

## Exploratory survey on the maintenance of Osun-Osogbo sacred grove, Nigeria.

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### Abstract

This paper examined the maintenance state of Osun- Osogbo grove in Osogbo – which is an organically evolved cultural edifice and landscape associated with the Yoruba traditional religion and culture. This was with a view to unfolding the level of deterioration, identifying the causes of decay, and providing appropriate maintenance solutions. In order to carry out this assessment, selected cultural properties like the first palace, the second palace, scared spaces, individual shrines, Osun worship points in the grove, Oja- Ontoto shrine, the sculptures, the suspension bridge, were examined through physical surveys. The analysis is also dependent on data procured through the administration of questionnaire.

Findings revealed that these cultural properties were generally ill-maintained and in a serious state of disrepair. It is also confirmed that the main factors affecting maintenance of these cultural properties were inadequate funds for maintenance, high cost of repairs and poor construction techniques. There is no specialized organization to inspect the monuments and advise for efficient maintenance regularly. It is mainly through maintenance of heritage buildings that cultural significance of these monuments can be sustained for the need of upcoming generation. This would be difficult to achieve if the best practice approach to the maintenance and management of heritage properties is not fully adopted.

**Keywords:** Osun Osogbo grove, cultural property, exploratory survey, deterioration, maintenance

## **1.0 INTRODUCTION**

Culture and heritage are often considered as the fundamental aspect underpinning a country national identity and sovereignty. Cultural heritage including historical sites, cultures and other invaluable assets are the distinguished elements that encapsulate a nation's soul and spirit (Ahmad 2006). These cultural properties, which are important component of the environment, may be viewed in two perspectives. These are religious and natural topographical landscape sites in form of relief features (hills, mountains, valleys, rock, outcrops, streams and rivers) that have been accorded significant historical and cultural relevance. Osun Osogbo sacred groove is an organically evolved cultural and landscape site associated with the Yoruba traditional religion and culture.

This sacred groove is about 75 hectares of rainforest vegetation, it harbours over four hundred species of plant of which two hundred are found to be of high medicinal value to the Yoruba people and others alike who believe in its efficiency. The Osun-Osogbo sacred groove is a sacred forest that form part of Yoruba cultural tradition. It is the domicile of Osun, the Yoruba goddess of fertility. The site consists of 40 shrines, 2 palaces and many sculptures and other works of art. The cultural Millen tagged Osun-Osogbo festival has two weeks programme of events starting with the traditional cleaning of the town called Iwopopo followed by the lightening of the 5000 years old 16 points lamp three days later called OLOJUMERINDINLOGUN. This is followed by IBORINDE some four days later, which is the assemblage of all the crowns of past rulers (Ataoja) for blessing. The festival grounds finally show cases the cultural procession of the people to the Osun groove. Essentially these activities are to spring board cultural development in Osun State and generally in Nigeria. Despite the influence of western civilization, education and religion the

festival has to a very large extent maintained its originality, authenticity and acceptability among nations worldwide. The Osun groove has been declared as a world heritage site by United Nation Educational, Scientific and Cultural Organization (UNESCO) on 15<sup>th</sup> July, 2005 (National Commission for Museums and Monuments, 2010).

The Osun grove has become a major tourist attraction both to local and international users, and could become a major source of income to the State government. World Tourism Organization (2008) calculated that tourism in emerging and developing markets has grown at an average of 6-8 per cent in the last decade(double that of industrialized nations) and that tourism has become a crucial source of income for 70 per cent of the world's poorest countries. It has also predicted that the number of international travelers will almost double by 2020 (WTO, 2005). It encourages development policy makers and practitioners to recognize the long-term potential that tourism can offer as a sustainable growth mechanism (WTO, 2008). As an integral part of these normative tools, operational actions have been recommended to foster sustainable use of cultural heritage resources for the betterment of local populations (Van Oers, 2009). This can only be achieved if the cultural properties are well maintained in their cultural state Universal Declaration on Cultural properties Diversity UNESCO, (2001) and the convention on the protection and promotion of the Diversity of cultural Expressions UNESCO, (2005), opined that the recognition of the importance of cultural diversity became an essential component in the development and implementation of approaches to manage the social, economic, and cultural impacts of globalisation on contemporary cultural expressions, as well as cultural heritage.

Heritage can boost the local and national economy and create jobs by attracting tourists and investment, and providing leisure, recreation and educational facilities (Tweed

and Sutherland, 2007; Nijkamp and Riganti, 2008; Communities and Local Government, 2009; English Heritage, 2009).

