living and mode of transport became more advanced. White-collar jobs where provided. Paid annual leaves and normal working hours were introduced hence the improvement in tourism, out door recreation and

traveling was harnessed through the provision of recreational centers, parks, clubs, museums and zoological gardens.

### **2.7.3 POST COLONIAL ERA.**

With the improvement in transportation, economy and introduction of annual leave, education and money became quite available; people become motivated to participate in leisure activities and the tourist market gradually opened up.

### **2.7.4 PRESENT DAY.**

Under the military dictatorship, tourism was the least on the agenda of the government policies. Bad governance leading to poor economic performance and economic instability combined to deprive us of the opportunity to develop our tourism industry. We are left instead with a large burden of foreign debts, poverty and collapsed infrastructure, among other problems.

With the changing tide in the country's new democratic environment, tourism investment atmosphere is now conducive given the abundant resources available, large market, enthronement of enduring democracy and package of incentives put together by the government. (Africa Today Sept. 9<sup>th</sup>, 2001.).

Although the task of projecting tourism to enviable height is not a simple one, but yet surmountable with resolved commitment and sustained partnership among stakeholders and players in the industry. Hence, the Lekki golf and recreation center amounts to seizing the moment and rising to the occasion.

## **2.8 TOURISM IN LEKKI, LAGOS.**

This area is blessed with a beautiful climate and eco-tourism sites featuring beaches that are simply amazing. The Lagos state regional plan (1980-2000) stipulates that all those

lands adjacent to the Atlantic coast are proposed/reserved for recreation and tourism to utilize the potential of the Atlantic Ocean and its front for the benefit of both local and foreign visitors.

Existing economic and residential activities in this area are permitted to continue undisturbed but with a new development must be in conformity with the objective of fulfilling recreational or tourist purposes.

Examples of the types of development permitted include:-

- Hotels/motels
- Resorts
- Small boat harbors, marina and landing ramps;
- Golf courses;
- Botanical gardens, arboretums;
- Zoos;
- **Amusement park**

## **2.9 TOURISM AND RECREATION ENVIRONMENT.**

One sector of the tourism industry which is growing particularly fast is tourism and recreation in natural areas, (a.k.a eco-tourism), where the tourist attraction is provided by relatively undisturbed natural environments. Coastal areas, conservation reserves, state forests e.t.c. are subject to increasing levels of tourism and recreation, mainly because recreation in natural areas is becoming even more popular. Using the coastal areas as a case in point, there is now wide recognition that these natural resources are finite and are in danger of being exploited, since the demand for tourism and recreation in natural areas is increasing and the natural areas is not. It is realistic

and pertinent to assume that levels of tourism and recreation in this zones (reserves) will continue to increase in the immediate future.

Good environmental planning and management is required to minimize the impact of such tourist pressure. This requires incentive to encourage particular activities and discourage others, for instance, low impact sporting and social activity such as golfing should be encouraged. Finally, environment impact of tourism and recreation can also be minimized through the maximum utilization of the natural landscapes (site) elements as incentives to the provision of facilities.

- **TYPES OF TOURISM AND RECREATION ENVIRONMENT**

Tourism and recreation takes place in diverse range of environments, although most have in common one or all of the following elements; a landscape to observe and enjoys, activities to participate in, and experiences to anticipate or remember. The main bases of classification of tourism and recreational environment as tabulated below can contribute to understanding of developments and their impacts.

**TABLE 2.5 TYPOLOGY OF TOURIST AND RECREATION ENVIRONMENT**

Nature	Nature-human	Human
Interface		

Settlement

General environment

Observational

Settlement

functions

Panoramas

Rural /agricultural

Commerce

mountains

Scientific gardens

Rerail

Seacoast

Finance

Morphology

Institutions

Plain

Animals (zoos)

Government

Arid

Plants

Education and

science

Island

Rocks and archaeology

Religion

people

way

Ethnicity

specific feature

leisure nature

Tourist

Landmark

Geological

Trails

forms of

access

Biology

parks

To and from a

destnation

flora

Beach

Destination

Founa

urban

information and

receptivity

Hydrological	others	Basic needs
	Resorts	Accommodation
		Meals
Inclusive environment		
Ecological	participatory	Leisure superstructure
climate	mountain activities	Recreation
entertainment		
sanctuaries	summer	performance
National parks	Winter	sporting events
Nature reserves	water activities	Amusements and
monuments		
		performance
		festivals
		cuisine

**Source: sue (1993)**

## **CHAPTER THREE**

### **LANDSCAPE DESIGN**

#### **3.1 LANDSCAPING**

In recent years, a great public awareness of the environment has strengthened the role of landscape design, hence, providing incentive for the creation of places where people can escape the ordinary relieve tired minds or block out distractions.

The oxford Advanced Learners Dictionary refers to Landscape as "All the feature or element of an area that can be seen when looking across it".

Land therefore could be define as the art and science of arranging land and the objects upon it for human use and enjoyment through the utilization of natural, cultivated and or constructed element. It is an art insofar as it creates for people experience that uplifts their spirit, expand their vision and invigorate their lives. It is a science insofar as it deployment precise knowledge of its processes and materials. And it is directly related to and expression of nature, insofar as it incorporates nature materials and scenes.

The element of landscape include:

- Topographical features like hills valleys and water bodies
- Cultivated feature such as trees, grasses flower scrubs
- constructed feature like building , roads bridges fountains and statues

Landscape designee, therefore work with a wide range of natural and processed material capable of holding up will in the specific local climatic conditions of the site

#### **3.2 HISTORICAL BACKGROUD OF LANDSCAPE.**

Landscape Architecture is as old as Architecture itself. In primeval period, the Egyptians developed efforts to planting gardens within the walled enclosure surrounding their homes, temples and palace they later laid out the gardens around rectangular fishponds flanked by ordinary rows of trees

In the Mesopotamia, the hanging garden was the most famous Erected in 605 BC during the reign of Nebuhannezzar II they including full-sized trees planted on earth-covered terraces raised on stone vaults in a corner of the palace complex. The Assyrians and Persians developed great tree fled park for hunting on horse back rectangular walled grades were also plated, irrigated by pools and canals and was shaded by trees which were usually set in vast bare plains. The gardens symbolized paradise and this inspired the design of Persian carpet

In Greece, colonnaded gardens were very common, the preserved sacred grooves as the habitats for divinities. In Rome ornamental horticulture first flourished in suburban villas around Room. Open arcades and epistyle were used to weave together dwellings; gardens and pools connived gardens were also used. Villas in hills terraced gardens the rich lavishly laid out pleasure grounds such as Luculent and meacennas this included banquets halls porticoes and sculpture. The vast ground of the Emperors Hadrious villa near Tivoli were magnificently landscape in the hot and dry climate areas of the deserts landscape was inspired by the presence oasis and the ancient Persian paradise gardens was centered on water they had enclosed courts surrounded by cool arcades and planted with trees and shrubs enlivened with colored tile work, fountains and pools and the inter play of light and shade in the 15 century grades with flower fruits trees water and shade were arrange in a unique composition the Tjmahal grades

In Asia, for example, China, palaces temple. And houses were built around series of courtyards, with trees and plant often in pots that could be change with the season and pools. The imperial city in Peking contained elaborate pleasure gardens with trees, artificial lakes and hillock, bridges and pavilions. in Japan, they had gardens inspired by Chinese and Korean models palaces , temples, teahouses and private houses and gardens settings that were closely integrated with the buildings. Kyoto was famous for it s gardens which included pools, waterfalls, rock stone, sand and evergreen, stone lanterns sculptures and wooden bridges gates and pavilions. Such tradition continues to some extent in modern Japan and has influenced western landscape architecture

**Medieval Europe:** Gardens were generally small and enclosed for protection within the fortified walls Of monasteries and castle. The gardens of most monasteries-s were surrounded by cloistered wails and had a well or fountain at the center, possibly inspired by Persian gardens which was intended to enhance meditation.

**Renaissance Italy:** Castles gave way to palaces in the roman tradition. The houses were usually designed with setting, thus ensuring harmonious relationship between the house and environment. Laid out along the central axis, avenue, walks and steps from terrace, afforded fine views of countryside. Borders of tall, dark cypresses and chipped Jew hedges, geometric flowerbed, stone balustrades, fountains and sculptures conformed strictly to the overall plan. Examples of the 15th and 16th century gardens include the garden of the Medici Palmieri and La Pietra Villas in Florence.

By the later part of the 16th century, Rome and its environs contained the finest

achievements of Renaissance Landscape architecture. In the hill north of Rome, water was used to cool and ornament the garden of the Villa d, este at Tivoli, designed by Piro Ligeria in C. 1550, the garden combined cascades, jets and curtains of water with placid pools and channels on hill side terraces through which the visitors walk on ramps and stairways.

