

Deforestation And Disintegration Of Health Beliefs And Practices In Nigeria

Ikenyei N. Sandra

Sociology Dept., Delta State University, Abraka 0803466677

Abstract: For years, the forests within many communities in Nigeria were protected by taboos. These taboos were instituted to preserve strategic forests because of their economic value. This indigenous practice prescribed the wholesome and sustainable use of the forest resources. However, as time progressed, the taboos and the use of the forest in regulating health and social order became untenable with the onset of industrial scale deforestation which commenced in 1940. While researchers have documented economic gains and pains of deforestation, there have been few studies on effects of deforestation on indigenous beliefs and practices that protects the forest, thereby, maintaining health and social order. Thus, this work examined deforestation, its disintegrative impact on indigenous beliefs and practices that once sustained health and social order in Sapele, Delta State, Nigeria. Ecological theory provided the framework for explanations of variables. From five major communities that make up Sapele local government area, total of 369 participants were randomly selected: Sapele (91), Elume (85), Amukpe (71), Ozum-Okokporo (61) and Ugborhen (61). The questionnaire collected data on the use of forest in regulating health and social continuity. Five focus group discussions comprising eight participants each, 10 key informants among household heads/traditionalists and 15 in-depth interviews with chiefs/forest custodians were conducted. Quantitative data were analysed using probit regression model at 0.05 level of significance. Qualitative data were content analysed. The mean age of respondents was 52±1.0 years. More than half (55.0%) were male. While 67.0% were Christians, 15.0% were traditionalists and 13.0% were Muslims. Majority (90.0%) endorsed forest and related beliefs as important for maintaining health and social order. The forest remains a significant determinant of beliefs ($x_2=2.7$), practices ($x_1=2$) and wellness ($x_3=2$). Indigenous health practices carried out in the forest included the performance of ritual cleansing, oath taking, invocation of cosmic forces, isolation, exorcism, shaming, fortification with forest relics, restriction of woman under menstruation, conferment of regalia/insignia of authority, festivities, rites of passage, spiritual and funerary rites-internment of endemic bodies in the forest. However, 90.2% indicated perceptions of ongoing changes to these beliefs and practices.

Keywords: Deforestation, Disintegration, Health belief model and systemic sustainability. **Word Count** 250

1. Introduction

Prior to the onset of industrial scale deforestation, basic needs and means of livelihood were forests dependents (Obono 2016). Access to the forests and performance of related rituals regulated life and death. The forest bestowed social status; it regulated social order, wealth, health and harmonious relationship among the people. Reverence for prohibitive taboos restraining unlawful trespasses into the forest and non desecration of sacred edifices were prioritized. Emphasis was targeted towards the protection of the forest and the taboos restraining unauthorised entry and unsustainable use of the forests. The protection of the forests were seen as paramount because of the preventive, curative, restorative, restrictive and rehabilitative services the forest rendered to community members (Dafinone 2011 and Mebitagan 2001). Sanctions against unlawful trespasses and exploitation of the forest thus guided against alien ideology and unsustainable utilization. Thus, forests were an integral component of most Nigerian social institutions and these included ritual observances that regulated life and social order. These ritual observances played important spiritual, physical, biological and economic roles. Prior to land tenure system, the forests were regarded as valuable properties of every member of the community. The Orodje (Monarch) and the Ekakuro (chiefs) owned communal land in trust. Every community member was entitled to a portion of land through inheritance. Most indigenous community members believe that powerful spirits which have unlimited influences over their lives inhabits the forests (Rim-Rukeh et al 2013). The forest derivatives and inhibitive forces were used for various purposes such as rehabilitation, purification, re-orientation and fortification of key participants before the commencement of notable festivals of the community. Forests also served as repositories for symbolic ancestral images and insignia of royalties such as crown and staff of