It is mainly through the maintenance and conservation of cultural properties that we can pass into the future generation what is currently identified as being of cultural significance today, and this would be difficult to achieve if the cultural properties are allowed to deteriorate and decay.

This article therefore examined the physical condition of the Osun-Osogbo sacred grove, identified physical defects in the cultural properties, evaluates nature and possible causes of the identified defects and suggested appropriate maintenance solution. The following plates display the array of stages of the festival sessions in the study area.

### **1.1 SITE LOCATION**

Osun Osogbo Sacred grove is located along the bank of Osun River in Osogbo Local Government Area of Osun State, South Western Nigeria. Its geographical coordinates are 7°45'02" N and 4°33'08" E. The sacred grove is situated on the margin of the southern forests of Nigeria on a raised parcel which is about 350 metres above sea level. The grove is bounded in the North by Laro and Timehin Grammar Schools, the South by entrance of Ladoke Akintola University of Technology (LAUTECH) which runs parallel to form a western boundary. In the east, it is bounded by Osun State Agricultural Farm Settlements (NCMM, 2010)

### **2.0 Cultural Heritage and Deterioration**

Taylor (2000) defined culture as that complex whole which includes knowledge, belief, art morals, law; custom and any other capabilities and habits acquired by man as members of the society. Kroeber (2000) put it as the mass of learned and transmitted motor reactions,

habits, techniques, ideas and values and the behaviour they induce. Leach (2000) in his work, defined culture as the components of accumulated resources which could be immaterial as well as material, that the people inherit, employ, transmute and add to and transmit. According to Edokpolo (2007) ancient monuments are highly valuable and informative in terms of socio-cultural, socio-political, socio-economic and even technological activities, of a particular society or group of people. The royal palaces are examples of such monuments. He went further to state that the palaces of the Oba and his Chiefs are of historical importance. These palaces faced a lot of devaluation through physical and biological degradation. Tangible cultural heritage includes monument, groups of buildings, sites and cultural landscapes (United Nations Educational, Scientific and Cultural organisation UNESCO, 1972), while intangible cultural heritage includes the practices, representations, expressions, knowledge, skills of communities and groups, and sometimes individuals, as well as instruments, objects, artefacts and cultural spaces associated therewith (UNESCO, 2003). The idea at the center of preservation measures for tangible cultural properties is the control of deterioration through maintenance of favourable preservation environment. Everything on earth is consistently degrading and changing in response to its environment. Thus, preservation measure for tangible cultural properties must somehow protect them from the effects of geo-climatic agencies such as moisture, air, solar radiation, temperature, humidity, contaminants in the air, and biological agencies such as fungus, insects, mold, and other actors. Furthermore, responses to ozone, carbon dioxide, nitrogen oxides, sulfur oxides, dust, etc. are necessary.

#### **Geo-climatic agencies.**

Building materials and components are subjected to the effects of a number of agencies, which influence adversely their durability and performance, and thereby have

major bearing on the possibility of their premature failure. These cover solar radiation, wind, moisture, (from the ground, condensation, and driving rain), and Soil movement (Ikpo, 2008). Solar radiation causes thermal expansion, which in buildings manifest as thermal expansion cracks in brickwork, block-work, and concrete if the ends are restrained, most building materials are opaque and are, therefore, susceptible to attack by radiations (Ikpo, 2006). The radiation absorption coefficients vary considerably from materials, depending on the colour and texture (Son and Yuen, 1993).

According to Ikpo, (2006) other effects of radiation on various building materials are warping of timber members, buckling of restrained concrete or steel members due to expansion, and flash setting of concrete. Bitumen and paint deteriorate in a similar manner when exposed to intense sunlight. Temperature changes cause dimensional changes in materials particularly when the coefficient of expansion is high as for example with aluminum and plastics (Obiegabu, 2003). These changes cause stresses which, if not accommodated can exceed the strength of some materials and cause distortion or rupture.

Moisture is the principal agent of deterioration and is probably also the agent with the greatest influence on the properties of materials. It can exist in the form of solid (Snow and hailstones), liquid (rain) or vapour (Son and Yuen, 1993). In many cases, moisture is a prerequisite for physical, chemical or biological reaction to take place. When water freezes in the pore of the materials, such as brick, stones and concrete, stresses are produced this may cause spalling of the surface, general cracking or disintegration. Changes in relative humidity can lead to dimensional changes in materials, with deformation, crazing or cracking. Prolonged low humidity can cause dehydration of some materials whereas prolonged high humidity aids fungi growth and

the subsequent decay of organic materials (Obiegabu, 2003).