In the 17th century, France replaced Italy as the primary inspiration of architectural and landscape design under Louis xiv, French gardeners began to work on a grander scale Andre'Le Natre, a famous architect, used sloping sites to create broad walks. At the palace of Versailles he laid out a vast expanse of basins, fountains, parterres and woodland alleys along a broad central axis whose terminus was the horizon. In the 18th century, French garden design responded to English naturalism with romantic woodland Landscapes dotted with grottos and pseudo-antique ruins.

The late 18th century gave rise to romanticism, with emphasis on untamed nature, the picturesque, the past and the exotic, which led to changes in landscape architecture as well as other arts. The parterres of symmetrically arranged flowerbeds and straight walks were placed with sweeping lawns, sloping hills with curved paths, rivers and ponds punctuated by informally planted group of trees and shrubbery, to achieve the effect of a wilderness. The English romantic style spread to other parts of Europe and North America.

In the 20th century, attempt was made to achieve a close integration of the house with its surroundings by Architects like Sven Marlilus in Sweden (1889-1977), Frank Lloyd Wright in the U.S. and so many others. Frank Lloyd Wright in the U.S. and so many others. Frank Lloyd Defined a building as appropriate to place if it is in harmony with its natural

environment and the landscapes were ever possible taking advantage of natural features. The falling water project is a notable example of this. Other proponents of this landscape technique include Lawrence Halprin, in 1962, at the California Coastal Development Sea Ranch, he revived the traditions of the water garden, in his complex walk through fountains in Portland and San-Francisco

### **3.3 FUNCTIONS OF THE LANDSCAPE.**

The function of the landscape are several and very important in the context of its design. Its function includes: -

- a) Landscape is used to enhance nature and to create natural settings for buildings, towns and cities.
- b) It can be used to enhance comfort, convenience and health within the surrounding.
- c) It can be used to create microclimate within the landscape areas or surrounding.
- d) It can be used to control soil erosion in areas where the topography is irregular.
- e) It can be used to break excessive wind flow, provide screens and demarcate areas of different functions.
- f) It can be used to create a buffer between quite and noisy areas.
- g) It can also be used to enhance accessibility on site.

### **3.4 CLASSIFICATION OF LANDSCAPE ELEMENTS.**

Landscape elements can be classified into two main categories. Soft and hard landscape elements. The soft landscape elements include trees, ground cover, shrubs, and hedges, flowers, water bodies and ponds.

The hard landscape elements include roads, footpaths, Driveways, pavements, playing courts, parking, swimming pools, sand, Stones and sculpture.

### **3.5 COMPONENTS OF LANDSCAPE DESIGN.**

The traditional components of landscape design include, space, Mass, line or outline, color, light and shade, texture, scent and time as Related to climate and season.

#### **3.5.1 SPACE**

Space is air or atmospheric volume defined by physical Elements and man's visual imaginations. The most easily understood Spaces are room's terraces, patios, and gardens. A room is defined precisely and unavoidably by floors, walls and ceiling particularly with doors closed and windows draped.

Space is defined by ground or floor surfaces below, obstacles that block vision horizontally or terminate it at the horizon and sky overhead. The fields, meadows, orchard, grooves, dune, forest, plains, lakes, River, oceans hills and mountains of the wider landscape have less precise and regular enclosures.

Man's sense of space results partly from his imaginative Extension, interpretation and structuring of what he actually sees.

#### **3.5.2 MASS.**

Mass is the opposite of space. They define each other and depend upon each other for virtual existence. Mass could be Topographical earth forms, rock outcrops boulders, trees and shrubs, Buildings and water forms-streams, lakes or waterfalls. These are masses in the larger landscape, even though they also incorporate space wittiness'

#### **3.5.4 LIGHT AND SHADE.**

Because the sun and to some extent, the moon, stars, fire and artificial lighting has the property of casting shadows, landscape design, in placing trees, structures and other elements on the land must always take into consideration the light and shadow resulting from Such placement.

Landscape must ideally, remain sensitive to and work carefully

With the light and shade relations that are most desirable in each

Different region or sub-region. For instances, light is welcome in

The cool, gray, northern climates and also in the foggy humidity

Of the western coasts of Europe and North America, while is

Required in the hot, bright, or tropical regions.

#### **3.5.5 TEXTURE.**

Texture refers to the smoothness or roughness of surfaces and

Is also an element of landscape design? It is perceived primarily by

Touch, although through vision one approximates the textures of different

surfaces and imagines how they would feel.

#### **3.5.6 SCENT**

The fragrance of flower and fruit is one of the traditional delight of garden and park, still attainable through sensitive selection and arrangement of plants. Scent is a delicate and subtle element in Landscape experience.

### **3.5.7 TIME, CLIMATE AND SEASON,**

The life span of garden and landscape spaces is dependent on Maintenance. Time and climate are closely interrelated in their effects on garden and landscape spaces. Because relation between Temperature and moisture, light and shadow, change daily through out the year, every region and locality on earth (i.e. every building site) has it's own climate, unlike any other. Therefore, garden and landscape design for every region, locality, and site may be expected to be different.

Time, climate, and season are all reflected in garden and landscape in the growth and change of plants. In the tropics, growth is constant and taken for granted, a problem of control. As growing season becomes shorter in the north and south or at higher elevation, they become more precious. In far northern and southern latitudes the short summer is a period of rejoicing and outdoor activity.

## **3.6 PRINCIPLES OF LANDSCAPE DESIGN**

Basically, the principles of landscape design deals with the arrangement of the elements, as expressed in specific materials, on a specific site. The principles include, unity and variety, balance and rhythm, accent and Contrast, scale and proportion.

### **3.6.1 UNITY AND VARIETY**

A variety of elements like color, texture, height, form, growth habits, Lines and perspectives can all be used to unify a landscape design. The difficulty of achieving a sense of unity increase as the number of elements or kinds of material increases. Natural landscaping allow for greater flexibility because so much of the art comes from nature and does not follow strict geometrical or formal design patterns. A little controlled chaos is permissible.

### **3.6.2 BALANCE AND RHYTHM**

In landscape design, balance is one of the most observed principles. Balance simply means that everything on both side of a giving focal point has equal weight. With asymmetrical balance, as the eye moves away from the central focal point everything is exactly the same on both sides.

Rhythm like balance result from the three-dimensional arrangement of element and materials on site. It is simply a sequence or Repetition of similar elements; as in a double row of trees. It tends to Emphasis direction and movement towards a viewpoint or terminus.

### **3.6.3 ACCENT AND CONTRACT.**

Arrangements that could have been dull and boring are made lively by the application of accent and contract. An accent is an element that differs from everything around it but is limited in quantity in relation to

surrounding elements. In contrast, two different elements may be juxtaposed in almost equal quantity to emphasize the special qualities of each. Accent can be achieved by contrasts in colour, difficult to achieve.

#### **3.6.4 SCALE AND PROPORTION**

Scale refers to the apparent (not the actual) size of a landscape space or of the element within it. Proportion is the determined relation among the sizes of all the parts within an element and of all the elements with a space. For instance the proportion of a landscape seat or bench as seen in the legs, arms and back determines the space of the seat. And the overall size of the seat, in proportionate relation of tree size, work way, lawn area, and so on, helps to determine the landscape area.

Finally, in designing a landscape, the movement of people, the focus, order and period these activities would be carried out should be pre-empted.

### **3.7 UTILIZATION OF LANDSCAPE ELEMENTS**

Natural and artificial materials of landscape if properly utilized are rich with shared or personal meanings. From the ordering of materials and forms the observer should be able to understand something about the use of the design and something about the people by and for whom it was built.

#### **3.7.1 WATER AND PONDS.**

Architecture engages in a continual dialogue with the environment and water is one of the fundamental elements of that dialogue. Large water bodies like the sea have the qualities of

reflection, depth, and a seemingly infinite surface, a focal point and can be said to relieve claustrophobia and expand personal space.

. **UTILIZATION:** Apart from providing beauty, water performs other functions, which includes: -

- a) As a horizontal line, it provides contrast to the vertical elements such as trees.
- b) It serves as focal point.
- c) It can be used to harmonize the building with the site.
- d) It can be as barriers.
- e) It forms one of the basic elements used as an obstacle in a golf course.
- f) Ponds can be used to demarcate boundaries and areas.
- g) They can be used to create external spaces by enclosing or breaking up areas.

. **CONSTRUCTION AND MAINTENANCE:** The two most common methods of creating a pond first require that nature be on your side. You can either dam up the main source (stream or sea) or you can dig the pond.

An area where the pond will reflect and where an irregular shoreline can be obtained should be considered. Clay, silt clay and some sandy clay will hold water for a pond. Sand, gravel and sand-gravel combinations are poor candidates for pond bottoms. The problem of slippage may be reduced by the use of a sealant in loosely bound soil.