office. The forest thus stood as residential zones for powerful entities. It was a strong room for safe keeping of sacred equipment used by designated personalities. Up till 1916, control over the forests remained largely in the hands of the indigenous people and forests were preserved by taboos and sanctions. Although farming was widely practiced in most traditional communities in Nigeria of which Sapele is a part of, the people minimized forest depletion resulting from subsistent agriculture (Aqarwal, 2011). Their trust and belief in the forest predisposed them to relying heavily on the forest for the actualization of life goals and ambitions. This trust helped to define health related decision making and also shaped choices in seeking alternative health care services. In view of this, indiscriminate forest usage was prohibited and defaulters were severely sanctioned. With modernisation that followed the arrival of foreign merchants, Sapele forest became a target of multinational corporations. Land tenure degrees and cession of the forest exposed the forests to unsustainable exploitation. Health benefits which flowed from the forests were disrupted by loss of control and large scale expropriation of the forest resources. Deforestation introduced unprecedented changes which the people were less prepared to combat. The changes affected many areas of their economy. Invariably, life sustaining activities which centered on the forest were intercepted by deforestation. This had negative impacts on the indigenous institutions, social order and the people's health.

2. Statement of Problem

Before the onset of industrial scale deforestation, forests, related beliefs and practices prescribed the wholesome and sustainable use of its resources. Forest was useful in observing rituals that maintain wellness and social order. The relevance of the forest was down played by the onset of

industrial scale deforestation which significantly depleted the forests in Sapele, Nigeria. The depletion heightened the disrespect for the beliefs and forest related health practices which maintain wellness and order. In pre-literate Sapele community, deforestation was regarded as a sacrilege-Urhui. The forest was protected by enshrined prohibitive taboos. Dowsing of the beliefs and practices became intensified as deforestation and modern ideologies portrayed the forests, prohibitive taboos and related rituals as primordial, superstitious and less effective in maintaining health and social order. Consequently, deforestation and exportation of timber increased. Approximately 3.3 billion trees were consumed yearly from Sapele forest (Brant 2008). While only 10% were extracted, 90% were left to rot (Ekwund et al, 1966). Apparently, 98% of the forests resources became depleted (Enabor 1992 and Kalaba 2009). This devalued the forest and dis-approbated its sacredness for the performance of indigenous health related practices. As deforestation increased, observance of ritual practices declined. The forest was no longer serene and safe for observing rituals which were exclusive preserve of few. The forest became a haven for carrying out unwholesome practices. These changes dowsed the peoples trust in the forests and associated beliefs. As a result, social integration, harmonious relationships, security, peace and health which flowed from the forest is jeopardized. While some extant beliefs and practices portray the forest as potent in preventing unwholesome practices, observance of health sustaining rituals is relegated today. The change and challenges are adduced to unsustainable deforestation. These changes and challenges are corroborated by research findings of Owumi (1989) and Rim-Rukeh et al (2013) among others.

3. Literature Review

Till 1940, the forest was the basic institution that sustains health and social order in Sapele, Delta State. Depletion of forests lowered standards of living and means of livelihood. Deforestation heightened consumption of poor diets and it weakened social relationships (Wayne 2012). Most disease aetiology is linked to environmental alteration (Romulo and Rosa, 2007). Maintenance of a stable belief system and the forest became untenable with the onset of deforestation. With deforestation, the natural and less harmful means of maintaining health that is affordable was altered. Deforestation created a poor climate that neither supports tourism nor an educated workforce (Anthony and Jo-Ansie, 2008). Economic resources derived from the forest have been depleted due to deforestation (Shakuntala, et al 2010). The forest is no longer green and all that the people can hear is the people's heart beats panting for survival (Awake, 2012). The Sapele community which was once fast growing and bubbling in commerce has become a deserted village characterised by dry climate, disease distribution, disasters and poor farm produce (Mebitaghan, 2001). This increased hunger and strife which has contributed to further degradation of fragile forests lands (Dean, East and Sara 1995). With the forest, the people maintained harmonious symbiotic relationships. Health care services and actualisation of life goals were tied to the forest. Sapele community like many other African communities with marketable trees suffered the effects of deforestation. Timber was produced and exported without afforestation. Like Sapele, it is estimated that Kenya has lost approximately 5.6 million of its forests trees to deforestation

(Kitavi, 2012). Statistics revealed that in 1960s, only 10% of trees felled in Sapele were extracted from the forest and used (Ekwund 1966). The remaining 90% of the felled trees were left to rot on the forest floor. Export income was estimated to be ₦150.5 million (US \$ 225.8 equivalent). These activities damaged largely young vegetation and endangered rare animal species (Rethead, 1960, Enabor 1992). Wild animals and birds were hunted or poached while many were exported illegally. The years 1950-1970 marked the foundational year for the destruction of Nigerian forests. During this time, Sapele experienced unsustainable deforestation which subjected the community to social decay and economic upheaval.