The atmosphere consists of inorganic dust particles. The dirt also contains some soluble salts which are deposited on buildings and cause adverse effects on appearance and increase the corrosion rate of metal surfaces and the deterioration of some stone surfaces. Brumaru, 2002 also include atmospheric pollution as agent of building decay, especially in industrialized urban areas.

Geological phenomena such as earthquakes, faults, subsidence and landslides also affect a building (Brumaru, 2002). These groups of geological agents, unlike the former, usually cause instantaneous collapse of building rather than progressive deterioration. Incidences of these geological phenomena have not been recorded as significant in frequency and severity in the study area, (Ikpo 1990).

### **Biological Agencies**

Attack by rodents, insects, fungi, algae and plants may cause serious deterioration in various parts of a building (Son and Yuen, 1993). Rodents may cause considerable damage to timber and other organic material. Insect attack is generally confined to timber, but some other materials derived from organic fibres or pulp may also be affected. Fungi attack occurs only in the presence of sufficient persistent moisture. Fungi are parasitic and attach themselves to surfaces which supply nutrients.

### **Heritage property Maintenance**

It is mainly through maintenance of heritage property that we can pass on to future generation what is currently identified as being of cultural significance today. This would be difficult to achieve if the best practice approach to the maintenance and management of heritage property ( buildings) is not fully adopted ((Idrus, Khamidi and

Sodangi, 2010). As cultural property age, it is natural that they are exposed to serious defects and deterioration. Maintenance has been recognized to be the most prominent conservation process. Forster and Keyan, (2008) Emphasized that maintenance management practices are essential in extending the life of heritage buildings and avoiding the need for potentially expensive and disruptive repair works, which may damage the building heritage values (Mustapha, Kamal and Zainul, 2003)

### **FACTORS AFFECTING MAINTENANCE**

There are so many problems being faced by attempts to maintain cultural heritage sites. Aradeon (1996) listed some of these problems to include, inadequate professionals and the closeness of these sites to urban centers thereby making the land occupied by them to attract high value for alternative investment. One of the numerous problems confronting the maintenance of cultural heritage sites is the advent of modern religion such as Islam and Christianity. This made a lot of people to denounce traditional religion.

The change of attitude to religion made many people abandon the worship of some of these deities for the new religion (Omisore, Ikpo and Oseghale, 2009). Finance is the major factor that inhibits the conservation of properties. The maintenance of cultural properties requires a lot of money that cannot be provided by a single body. The cost of maintenance varies from one heritage site to the other (Omisore, Ikpo and Oseghale, 2009).

The effects of deterioration can be reduced by serious commitment towards maintenance by the users of the cultural properties. Also delay in attending to the problem by indifferent users can heighten the problem of deterioration. When maintenance is ignored (delayed or not executed at all) the effect is to

aggravate it or increases the rate of property deterioration from year to year (Al-Sultan, 1996; Olubodun, 1996; Brumaru, 2002).

Majority of the defects mentioned above can be avoided, when the properties are maintained on regular basis. Unfortunately in Nigeria we do not have legal tools to motivate the owners of cultural properties to carry out maintenance. In addition there is no specialized organization to inspect the building and to formulate and advise for efficient maintenance regularly.

Since the main task of the Institute of Monuments is research, documentation and methodology of the listed monuments which are going to be restored, or are under restoration. Other factors identified to be affecting maintenance of properties include cost of repairs, poor construction, improper use of property, age of property and third party vandalism. (Oladapo 2004; Son and Yuen 1993; Ikpo, 2008; and Omisore, Ikpo and Oseghale, 2009)

Vandalism is caused by willful damage to the building or facility or structure. It has its roots in the social fabric of our society (Son and Yuen 1993). They further stated that lack of security, wrong choice of materials, poor space layout. Poor lighting arrangement and failure to promote awareness of social responsibility as other factor that can increase the incidence of vandalism.

### **Known historical properties and features within Osun Osogbo grove.**

These include the river, roads and footpaths, the first palace, the second palace, sacred spaces, individual shrines, Osun worship points in the grove, Oja- Ontoto shrine, the sculptures, the suspension bridge, the Iya-mapo, the main gate, heritage and education resource centre and new structures.

**The river**

The river, (Osun River) drains into the grove. It takes its course from the swampy grounds of Igede-Ekiti in the neighbouring Ekiti State of Nigeria, flowing through Ijesha land into Osogbo where it becomes broader meandering through the sacred grove, and

finally empties itself into the Atlantic Ocean (NCMM, 2010). The photograph of the river is shown in plate 5.