It should be noted that water always occupies the lowest spot in the landscape, hence, it should not be perched on a slope or burrowed into the top of a ridge, otherwise it will look unnatural. It should be cited in the open because shade encourages foliage growth and trees should not be left to

overhang, to avoid leaves falling on the water surface. Decreasing the dept of the pond is one way to reduce the mosquito population.

### 3.7.2 TREES

No other similar element in the natural landscape affects the environment as much as trees. They can control the environment as well as please the eyes. They are used extensively in the construction of the golf course and its utilization in the golf club house environment compliments the course.

#### . UTILIZATION: -

- a) It can be used to cast shades.
- b) They are used to create barriers to the wind, dust, sunshine and noise.
- c) They are used to prevent erosion.
- d) Used to relate the building to the site and to link external spaces.
- e) A tree hazard can be used in defining line in a golf course.
- f) They help to direct pedestrian circulation.
- g) They are used to create a canopy high above ground.
- h) They are used to accommodate changes in level and ground modeling.
- i) They give privacy.
- j) They are used to demarcate boundaries.

### 3.7.3 LAWN AND GROUNDOVER.

Tiller grasses (those that grow to the side by sending create a lawn out stems along the ground).

. **UTILIZATION:** Lawns prevent the soil from blowing away when it is dry and from washing away during the summer. The roots keep the soil porous, soaking up water and

reducing runoff. This stabilizes the water table and cleans and filters surface waters. Lawns form the major part of a golf course and it enhances play.

There are two types of ground cover, trailing plants that root as they creep, forming a mass of uniform high and low shrubs that have a naturally widespread habit which produces an undulating, mounded appearance. A ground cover that is thoughtfully selected and is well cared for will suit any architectural style and will enhance any landscape scheme.

#### **3.7.4 SCREEN AND HEDGES**

Screens and hedges provide a framework of the garden. They are capable of controlling the seen and the unseen in the landscape.

##### **UTILIZATION: -**

- a) They are used to enclose and divide spaces or areas.
- b) Use as hazards in a golf course.
- c) They are used to direct pedestrian circulation
- d) They give privacy, screening, visual barrier and security.
- e) They are used to enhance and accommodate changes in level.
- f) They provide shelter from wind, dust and noise.
- g) They are used to direct focus on views or away from objects.
- h) They are used to demarcate boundaries.
- i) They provide contrast in form, texture or colour with building, paving or water

## **CONSTRUCTION AND MAINTENANCE.**

Screens and hedges take time to reach their mature size and form. When choosing a hedge, the height and the amount of screening to be achieved should be carefully considered.

To maintain screens and hedges, they should be weeded and watered during drought and especially in the first year, the soil should be firm and general fertilizer can be applied. Light pruning should also be done to keep shape.

### **3.7.5 ROCK.**

Rocks, Stones and pebbles add another dimension to a landscape that is different to include in any other way. The huge solid mass of an outcrop of local rock, the varied and different textures of naturally eroded stones and the small surfaces of pebbles invites us to touch and handle them, and loft the smaller stones and pebbles gently into a nearby stream or skip them across a pond.

- **UTILIZATION.**

Steps can be made for climbing the rock, depending on the height and steepness and a sitting area can be made on top of the rock, this also depends on the nature of the rock.

### **3.7.6 PATHS.**

The best paths are those that blend in and seem to be a natural part of the landscape. Paths serve to connect points of interest in the landscape. It should be constructed to follow the land's contours as it gently climbs the slope. It is necessary to have a variety of working experiences. There should be some straight sections, others that curve and still others that zig-zag. Right angles should be avoided where a curve could be used as short cut. The pathway

should be wide enough to be inviting (about five feet will do). Materials for constructing pathways include grass, stones, gravel, bricks, sand, pine needles, wood bark and concrete.

### **3.7.6 PLAY AREA.**

Play areas should be structured with a variety of levels, places to play and different play activities. To compliment the play world, it is pertinent to provide a beautifully detailed playhouse, swing set, sand box, planted windows boxes built to children's scale.

Tree branches can be utilized to accommodate the swing. The area set aside should be such that, there is interaction with nature. Natural play element for play areas include soil, death wood, leaves, rocks, sand, plants and so forth.

Apart from being comfortable, safe and easily accessible, the play areas should be in plain view of the playhouse because of young children who need to be supervised.

### **3.7.7 OUTDOORS LIGHTING**

Areas that benefit from out door lighting includes walk ways; drive ways, pools, patios, terraces, steps, parking areas and slopes. Out door lighting enhances safety at night and also highlights natural landscape.

White lights are best for recreation center lighting. The equipment should be accident and shockproof. It should be protected against vandalism and accessible for maintenance

#### **. UTILIZATION.**

Low mushroom units, set in beds, should light flowerbeds.

Floodlight can be directed across beds.

Trees are best shown by light, which reaches their foliage directly from concealed sources. Paths can be treated as footways. Fountains and pools are best lighted by submerged equipment.

### **3.7.9 OUTDOORS FURNITURE.**

Outdoor furnishings and equipment include both fixed and moveable elements like, seats, trash containers, mailboxes and telephone Booths, signs plant containers, bollards, supports and ground rails. If all of these elements are not predicted as much as possible in the original design plans, incorporated in them and carefully controlled thereafter, they can destroy carefully planned landscapes.

#### **. UTILIZATION.**

- a. **Seating:** Sitting areas should be located in such a way that activities like traffic, play shopping etc. can be watched. Sitting for a golf course should be in such a way that the beginning and the of the game is within view. Generally, sitting should be in sheltered position, not obscuring traffic. Materials used for seating include; hard wood, pre-cast concrete, metals, aluminum and steel.
- b. **Trash Containers:** Trash Containers should be located within possible reach of users. They are made out of aluminum and plastic materials.

They can be securely fixed to the wall, ground or post and should have covers and internal container that could be easily removed for emptying.

c. **Mail Boxes and Telephone Booths:** Mailboxes

should easily be recognizable and should be placed in strategic positions.

d. **Plant Containers:** They are used in defining space

and enclosure and also changes in level. They should be located where conditions will be favorable for the plant and adequate light should be considered. Plastic containers, pre-cast concrete blocks, bricks and metals are the basic materials used.

e. **Bollards:** They are used in landscape design to

prevent vehicular traffic encroaching on to pedestrian areas. They are also used to encourage traffic flow and to define boundaries. Bollards should be about 1m high. Anchor holds are either constructed out of concrete or steel and set 300mm below the ground. They are normally temporary or permanent structures.

f. **Guard Rails:** Guardrails discourage pedestrians

from moving off a given circulation area like footpaths.

g. **Traffic and Parking Control:** Traffic and Parking

Control in a recreation center should be well located to ensure that items do not conflict.

h. **Car Park Post:** They are post used to mark off bays

in a parking area. They could be metal or concrete material.

i. **Signs:** The main function of signs in recreation

centers is communication. The message should be

simple and placed in a position that it can be seen

easily and recognized. They should be visible both

during the day and at night. They should be mounted

at the eye level of a car driver and a pedestrian

(1.07m – 1.2m), fixed on trees or walls with bold and

simple lettering. Sheet metal, cast aluminum or sheet

plastic, stones, concrete or engraved metal can be used.

Display posters have similar functions and are utilized the same way as signs.

### **3.7.10 GAMES COURT.**

In recreation centers, the importance of games courts is not farfetched. They are provided for the enjoyment of both teenagers and adults. The games played on court include; Badminton, Tennis, Basketball and Volleyball. The type of surface to be used for each game depends on choice. It could be hard or soft surface.

The size of games court is relative depending on the type of games and play option. They should be placed in a visible place with convenient access. They can be screened from other parts of the recreation center but not from view seats for spectators and players waiting their turn should be provided and also lighting should provide if courts would be used at night.

### **3.7.11 SWIMMING POOLS.**

The impact of the swimming pool in a recreation center cannot be over emphasized. It can be used to cool off one's body on a hot day, for relaxation and Swimming exercise.

It could be placed in a strategic place relative to the building. This is to say that it can be made a focal point of landscape enjoyment and activity in a recreation center. The addition of a simple jet or fountain, sculpture, special edging or tiles that blends with the surrounding environment and also a change in

level to create a small waterfall is a plus for the landscape. Lounge Chairs and Umbrellas invite sunning, napping, reading and chatting.

The shape of the pool should be organic in nature since it is in a natural terrain with the sea as reference element.

### **3.7.12 BARBEQUE SPOT.**

This is an open-air social entertainment area where animals are roasted whole or in parts. In a recreation center, it should be placed close to the bar and to where most outdoor activities take place like, picnics, boating, games depending on choice.