Plate 1: Osun river.

**Roads and footpaths**

There are two principal roads and several footpaths leading to sacred locations, mythological palaces, the primordial market

(Oja-Ontoto), the river side altars, the New Sacred Art works and the suspension bridge (built in 1935 to facilitate movement of men and materials during World War II) (NCMM, 2010)



Plate 2: Osun Osogbo entrance gate



Plate 3: Entrance gate to worship ground.

#### THE FIRST PALACE

The first palace is where the first Ataoja of Osogbo, Larooye and his people settled first. It is located in the Osun courtyard (Agbala Osun) which is reached from the Iron Gate

through the pilgrimage trail which bifurcates into two-private and public routes (see above). The first palace (Ile Osun) houses the Osun Shrine and the Temple. Sacred stone stool called the stone of Authority is located in the

Temple which Larooye, the first Ataoja, used some 400 years ago.

According to Susanne Wenger, the outer shine walls of the Osun Temple and central altar were almost intact in the 1960s when the Osun Priestess then appealed to Susanne Wenger and other devotee Artists to salvage it

from termites that had started a subterranean invasion of the walls, pillars and roofs. It was in the process of doing this that art was created on the walls of the temple (which represents today the first palace) by the NewSacred Art movement artists (NCMM,2010).



Plate 4: First Palace

## THE SECOND PALACE

The sacred palace (Iledi Ohuntoto) was the second residence of Larooye. It is about 600 meters from the first palace. It was built to avoid the effect of constant flooding experience at the first palace. Today the Ogboni Cult House stands within a symbolic reconstruction of the second palace. The Ogboni Cult is an elitist society of men of influence and affluence, similar to European

Lodges. Their patron is the goddess of earth, Onile, which they consult before taking decisions. Today its membership comprises of the Yorubas as well as non-Yorubas. It wields tremendous economic and political influence as Ogboni members are said to have great integrity. Members have their regular meetings here every 15 days (3 traditional weeks) and daily during the Osun- Osogbo Festival (NCMM, 2010). Photographs of the second palace is shown in plate 5.



Plate 5: Second palace

## SACRED SPACES

The Osun-Osogbo Grove has five main sacred divisions which are associated with different gods and cults. While three of these are primordial, originating with the grove, two are later ones which were said to have been transferred into the grove in the 1950s when their existence was threatened in the main town of Osogbo as a result of religious fundamentalism.

**(a)** Primordial sacred spaces

Igbo Oya (Oya bush): is dedicated to Oya, one of the three wives of Sango, god of thunder and lightning.

Igbo Oro (Oro bush): This is the divine agency connected with winds which its members invoke, before major ritual events, to cleanse the community of evil spirits.

Igbo Orubu (Orubu bush): Igbo Orubu is one of the worshipping points on the Osun river, through which the Ifa Oracle may be consulted to carry out purification rituals.

**(b)** Later sacred spaces

Igbo Ifa (Ifa Bush): This is a sacred space dedicated to Ifa oracle devotees and medicinal herbalists (Babalawos).

Igbo Epa (Epa Bush): This is the location of the cult associated with

hunting and marksmanship as well as the ceremony associated with martial art (NCMM, 2010).

### **INDIVIDUAL SHRINES**

At the entrance to the Osun Osogbo Grove are some shrines dedicated to central Yoruba gods, hosted by Osun. These are:

Sango and Oya. god of thunder and goddess of the storm.

Esu: The god of natural justice and messenger of Orunmila ( the god of divination and oracles).

Obatala: The god of creativity, co-worker and assistant to Olodumare (Supreme God).

Ogun: the Yoruba god of iron and iron mongering (NCMM, 2010).

### **OSUN WORSHIP POINTS IN THE GROVE**

There are ten sacred worship points along the right bank of River Osun with designated priest and priestesses connected with different quarters (residential lineage groups). From these points Osun is worshipped, her waters collected and may be drunk for healing cases of infertility and other diseases (NCMM, 2010).



Plate 6: Worship point.( the goddess responsible for child bearing)



Plate 7: Worship point.



Plate 8: Worship point.



Plate 9: Worship point.