### **3.7.13 ENCLOSURE STRUCTURES.**

Enclosure structures, such as walls and fences are designed to control vision or movement or both. They may be of different height (1-3 meters) or more. Materials normally used includes brick, stone, concrete masonry, wood, metal and sheet materials such as glass, plastic, asbestos and pressed boards.

They are very important in intimate visual design because they are at eye level and extend and connect buildings.

### **3.7.14 SHELTER STRUCTURES.**

Among such elements or structures are Gazebos, Pavilions, Garden Temples, Summer House and Hermit Huts. They are designed to protect from Sun, rain or wind and may incorporate enclosure elements at the sides with overhead elements like open – framework pergolas or arbors carrying vines or solid Opaque or translucent roofs

### 3.7.15 **ENGINEERING STRUCTURES.**

They are usually mechanical or electrical like transformers, vent, valves, siphons, drains, culverts, head walls, dams and canals. In a good landscape design, these structures are integrated into the overall plan.

It is pertinent to note that these structures are important in landscaping because they introduce precise geometric forms intermediate in scale between main buildings and landscape.

## **CHAPTER FOUR**

### **CASE STUDY**

#### **4.1 KANO CLUB**

##### **4.1.1 BRIEF DESCRIPTION:**

Kano club is located in Nasarawa Area of Kano State. British colonies established it in about 1905. It was rebuild in 1976 and subsequently cause new Kano club after a major fire incident in the club.

It is owned, financed and maintained by members through subscription and levies. The entire club makes up a large center with provision for different recreational, swimming and indoor games, which include, Billiards, Scrabble, Snooker, Dart, Chess, Table Tennis and Badminton, an 18-hole golf course and a golf clubhouse help to elevate the Kano Club as a Standard recreational facility. Support facilities include multi-purpose hall, Bar/Restaurant and Children's playground.

Legend. A (Admin Blocks), B (kit), c (multi-purpose unit), D (V.I.P Lodge), E( Garden), F(Indoors Sport Hall), K (Dinning Room), J(Lodge), I (Swimming Pool), J(Adult Swimming Pool), K (Sit out), L (Play Ground), M (Tennis court), N (Golf Club House), O(Toilets), P(Squash), Q(Shops), R(Golf Club Parking Lot), S(General Parking), and T(golf Course).

#### **4, 1.2 MERITS:**

1. Overall scheme integrate a large percentage of users requirements

2. Access is easy and properly located
3. Facilities are closely knitted
4. Golf clubhouse is well located around the 1<sup>st</sup> lines and the 18<sup>th</sup> hole

Plate 1.view of clubhouse terrace, tennis courts, play lot and sit out

#### **4, 1.3 DEMERITS.**

1. Entire structure lacks good scenic view
2. Vehicular and pedestrian circulation is not well articulated.
3. It is located at the middle of the city activities, hence unsuitable for relaxation
4. This structure lack good Architectural definition
5. Lacks basic landscape elements

## **4.2. KADUNA GOLF CLUB**

### **4, 2.1 BRIEF DESCRIPTION**

The Kaduna golf club with a membership of about 1000 is located along the golf course road opposite Ahmadu Bello University Teaching Hospital in Kaduna North Local Government.

Established in 1921, is the pioneer golf club in Nigeria

From the parking lot two entrances are visible, the main entrances and golfers-only entrance. A third entrance, which was hitherto part of the old clubhouse. From the main entrance through the hall a dramatic view opens through a door way which leads straight to the golf course

The old and the new clubhouse is intimately linked by a long corridor stretching from the bar lounge to the Restaurant.

Available facilities include a standard 18hole golf course restaurant, changing and rooms and well landscape open air sit out

Fig 2: plan of Kaduna club

Plan 2 Kaduna club garden

Plan 3 Kaduna club Landscape parking lot

Plan 4. Kaduna club reception area

**4, 2.2 MERIT:**

1. There is a high functional relationship between line bar, lounge, terrace and outdoor garden.
2. Easily accessible and entrance can be quickly identified
3. Pedestrian and vehicular well articulated with the use of landscape element
4. There is adequate natural lighting and movement of air through the structure hence there is proper ventilation and good visual contact.

**4, 2.3 DEMERIT:**

- 1 Unidentified architectural character.
2. Lack of diversified recreational opportunities.
3. Rigidity of design and site constrain may hamper meaningful expansion.

**4.3 OCTVILLE GOLF AND COUNTRY CLUB.**

**4, 3.1 BRIEF DESCRIPTION:**

Located in Johor Baharu, Malasia, the clubhouse is symbolically positioned on the highest point of the course, reached by a winding access road. Amid the undulating green and fairways the building appears as a surreal cacophony of colliding planes, angles and drums, like some strange, deconstructive structure. Very much an object building, it utterly dominates its surroundings, visible from every part of the course like a marker beacon. The bulk of the clubhouse accommodation is contained in a circular podium half sunk into the hilltop. A central circular ramp is used as an organizing device, connecting the horizontal and vertical spaces.

The ramp is intersected by a linear structure that slices through the entire composition to forge a dramatic connection between the clubhouse and landscape. Available facilities include games facilities, administrative areas, restaurant, lounge, shops, pools and gallery.

The design, by Architect Tengara, is a bold subversion of conventional precedent. It represents a shift away from the familiar colonial imagery employed by most clubs.

Fog 3: Octville club floor plan.

Fig 4: Octville club first floor plan.

#### **4, 3.2 MERITS:**

1. Carefree architectural style reflects recreation ambience
2. The potential of technology and materiality was fully employed in the Design resulting in a structure based on fragmented informally and spatial dynamism.
3. There exist a strong visual relationship between clubhouse and course.
4. Instead of the usual agglomeration of large buildings, the bulk of the clubhouse accommodation is contained in a circular podium half sunk into the hilltop.
5. Proper use of landscape element in defining space helps to articulate the clubhouse and integrate it to the course.

Plate 5: View of golf course and clubhouse

Plate 6: Area view of clubhouse and surrounding

Plate 7: Changing room

Plate 8: Landscaped clubhouse area.

#### **4, 2.3 DEMERITS:**

1. Lack of diversified items for general recreation opportunity.
2. Maintenance costs are likely to be high since most equipment is Mechanically or electrically dependent.

#### **4.4 TRAPCO RANCH AND RESORT**

##### **4, 4.1 BRIEF DESCRIPTION:**

The TRAPCO ranch and resort is located in Birnin Gwari local Government area of Kaduna State. It is a private enterprise and 20KM from Kaduna town and 3KM to the airport. It is private enterprise and is being developed in phases

The presence of a natural lake and surrounding hills gives the resort a Beautiful scenery and favorable atmosphere'

At the TRAPCO ranch and resort there is a provision of accommodation, Swimming pool, restaurant and bar. Children's play ground, picnic area, love Garden, lakeside bar and crocodile ponds. Sporting facilities available include a polo field and a ranch, tennis court, boating and biking facilities

and an uncompleted indoor sport hall.

Plate 9: Bird's eye view of Trapco ranch and resort

**4, 4.2 MERITS:**

1. Both traditional and modern construction materials were used
2. Good scenery
3. Favorable weather condition
4. Standard accommodation.

**4, 4.3 DEMERITS:**

1. Undefined parking lot.
2. Inadequate recreation facilities
3. Rough access road.
4. Undefined circulation routes
5. Facilities poorly unified and widely spread
6. Improper utilization of both hard and soft landscape element

Plate 10:View of Swimming Pool and Restaurant.

Plate 11: View of Lake showing boarding area.

Plate 12: Children's play lot

Plate 13: Landscape out door circulation.

## **4.5 INFERENCE FROM CASE STUDIES.**

### **4.5,1 THE SITUATION**

#### **(A) LANDSCAPING**

- ❖ Lack of basic landscape elements such as fountains, paths, lawns
- ❖ Planning not in conformity with principles of landscape.
- ❖ Pedestrian and vehicular circulation is not properly defined.

#### **(B) ARCHITECTURAL**

- ❖ All the scheme lack strong architectural character.
- ❖ No vest range of interest.
- ❖ Architectural units not simultaneously conceived.

#### **(C) FACILITIES:**

- ❖ Poorly unified and widely spread facilities.
- ❖ Inadequate provision of user's requirements.

#### **(D) SENERY**

- ❖ Schemes lack good scenic view
- ❖ Location also is a factor militating against the provision of good scenic views.

#### **4.4,2 DESIGN RESPONSE**

##### **(A) FORM**

- ❖ Effective use of circular forms shall be utilized to bring everything alive and Enhance interaction.

##### **(B) VIEW**

- ❖ View from building structures into all main attractions and the sea shall be Enhanced through the use of glazing.