### **OJA-ONTOTO SHRINE**

Oja-Ontoto is a mythological market where human and spirit beings are said to have interacted. It is the first market in Osogbo. A traditional shrine (Oja-Ontoto Shrine) is located on its grounds. According to Osogbo mythology this was a market place for the gods, subterranean and supernatural beings. Evidence of grinding activities are represented by oval pits out of the pre-cambrian outcrops of stone slabs that cover the “market space”. Relying on the myths of the Osogbo people, one of the New Sacred Artists Saka, has recreated in dramatic cement sculptures the typical scenery of Oja-Ontoto market bringing

intangible myths into tangible format; thus serving as an educational value.

### **The suspension bridge:**

This is a colonial bridge built over the Osun river within the heart of the grove in 1935/36. It probably served as a temporary bridge to link Osogbo with other southern Yoruba towns, to carry supplies and men during the World War II. It now serves as a tourist trail and a viewing point of the Osun River as well as the surrounding grove.



Plate 10: Suspension bridge



Plate 11: Iya mapo

**3.0 Research Methodology**

To assess the state and physical condition of Osun Osogbo grove, the listed cultural properties were examined through a field survey. This provided primary data on their level of deterioration. In addition, 60 out of the 90 questionnaire were administered on respondents (staff and tourists) in Osun Osogbo grove were received. The questionnaires were structured to obtain information on the condition of the properties, factors affecting maintenance, and maintenance response time. To complement information from the survey the natives and worshippers at the Osun Osogbo grove were interviewed. Simple descriptive and inferential statistical methods were used to analyse, present and interpret the data collected.

Maintenance staff and tourists were asked to assess the state of the physical condition of properties at the grove. The respondents were asked to indicate their perception on a 5-point scale ranging from 1-very bad, 2-bad, 3 average, 4-good, 5-very good. Table 1 shows the responses from the respondents.

This study investigates the various factors affecting maintenance in their degree of prevalence. The “Relative Maintenance Index”(RMI) was used to determine the occurrence of the factors on the cultural properties.

The RMI for each occurrence of prevalence was computed from the analysis of the rating indicated by the respondents. The liker’s scale

used for the rating were very significant (VS), significant (S), Quiet significant (QS), average significant (AS), quite insignificant (QI), insignificant (I), very insignificant (VI). The RFI is the ratio of the summation of the values and the total number of the number of respondents of respondents for all ratings to each types of project.

$$\sum X1Y1 \text{ and } RFI = \frac{\sum RF1}{\sum f1}$$

Were F1=number of respondents to rating I (I=1-7), the value of 7,6,5,4,3,2,1 were respectively to very significant (VS), Significant (S), Quiet significant (QS), Average significant (AS), Quite insignificant (QI), Insignificant (I), Very insignificant (VI).

Thus, RMI of each prevalence of factors affecting maintenance takes a value between 7 and 1 that means the Rm1 to 7; the higher is the degree of prevalence of the factors on building. The average importance attached to the various factors on building is devoted by;

$$RF1 = \frac{\sum RF1}{N} \quad n = \sum X1$$

- VS - Very Significant
- S - Significant
- QS - Quite Significant
- AI - Averagely Insignificant
- QI - Quite Insignificant
- I - Insignificant
- VI - Very Insignificant

**4.0 Data analysis and discussion**

**4.1 Perception of respondents on the physical condition of the properties**

**Table 1 Frequency of responses to the physical condition and state of the properties**

Response	Frequency	Percentages
Very Good	4	6.67

Good	17	28.33
Average	22	36.67
Bad	6	10.00
Very bad	11	18.33
Total	60	100

Table 1; show the responses from the respondents on their perception on the physical condition of the properties and features in the grove. The result shows that 6.67% of the respondents agree that the properties were in a very good state, 28.33% agrees that the properties were in a good state, 36.67% agrees that the properties were average, while 10% agrees that the properties were in a bad state and 18.33% agrees that the properties were in a very bad state. The implication of this is that the properties were averagely maintained.

#### 4.2 Response time for maintenance request

The maintenance staff were asked to indicate the time between when a defect in the properties were observed and the time intervals when maintenance actions were attempted. The result is shown in table 2.

Table 21: Response time for maintenance request (in weeks)

Description	Frequency	Percent	Cumulative percent
Within 1st week	2	3.33	
1 <sup>st</sup> – 4 <sup>th</sup> week	8	13.33	3.64
4 <sup>th</sup> -8 <sup>th</sup> week	7	11.67	18.19
8 <sup>th</sup> -12 <sup>th</sup> week	2	3.33	30.92
Above 12 <sup>th</sup> week	36	60	34.56
Total	55	91.67	100
Missing	5	8.33	
Total	60	100	

Table 2 shows the response time for maintenance request. The response time for maintenance request within 1<sup>st</sup> week were 3.33%, 1<sup>st</sup> – 4<sup>th</sup> week were 13.3%, 4<sup>th</sup> -8<sup>th</sup> week were 11.67%, 8<sup>th</sup> – 12<sup>th</sup> week were 3.3% and above 12<sup>th</sup> week were 60% which mark the highest percentage. This indicates that

prompt and proper maintenance actions were not given to defective element /component immediately they occur. The implication of this is that 60% of the properties in the grove had a maintenance downtime of over three months, and this could lead to further deteriorations of the properties.

**4.3 Factors affecting maintenance**

Table 3: Factors affecting maintenance

	VS	S	QS	AI	QI	I	VI	Fi	FiXi	Rmi	DRMI	Rank
	7	6	5	4	3	2	1					
Inadequate fund	33	3	9	0	1	1	2	49	301	6.142857	1.781561	1
Cost of repairs	30	6	0	1	2	1	5	45	263	5.844444	1.483148	2
Poor construction	34	4	2	0	5	1	7	53	293	5.584906	1.223609	3
Delay in reporting failure	24	7	2	0	0	3	10	46	236	5.130435	0.769139	4
Delay in executing repairs	20	4	6	4	1	2	7	44	224	5.090909	0.729613	5
Improper use of property	23	6	2	0	2	5	10	48	233	4.854167	0.49287	6
Age of property	13	6	3	1	3	10	16	52	191	3.673077	-0.68822	7
Third party vandalism	1	2	8	11	5	9	4	40	140	3.5	-0.8613	8
Religion	7	7	4	0	0	13	21	52	158	3.038461	-1.32284	9
Lack of adequate technology	6	0	1	1	1	17	24	50	112	2.24	-2.1213	10

The table indicate that the most significant factor affecting maintenance in the study area is inadequate funds for maintenance with the highest positive deviation of 1.7816 from the mean (aggregate relativity index). This is followed by the cost of repairs with a deviation of 1.4814. On the other end of the rank, the lack of adequate technology and religion have the highest negative deviation from the mean with values of -1.213 and -1.3228 respectively making both the most insignificant factor affecting maintenance in the study area

**4.4 Nature of deteriorations (evidence of direct observation conducted).**

Physical observation of the properties at the grove were not well maintained, as these building and other structures were defaced, cracks were noticed on the walls and floors

with much wears on finish (see plates 12 to 16) .

Common construction materials prevalent include clay, mud, concrete, brick/block, timber, metal and finishing materials. Puddle mud and clay were used for foundations, walls, floors, lintels of the ancient buildings “over 200 years ago while brick/block, clay, concrete were also used for the modern building. While building of 100 years and above are partly of both concrete and mud, bricks/block and concrete has come to replace mud and clay completely for the construction of foundation, walls, floors and lintels of modern buildings.

Bricks, used for most of the old buildings, were made of clay and mud sun dried and burnt. In the same vein, blocks, made of cement and sand (i.e. sandcrete) were more used for the construction of modern palace, office buildings because of their high strength, durability, and aesthetes’. For the age

buildings, some of the roofs were made of unsawn wood while the modern buildings are roofed with the convectional sawn hardwood struts, purlins and rafters.

Ancient walls of notable places like the shrines were well decorated with cowrie shells of various colours, patterns and designs.

Deterioration of the wall fence due to the activities of weathering. This crack will continue to expand as long as water and moisture percolates leading to its eventual collapse. Immediate repairs and maintenance is required to avert the total collapse of the structure.



Plate 12: showing Cracks and plant growth on wall.



Plate 13: showing plants growth on the wall.



Plate 14: showing plants growth on the wall



Plate 15: showing moss growth on the wall

## 5.0 Conclusion

Virtually all traditional building techniques, materials and methods of construction displayed have vanished with time. In some cases they have been replaced by modern technology that is more imposing on their construction and maintenance. Investigation has thus, shown that most of the cultural properties and buildings located at the grove were generally ill-maintained and in a serious state of disrepair.

Incessant cracks of floor and walls, peeling of plasters and finishes, damage paintings and decoration, defects in roofs, damage in the external doors, outdated sculptors, characterized the properties. The most serve factors found to be affecting maintenance of cultural properties at the grove were

inadequate funds, high cost of repairs, poor construction techniques and delay in reporting defects.

The research recommend that a holistic and predictive maintenance approach should be adopted in the maintenance of the cultural properties in order to preserve the components and elements in their originally designed state so that properties can retain their originality for future generation.

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