##### **(C) FACILITIES**

- ❖ A wide range of recreational facilities shall be provided conform for the nature of the site

##### **(D) LANGUAGE ELEMENT AND UTILIZATION:**

- ❖ general planning and design shall be in conformity with basic principle of Landscape such as-Rhythm and balance
- ❖ Landscaping element such as paths , fountains, ponds, laws, huts, etc shall be employed to enhanced a comfortable and naturalistic feel. This will also enhance a unlimited view of the site.

Plate 14: impression idea f a leisure environment.

## CHAPTER FIVE

### THE SITE

#### LOCATION

Located within the longitude of 3, 5"E and the latitudes of 8.68'N and 8.72"N Ibeju / Lekki Local Government falls along the coastline of Lagos.

It is located east of Victoria Island and bounded to the north by the Lagos lagoon, to the west by endless strip of coastline and the south it is bounded by the Atlantic Ocean its land mass is estimated to be about 11,425.00 hectares of 114, 25 square kilometers.

The projected population of the local government for the year 2000 is about 56,852 (*Lagos State Regional Plan 1980-2000*)

Fig. 5: Map of Nigeria showing location of Lagos State.

Fig.6. Map of Lagos showing the location of Ibeju / Lekki

Fig 7. The site

## **5.2 POPULATION**

In land area, the size of Lagos is comparatively 0.4 percent of Nigeria, hence, the smallest state in the country. Although Lagos is the smallest state in Nigeria yet it accommodates 5 percent of the estimated population of Nigeria.

The rate of population growth has been in excess of 9 percent per a in recent years thus resulting in an additional 300000 persons per annum. 25000 per annum 833 per day 34 per hour.

The presence of a long stretch of beautiful sandy beaches along the coastal zone and the population and strong industrial base, makes Lagos state really thick in the area of economic and touristy relevance.

### **5.3 SITE ANALYSIS**

The implication of the proposed site are discussed below under the following sub heading .topography, Drainage Vegetation, Morphology, Geology, Hydrology, Vista, Access and Noise.

#### **5.3.1 TOPOGRPHY**

The site is characterized by a gentle slope with contours ranging from 0.5-2.0 Meters. The crest of the topography fluctuates around 120 meters above sea level. By way of taking advantage of the topography of line site, split-levels, out and leveling methods shall be employed in the building structure. Some of the structures shall be partially raised on columns. The gentle slope of the site is an advantage to the construction of a golf course due to ease of manipulation

#### **5.3,2 DRINAGE**

The site slopes in a North-South direction towards the oceans drainage shall therefore be along this direction

Plate 15. Site topography.

### **5.3,3 VEGETATION**

The sites fall within the dry sandy grass lands and marsh swaps of Lagos State. The Vegetation on site ranges from spare to dense, specifically characterize by a plant cover Which varies from low lying grass and creeping vine to palms pines scattered in an almost regular pattern.

The availability of green plant cover is indicative of the fact that maximum results would be achieved be from the utilization of landscape elements like, shrubs, hedges, lawn, and trees. To say the least of the possibility of a green golf course existing on the site,

Plate 16, site vegetation

#### **5.3,4 MORPHOLOGY**

The plan from the ocean bank is depended by the action of waves. Thus. the physical shapes of the ocean bank are meandering.

The design approach therefore shall be that of strong relationship with line environment by way of mimicking wave action along the coastal area

#### **5.3,65 GEOLOGY**

Rock outcrops are hardly noticeable on the site. The soil type is mainly sandy pile foundation s also recommended for the building structures.

#### **5.3,6 HYDROLOGY**

It is estimated that sea level rose by 10- 15m over the last century. That levels are currently rising at 1-3mm/year and that could increased by another 30m in the next 50 years or 0.5-2.0 meters by 2100 ( David C. 1992) in view of this , the distance of the closest building structure from the sea shore shall not be less than 150 meters .

More palm trees shall be encouraged along the coastal strip to forestall erosion by waves action.

Plates 17. The sea scape

#### **5.3,7 VISTA**

The site has good views radiating to and from it. 5 to 60 percent large opening shall be employed in the design to allow for maximum view. Large glass panels shall be considerably utilized in order to enhance view from the interior.

### **5.3.8 ACCESS**

Access to and from the site is basically by road and by sea. The presence of a coaster road linking other parts of Lagos to the site shall be from the coastal road. Which is about 850 meters from the site boundary.

### **5.3.9 NOISE**

The site is considerably a highly quiet and serene environment. The only sources of noise is from the adjoining settlement and wave action on the, which is minimal and possesses a therapeutic value in its rhythmic and musical nature in the area of Golfing, this is a very encouraging merit.

### **5.4 CLIMATIC ANALYSIS**

The climate of a place is the average weather conditions of that place or region throughout the season. the coastal region is characterized by a semi-arid climate, which is local in influence and extends its influence over several kilometers. The climate characteristics of the site are described below in terms of temperature, Humidity, Rainfall and Sunshine.

Fig. 9: The sea breeze effect.

The land warm quickly, this is displayed by inflowing heavier and cooler river air

Both the sea and land breezes help to keep the temperature of the coastal area relatively uniform.

Air channel shall be provided at interval along the building structures to ensure uniform temperature and also to safeguard the building against the effect of strong winds.

## TEMPRATURE

### 5.4,1 TEMPRARURE

The temperature of the coastal area is affected by land and sea breeze. The land and sea breezes from part of a diurnally varying vertical circulation of air that is untimely induced by temperature difference between land and sea.

The mean monthly temperature is 250C minimum and 30C maximum. There is seasonal

MONTH	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
MAY°C	31.3	32.3	32.1	30.8	32.2	29.4	28.3	27.8	28.3	29.6	31.3	31.8
MIN°C	24.6	25.2	24.9	25.8	25.9	24.3	23	24	23.7	23.8	28.9	23.3

variation of about 60C between the hottest month (March) of the year and the coolest month (August).

a) Land breeze

This is the movement of air from land to river. On clear nights,

The land cools faster than the , cooling more quickly the lowest layer of air there by making the land air to move to the water.

**Fig.8: the land breeze effect.**

- b) This is the movement of air from sea to land. On clear day the land usually heats faster than the water body, the lowest air adjacent to

Fig.9: the sea breeze effect.

The land warm quickly; this is displaced by inflowing heavier and cooler river air. Both the sea and land breezes help to keep the temperature of the coastal area relatively uniform.

Air channel shall be provided at interval along the building structures to ensure uniform temperature and also to safeguard the building against the effect of strong winds.

### TEMPERATURE

MONTH	JAN	FEB	MAR	APR	MAY	JUN	JULY	AUG	SEP	OCT	NOV	DEC
MAX°C	31.3	32.3	32.1	30.8	32.2	29.4	28.3	27.3	28.3	29.6	31.3	31.8
MIN°C	24.6	25.2	24.9	25.8	25.9	24.3	23	24	23.7	23.8	28.9	23.3

Fig. 10: Temperature data bar chart.

#### **5.4.2 HUMIDITY**

The humidity of the coastal region is prevalently uniform, between 65 – 85%. During the dry season relative humidity falls between 60 – 70%. In the wet season, the relative humidity rises to as much as 85%.

The high moisture content shall be responded to in design by the use of materials that are corrosion and moisture resistant. The materials include, glass, stone, concrete with impervious coatings on the outside and steel.

#### **5.4.3 RAINFALL.**

The study area has a history of frequent rains throughout the year with seasonal variations from May to October when the highest down pour occurs. Its influence is by way of good insulation against water penetration in flat roof or reasonable pitch.

#### **5.4.4 SUNSHINE**

During the dry months of November – April, the monthly variation in the amount of sunshine follows the general trend of an increase. The decline in sunshine hours reaches its lowest values in the month of August.

The influence of sunshine on the design shall be accommodated by way of the use of reflective wall finishing

## **5.5 UTILITIES, SERVICES AND INFRASTRUCTURE**

These have to be with the essential amenities necessary for man to stay comfortably in an environment. These amenities include; Transportation, Water electricity, Road network, Telecommunication, sewage disposal, refuse disposal and drainage.

### **5.5.1 TRANSPORTATION**

The major transportation system in Lekki is by taxi, motorcycle, buses, ferric, canoes and flying boats. Adequate parking shall be provided in the center to accommodate both vehicles and motorcycle.

### **5.5.2 WATER**

The major source of water in the area includes, wells, boreholes and the water board. The distance of sweat water (water board) is about 1km. Water reservation for both consumption and fire safety shall be provided for the reservation center.

### **5.5.3 ELECTRICITY**

The Electricity in Lekki is provided by National electric power P. L. C. The Recreation center is to be electrically powered through the same means and in addition it shall be provided with a standby generator.

### **5.5.4 ROAD NETWORK**

The availability of good arterial road in Lekki helps to link the Lagos city center to Lekki and beyond.

### **5.5.6 COMMUNICATION**

The availability of the post office and the Nigerian Telecommunication Company will carter for the communication needs of the people. The center shall have a post office and shall also be linked with the Nigerian Telecommunication company line.

### **5.5.7 SEWAGE DISPOSAL**

There is neither a central public sewage disposal system nor a coordinated solid waste management for Ibeju/Lekki local government area. Some household use water closet, others use the pit latrines while some use open ditches or nearby bush-grown areas.

The proposed center shall have multiple sewage disposal units for ease of maintenance.

### **5.5.8 REFUSE DISPOSAL**

There is no organized disposal system within Ibeju/Lekki town. Refuse are thrown around open spaces and ditches. There are very few recognized refuse dumping sites. Incinerators shall be provided in the proposed site for adequate refuse disposal.

### **5.5.9 DRAINAGE**

The drainage facilities are poor; they either lined or unlined channels that have been turned into refuse dumps. Proper drainage channels with covered top shall be provided on the proposed site.

### **5.5.10 ECONOMIC ACTIVITIES**

Lagos State generates an important share of the income in the Nigeria economy. The economy is divided into nine activity groups namely, Agriculture, Forestry and Fishing, mining quarrying, manufacturing and crafts, utilities, building and construction Transportation and communication, public administration and other service.

The Lekki golf and recreation center shall serve also as a job opportunity area for the unemployed.

## **5.6 SITE SELECTION CRITERIA**

The following criteria were used in selecting a site for the proposed site.

- a) **Availability of Land:** possible expansion and flexibility of design were considered while selecting the site. A standard golf course (18 hole) takes between 100-150

acres of land area hence the possibility of the site to accommodate both building structures and the golf course was considered.

- b) **Accessibility:** The maximum utilization of the project site is dependent on its accessibility. A multi - faceted accessibility opportunity encourages and enhances the utility of the project.
- c) **Vista:** Good scenic views encourage participation in recreation and leisure activities.
- d) **Landscape resources:** Natural landscape features such as the seascape, trees, beach sand and many others are added advantage in the quest to proposed recreation center.

## 5.7 SITE APPRAISAL

### a) Merits

- i) The site measures about 750 acres, hence, it is large enough for a wide range of recreation activities and an 18-hole golf course. Future expansion would not be a problem in view of the large size of the site.
- ii) Good views radiant to and from the site with the sea acting as a local point.
- iii) A good coastal road links the site with other parts of the state. It could also be accessed by boat.
- iv) Good landscape resources abound in the area. This includes, palm trees, the beach sand, etcetera.
- v) A good golf course is that which could drain water quickly *after rainfall*. *The soil type in the area has the good quality of percolating rainwater very fast.*

**a. Demerits**

Because of the low bearing capacity of the soil Raft foundation is required.

## **CHAPTER SIX**

### **DESIGN BRIEF**

#### **6.1 BRIEF DEVELOPMENT AND ANALYSIS**

The proposed Lekki golf and recreation center will meet up the needs of various people from different face of life. Both domestic and foreign population will be considered in the provision of facilities. The various facilities of the different functional units necessary for the smooth running of the proposed center included:

##### **i. Administrative unit:**

The Administrative section of this resort will cover the main entrance, reception/guest lounge cyber café, offices, exhibition area etc.

##### **ii. Golf club house:**

This includes cocktail lounge, Restaurant, trophy room, pro-shop, locker rooms, committee rooms, offices, storage, caddie station etc.

##### **iii. Multi purpose unit:**

This is the unit that cater for the interpersonal interaction amongst members . It is composed of lounge, multi-purpose hall, indoor games rooms snooker, billiards, cards etc) night club, banquet hall, sit outs etc.

**iv. Leisure and recreational facilities.**

This will include, an 18 hole golf course practice putting brown, practice driving range, squash hall, lawn

Tennis courts, basketball, swimming pool, valley ball, panic areas, children playground

(this includes, sandbox, swing sets, turning wheel, see-saw slides etc), landscape areas for

private sitting, adaptable space, e.t.c.

**v. Auxiliary Service:**

This include the maintenance units, commercial bank which will cater for the

Financial needs of the guests and general public, caddie station, shops where

People can shop for goods ranging from souvenirs, swimming costumes,

magazines to perfumes, textiles etc.

vi Accommodation units:

These are lodging facilities for various groups:

Players/guests, family, V.I.P and caddies. The family chalets shall have living

Room, kitchenettes and two bedrooms. Single rooms would be meant for caddies

And low class guests. The V.I.P suites are also to be given priority in terms of

Design and location

Vii Others:

This includes maintenance unit (plumbing, electrical, landscaping etc:)

Security, generator room, laundry and house keeping.

## 6.2 **SPACE REQUIREMENTS AND FUNCTIONAL RELATIONSHIP**

This shows the relationship between the different units of the proposed golf

And recreation center, i.e. Administration, golf club house, recreation, parking etc.

### 6.2.1 FUNCTIONAL FLOW DIAGRAMME

This shows the relationship between the different of the proposed golf and

Recreation center

### 6.2.2 SCHEDULE OF ACCOMMODATION AND SPACE REQUIREMENTS

<b>DESCRIPTION</b>	<b>NO</b>	<b>AREA/M2</b>
<b>A. Administrative unit</b>		
Main entrance	1	36
Perception/ information are	1	69
Porter	1	15

General office	1	36
Accountant office	1	20
Director	1	20
Manager	1	16
P.R.O	1	16
Personnel office	1	16
Car hire	1	15
Cyber café	1	42
Bank	1	42
Conference hall	1	180
Travel agency	1	15
Museum	1	75

-CURATOR	1	18
-Store	1	18
First and room	1	12
Library	1	102
-Audiovisual room	1	36
Art and crafts	1	99
-Storage	1	9
Exhibition area	1	171
Toilets	4	24
Maintenance area	1	54
-Office	1	9

-Store	1	9
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Shops	6	9
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### **B.Golf clubhouse**

Entrance foyer	1	18
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Reception/lounge	1	39
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Cocktail lounge	1	54
-----------------	---	----

-Drinks store	1	9
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-Cold store	1	9
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Restaurant (main dinner)	1	186
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19 <sup>th</sup> hole (men's bar)	1	114
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Private dining	1	42
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Kitchen	1	72
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Dry store	1	16
Cold store	1	16
Chief	1	9
Shower/WC	12	39
Locker room	2	30
Club storage	1	36
Club/shoe cleaning porch	1	30
Record room	1	8
Trophy rooms	2	30
Pro-shop (display area)	1	39
-Store	1	30

Caddie yard	1	113
Rest room	2	30
Store	1	24
Starters booth	1	12
Green keepers	1	30
Club president	1	24
Manager	1	24
Secretary	1	24
Committee room	2	48
Terrace	1	117
Practice putting green	1	
Practice driving range	1	

Parking	36	
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**C, multi-purpose unit**

Entrance foyer	1	18
----------------	---	----

Reception/lounge	1	39
------------------	---	----

Male/female WC	4	24
----------------	---	----

Night club	1	102
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-Entrance hall	1	9
----------------	---	---

-Bar	1	12
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-Ticket booth	1	9
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-Drinks store	1	9
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-D.J cubicle	1	12
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-Male/female wc	5	21
Multipurpose hall	1	261
Kitchenette	1	27
Furniture store	1	21
Table tennis room	1	39
Snooker room	1	87
Board game room	1	66
Fitness center	1	60
Equipment store	1	21
Laundry	1	84
Sit out	1	114

#### **D.Other recreational facilities**

Leisure swimming pool	1	
Kiosks	4	24
Swimming pool bar	1	54
Machine/ chlorine room	1	15
Changing room	2	35
Floating bar	1	56
Barbecue hut	1	3
Volleyball	1	162
Basketball	1	364
Handball	1	
Lawn tennis	3	230

Fives-a-side football	1	540
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Squash	2	54
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### **E.Children play area**

Play lot	1	1520
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Creativity rooms	2	21
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Games room	1	21
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Storage	1	16
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Toilet	3	16
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Staff room	1	24
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Children's pool	1	32
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### **F.Accommodation**

### Twin guest/caddie chalets

-Bedroom	1	15
-Toilet bath	1	4

### Double Bedroom guest chalets

-Living room	1	24
-Bedroom	2	16
-Kitchenette	1	6
-Bath/wc	1	4

### V.I.P Guest chalets

-Living room	1	20
-Bedroom	1	12
-Kitchenette	1	4

-Bath/wc	1	4
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**G.Others**

Gate house/security	1	4
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Generator house	1	4
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Lifeguard post	2	3
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**TOTAL AREA:**

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**A. Topography**

Topographical studies to determine the integration of the design on the site

Topography directly affects the floor shape of the building and require early

Consideration at selection stage.

**B. Access**

- Vehicular

Vehicular routes should be up front and not deep into the site and should be

Separated from pedestrian route. Quick and easy drop off points off would be

Provided. Parking would be situated such that accessibility and exit is enhanced.

All routes must be simple and uncomplicated

- Pedestrian

Effective separation of pedestrian access from vehicular routes should be defined. Ramps

and self- closing doors should be provided to allow easy movement for the disabled and

to aid their access to site and circulation within.

### **C. Landscape**

This landscaping of the environment and surrounding and surrounding

Would be designed to suit the proposed activity. Natural features such as

Trees, shrubs, water bodies, and sculpture e.t.c. Will be used to create

A conducive environment for leisure and recreational purpose.

**D. Ventilation**

The design would be that a functional balance would be achieved

Between openings for maximum natural ventilation and lightning. This

Would be achieved through the provision of fenestration in wind

direction. Additional mechanical supports will be provided.

**E. Maintenance**

For a durable and reduced maintenance effects after construction, the design

Will ensure careful use of material and construction process.

**F. Lightning**

Maximization of natural lightning would be considered in the planning and

use of materials i.e. translucent glazing element. Attempt will be made to provide natural lighting in all functional spaces and night scenes will be adequately lighted using artificial means.

**G. Fire**

In any building, prevention and control of fire outbreak is very important. Fire can be caused by electrical fault, cigarette stub on rugs e.tc. Access to fire fighting brigade, water hydrants and the provision of fire and smoke detectors will be a control measure to be employed. Sprinkler and fire extinguishers will also be strategically be located for easy reach when necessary.

**H. Expansion.**

Flexibility and expansion are some major criteria that could be considered and be implemented in the design. There would be room for linear expansion to conform to the coastal site character.

## **CHAPTER SEVEN**

### **THE DESIGN**

#### **7.1 PLANNING CONCEPT**

The linear plan follows the line of the beachfront and is dictated by the decision to provide all rooms, both private and public, with unobstructed view towards the sea. The complex is however far from being monolithic. The clubhouse and the multipurpose unit shall be strung out either side of the administrative block, which houses some public facilities such as exhibition area and shopping. Recreational facilities such as swimming pools and out door sit outs shall be located close to the ocean to give guests a good scenic view. The chalets shall also be spread along the coastal line to achieve the same scenic effect.

Landscape elements and their utilization shall be highly emphasized. The general planning is dictated by the nature of site and existing water body. With the addition of other landscape elements like; fountains, shrubs, trees, stones, etc aiding the natural aesthetics.

#### **7.2 FORM CONCEPT**

The circle is considered a form that symbolizes the cyclical movement, which is an embodiment of nature. The architecture of the golf and recreational center is based on the three-landscape character of the coast. These include ripples, waves generated by strong coastal wind and it's linear horizontality.

### **7.3 GENERAL CIRCULATION**

Gently curving lines of pedestrian footpaths shall be employed to increase the utility of the center, give it a unique expressive quality and intimately link the buildings with the natural setting.

### **7.4 DESIGN REPORT**

#### **7.4.1 ADMINISTRATIVE BUILDING**

On approaching the center you are confronted by a huge entrance, which celebrates the structure in a dynamic way. You enter the administrative block from the parking lot carefully laid out in front of the golf club house and multipurpose unit via gently curving lines of stone walk way. Passing through a large aluminum glass paneled door the visitor first arrives at a large reception lobby and can either continue to the exhibition courtyard, the cyber café, bank or rest while waiting to be attended to. A further walk through either of two corridors leads into a dramatic panorama of the pool and ocean.

Other facilities on the ground floor include, the art and craft center, museum, staff lounge, maintenance unit, first aid, shops overlooking pool. On the upper floor the building plan provides for administrative offices, library, and conference hall organized around a courtyard. The characteristic photo chronic fibred glass sky light covering the courtyard gives a clear intrusion into the natural setting complemented further by the indoor fountain.

The undulating roofline of the general structure reverberates in concordance with the surrounding wave action scenery. Long span aluminum roofing sheets is used for the administrative block to reduce monotony of concrete.

#### **7.4.2 GOLF CLUB HOUSE**

The golf-club house flanks the administrative building on the left with a 36 car capacity parking lot in front entrance porch is also celebrated by a smaller version of the type employed in the administrative building.

The amenities that constitute a well-integrated golf club are located on the ground floor. This amenities include, a cocktail lounge, pro-shop, 82 people capacity restaurant, spacious in door kitchen plus an outdoors cooking area, men/female locker rooms, and the 19<sup>th</sup> hole or outdoor bar which is about thirty meters walk from the 18<sup>th</sup> green.

On the upper floor there exists a gallery that overlooks most part of the golf course. Two committee rooms and offices for the club president, secretary and club managers are also accommodated on the first floor.

Translation concrete shell is used to roof the clubhouse. The shape of the shell is fluid hence giving it a wave like appearance.

The rooms are double volume on the ground and upper floor.

### **7.4.3 MULTI-PURPOSE UNIT**

The multipurpose unit is a prototype of the golf club house except for the functions. The ground floor constitutes a multipurpose hall, nightclub, indoor games room, fitness center, laundry and an outdoors lounge. The upper floor also constitutes indoor games rooms for billiards, snooker and card.

### **7.4.4 ACCOMODATION UNITS**

Rather than introduce a massive imposing volume into the landscape, the accommodation has been hived off into domestic scale chalets. These cluster of chalets around the cul-de-sac are connected to the public areas by a network of pathways. Each chalet has a private balcony from which guests can freely commune with nature.

Three categories of chalets are provided. The single room twin unit chalet for single tourist and caddies, the family chalet with two bed rooms, living, kitchen and dining and the VIP chalet with a room, living, kitchenette and built-in dress-in.

The three types of chalet take circular shape. The chalets shall have attendants to take care to allow for efficiency and hygiene. Additional security checks shall be provided at the entrance to the accommodation area to check security.

### **7.4.5 RECREATION**

The swimming pool, which the pivot around which various activities take place is considered as a point in the center of a circle with views rating to and from it. The area

is laid out along the six axes, and in the stage for visual discoveries, created to excite the visitor's imagination.

The indoor recreational activities include table tennis, fitness room with board game facilities. The outdoor activities include, boating, volley ball, lawn tennis, five a-side football, landscaped area for picnic, outdoor sitting, sculpture garden and children's play area with swings, tunnels, merry go round, slides etc.

The shallow end of the swimming pool is 600mm, while the deeper end is 2.5 meters. The shape of the swimming pool is organic, mimicking the shape of guitar. Poolside facilities provided include changing rooms for male and female, plant room for water circulation and purification, instructors' room, a sit out area, snack shops and a gazebo on top of the snack shops. The low tide zone of ocean provides a boating area and floating bar. The structure is raised on piles and is raised 1m above sea level to check the effect of high tide.

The children playground is far removed from the shores of the ocean for safety reasons. It is about 40m away from the seashores. It is exposed to view from all directions. Playrooms are provided for all the kids' indoor activities. And a pool of 600mm deep is provided for kids.

#### **7.4.6 AUXILIARY FACILITIES**

Auxiliary facilities provided include the caddie station. It is about it is about 30m away from the clubhouse and in clear view of the club parking lot. It constitutes the caddie yard, Green keepers lounge, and caddie rest room. Other

auxiliary facilities provided include the gatehouse, lifeguard posts and T.V. tower.

#### **7.4.7 GOLF COURSE**

The 18-hole golf course is planned with relation to the clubhouse. The 1<sup>st</sup> and the 10<sup>th</sup> tee and 18<sup>th</sup> green is placed close to the clubhouse for convenience. The problem of having to walk a very long distance from the last hole (18<sup>th</sup> brown) is solved by placing it very close to the clubhouse.

The tees, bunkers and greens all take an organic shape due to the ecological quality of the site. Tee length from the hole is reduced by 5% for ladies. The total length of tees for male is 6753 yards (5874m) while for ladies it is 6256 yards (5723m).

The length of the tees for both male and female are shown in Appendix 2.

#### **7.4.8 LANDSCAPE**

Both hard and soft landscape elements were utilized in the design. Both the facilities section and golf course have been well landscaped with different landscape elements. Substantial open spaces have been allowed for fresh airflow, abundant grass cover gives humidity balance as well as relaxation gardens.

#### **7.4.9 CIRCULATION NETWORK**

The traffic network is designed in a way that congestion is not created at any point in time. From the approach, vehicular and pedestrian circulations are separated. Gently curving lines of path is employed to enhance a comfortable and naturalistic feel. This will also enhance unlimited view of the site. Parking lots is provided in the club and multipurpose unit. Parking is provided for two chalets each.

## **7.5 SERVICES AND MAINTENANCE**

The choice of materials, methods of construction and durability of materials used help to prolong the life span of any structure.

Replaceable materials for construction and finishes is hereby recommended to ensure a regular, stress less and consistent maintenance of the center.

The services requiring periodical maintenance culture include

### **1. Planting and maintenance off: -**

- a. Lawn
- b. Ground cover for tees, fairways and greens
- c. Screens and hedges
- d. Trees.

### **2. Maintenance and repair of:-**

- a. Signs and street furniture
- b. All buildings
- c. All mechanical and electrical plants
- d. Roads and footpaths

### **3. Pollution control**

- a. Prevention of rubbish dumping on site
- b. Clearing of waste bins

### **4. Water structure**

- a. Maintenance and control of all water supply systems
- b. Cleaning of all water bodies (fountains, ponds)

- c. General maintenance of the swimming pool.

## **5. Emergency services**

- a. Fire fighting: fire extinguishers, sand buckets, alarm systems and other warning systems are to be provided while liaison with the maintenance section to reduce the risk of bush fires by keeping all grass low at all times.
- b. Health: mobile medical staff will be in the first aid office during opening hours.

## **7.6 BASIC SUPPORT INFRASTRUCTURE**

### **7.6.1 WATER SUPPLY AND STORAGE**

The center is linked to the mains of Lekki water supply for the supply of water for needs such as cleaning, gardening, swimming pool, laundry, domestic purpose and recreational activities. A water storage reservoir is required to ensure an adequate constant pressure to meet fluctuating demand especially at peak periods and to act as a reserve from interruption of supply from the cooperation.

### **7.6.2 REFUSE AND GABBAGE DISPOSAL**

Dustbins are provided in each chalet, the administrative block, golf clubhouse, multipurpose unit, and recreation areas and along path ways from where they are transferred to the incinerator provided in the North-East zone of the center and burnt.

### **7.6.3 SEWAGE AND SEWARAGE DISPOSAL**

Surface water, foul water and other organic matter have been duly taken care of as shown on the services drawings. The gradient of the sewer must ensure self-cleaning velocity of  $0.75 \text{ ms}^{-1}$ . The natural slope of the site helps to enhance this.

### **7.6.4 ELECTRICITY SUPPLY**

Due to the interruption of electric supply by the national Electric Power (PLC a generating plant is installed. Transformers are located at the fence away from the buildings and activity area; this is to avoid any likely wood of fire from the transformer spreading into the resort.

Electrical wiring in the building shall be achieved by conduit wiring and shall be connected to the floor through service voids.

#### **7.6.5 AIR CONDITIONING**

Air conditioning systems adopted for the building include the split unit system for large public areas like the administration building, multipurpose hall, restaurant etc and the console or window unit types for individual chalets.

#### **7.6.6 COMMUNICATION SYSTEMS**

Efficient communication system is provided to attract tourists needing to keep in touch with their families, offices or friends. Telecommunication wire shall also be through conduit pipes. A cyber café, telephone area and postal agency are provided and open to tourists.

#### **7.6.7 EXTERNAL LIGHTING**

To create an interesting and social atmosphere, light is providing for night scenes and to enhance golf play in the night.

Lighting will also help to aid security public safety and traffic control. Flood light, color light, street lights are provided for different spots in the garden, this is such that glare and confusion is prevented.

## **7.7 STRUCTURAL SYSTEMS**

The cross-section through, the administrative building and the golf clubhouse give a clear picture of the building structures. The administrative building is made up of vertical columns and beams connected to form a rigid frame while the structure of the golf club house and the multipurpose unit is the combination of columns, beams and translation shells used in the roofing. Raft foundation is recommended due to the sandy nature and low bearing capacity of the site. Also because of the varying soil compressibility the stiff slab and beam construction is utilized to bridge over areas of more compressible soil, thus differential settlement of the foundation slab is minimized.

## **7.8 BUILDING MATERIALS AND CONSTRUCTION TECHNIQUES**

The importance of the choice of materials for the construction of buildings cannot be over emphasized. The materials apart from carrying out their structural functions could also be used to create an image for the building. Pre-cast and reinforced concrete indifferent shapes and forms are also used in the gardens as base materials softened by trees and shrubs in pits and planters.

Selection of materials for construction was therefore thought of in terms of the following factors;

- i. Suitability for the intended use
- ii. Strength
- iii. Resistance to degradation and cost
- iv. Availability
- v. Maintainability

vi. Durability

vii. Appearance

- A. **Floor finishes:** in the main structures of the center, terrazzo and ceramic floor finish are employed. This is because of the excessive wears and tear caused by high traffic. This surface will be well polished. For the chalets, paladin will be employed.
- B. **Wall Finishes:** Cool blue-based colors will be employed for the external walls to blend with the ocean. And for the interiors, walls will be paneled in wood, wallpaper or painted. The windows and external doors will be aluminum frame and tinted glass panels, while for the internal doors, hardwood, finish doors are utilized.
- C. **Roofing materials:** long span aluminium roofing is used to roof the golf clubhouse and the multipurpose unit is clad with Aluminum foil because of its natural resistance to corrosion, durability and its expected that the essential beauty of the aluminum – a cool and fascinating beauty will enhance the aesthetics of the building. To minimize the weight of the roofing structure in the administrative block space frame structure made from circular-section tubes is used to carry the long span aluminum roofing sheets.

## **CHAPTER EIGHT**

### **CONCLUSION AND RECOMMENDATION**

#### **8.1 SUMMARY**

Every human endeavor tries to satisfy a particular need. This thesis therefore seeks to contribute theoretically and also to evolve a design, which will serve as a model for the development of other recreational centers. Chapter one analysis the need for a golf and recreational center, clearly indicating its aims and objectives. The limitations of the study are also established.

Chapter two involves a literature review of the relationship that exists between recreation and leisure. An expose is given on tourism in general, in the context of the country and how the nation could benefit from its huge potentials.

Chapter three critically examines the components and principles guiding the design of landscape and underscores the meaning different aspects of landscape elements have vis-à-vis their utilization.

A thorough research and documentation of existing situations and trend commonly associated with the planning and design of golf clubs and recreation centers forms the core theme of chapter four.

Finally, every good design is both a product of a systematic design process and intuition, hence, chapters five; six and seven examines the study site through research and available data. Consequently, the procedures involved in developing recreation center is highlighted and used as a guide for the final design proposal.

## **8.2 CONCLUSION**

Leisure time can be used for recreation as it restores a person's vitality, initiatives and perspective of life, thereby preparing him to return to his work. Most people today not only hope for recreation, but also demand it as a part of their life style and expect to get the best quality.

With the number of available natural sites and tourism potentials in the country, it will amount to sheer idiocy to wring our hands helplessly and lament the poor state of tourism in the country. Nigeria stands a chance of benefiting immensely from a well-developed tourist industry.

Given this scenario where demand is rapidly rising and supply remains virtually static, the duty of the architect is to plan the tourism resources such that a balance is maintained between conservation on one hand and satisfaction of the growing demand on the other hand. Perhaps, the most popular discipline linking sustainability of the environment with the growing interest of mankind is landscape design. Proper landscaping, therefore, remains the best method of maintaining the balance between the conservation of the environment and this interest.

## **8.3 RECOMMENDATIONS**

In view of the foregoing it is hoped that this work will trigger off further intellectual involvement in the field of tourism. It is therefore recommended that:-

- A. More awareness of the game of golf should be created and it should be introduced in the sports programme of both secondary and tertiary institutions.

- B. Local, state and federal governments should demarcate potential tourism zones in their locality.
- C. Government should treat tourism sincerely as a preferred sector, and as such potential investors should enjoy incentives such as tax holidays, tax rebate and soft loans with long period of moratorium.
- D. A local government tourism committee should be formed and the services of experts should be engaged to locate and identify potential tourist attractions and how to translate such potentials into reality.

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## **WORDS AND MEANING**

**Tee:** the area from which the player drives off.

**Fairway:** the Smooth turf between the putting green, distinguished from the uncut rough and from Hazard

**Putting Green:** the surface prepared for putting

**Hazards:** Any bunker, water trap or trees.

**Par:** the score in which a first-class player should play a hole.

**Rough:** All ground on the Course that does not come under the heading of fairway, teeming ground, putting green or hazard.

**Bunker:** An area of bare ground, often a depression, which is usually covered with sand.

### HOLES, TEE LENGTHS PAR RATING FOR PROPOSED GOLF COURSE

Hole	Length (men)		Length (Ladies)		Par
1	441	403	416	380	4
2	370	338	343	313	4
3	238	217	238	217	3
4	460	420	410	375	4
5	451	412	401	366	4
6	145	132	145	132	3
7	493	450	450	411	5
8	183	167	168	153	3
9	396	361	368	336	4
10	380	362	343	313	4
11	384	351	356	325	4
12	343	313	321	293	4
13	443	404	413	377	4
14	520	475	480	439	5
15	454	414	429	390	4
16	163	148	163	149	3
17	423	386	393	359	4
18	441	403	419	383	4