4. Theoretical Framework-Ecological Theory

The Ecological model as the name suggests deals with surroundings and the interactions that take place between its component parts. This theory advocates more reconstructive and reformative use of the forest. Invariably, this theory makes a case for reconstruction, transformation and harmonization of beliefs for improved social relationships. Social ecological model (EM) advocates for prevention of deforestation and its effects deforestation on beliefs and the people. According to Bronfenbrenner, social relationships are shaped by the individual and the environment. The goal of ecological model is the inhibition of disastrous change on the forest, beneficial aspects of beliefs and practices. Deforestation has been identified as one of the major factors that cause disastrous change in the indigenous institution of the Sapele people. The ecological model demystifies the complex relationships between individuals and societal factors such as the beliefs, values and practices. Good understanding of this interplay provides insights on the causes of deforestation and best means of controlling its adverse environmental effects. This study thus uses the ecology model to examine the effects of deforestation on the disintegration of social order and health related beliefs in Sapele. This analysis reveals that, there is a chain relationship between the individuals, the community and the society. Deforestation influences these three levels of interaction. At the individual level, biological factors, and personal backgrounds often determined deforestation. The poor out of want and ignorance are more vulnerable to leasing the forest to unsustainable. Personal background on the other hand reinforces adherence to the beliefs and practices prohibiting deforestation. Therefore, poverty and background increases the likelihood of leasing and depletion of the forest. To correct this, solutions are targeted at the individual. In Sapele, this is achieved through socialization which teaches the norms that work on the attitudes and the behavior of the people on a long run. Socialization models the individual's relationship with peers, family members, the larger society and the environment. At the community level, the ecological model emphasizes the environmental, social settings and the neighborhood in which these beliefs are domiciled and practiced. Through time, it looks at the trend of changes on the physical environment, the people in the neighborhood and their practices. The societal factors are the enabling or inhibiting factors to the destruction of the forest and then deviation from the moral norms. It focuses on the social and cultural norms that inhibited deforestation and disintegration of beliefs. The ecological model is a framework for the prevention of deforestation and disintegration. The societal factor looks at those variables

that help create a climate in which deforestation is enabled or inhibited. Poverty, change in moral order and lack of consensus are major factors that encourage deforestation and disintegration of beliefs. The ecological model expatiated on knowledge about the dynamic relationship between personal and environmental factors. Introduced as a model in 1970s and formalized in 1980s as revised by Bronfenbrenner, it focuses on human development. According to Bronfenbrenner, to understand development that prevents destruction to human institutions modeling their life, the entire ecological system in which growth occurs need to be taken into account. Thus, the norms, the beliefs and the environment collectively are important in solving social problems. The Individual as the basic entity of the community suffers the greatest effects of deforestation. The individual who needs the forest to practice his beliefs to maintain a social order is denied access due to forest. This affects his relationship with people and his predisposition to practicing and preserving beliefs.

5. Research Methods

Research design is descriptive and cross-sectional. This enabled the effective investigation, documentation and description of findings as they are.

Research Setting- Because Nigeria is a large entity, Sapele which is a typical example amongst the communities worst hit by the effect of deforestation was chosen as the research site. Thus, the study was conducted in Sapele, Delta State, Nigeria. Five major communities that make up Sapele LGA were purposively surveyed. The study area was chosen because of unsustainable deforestation which increased hardship and crisis. Sapele is surrounded by thick forest and heavy vegetation. It is located in the Southern region of Delta state in Nigeria. They are predominantly farmers and artisans. The region is a seaport which served as exports terminals to timber, and lumber, rubber and palm kernels. Sapele forest is rich with shallow roots plants that harbour and provide feed for fishes as a fishery hub. It is a home of industries that manufacture rubber, charcoal, palm oil and timber. They are noted for speaking Okpe and a unique style of Nigerian Pidgin English. They also have slangs that are peculiar to the region. They have cultural affinity with the Edo (Ediod) speaking people of Nigeria.

Study Population- The population of Sapele is 174,273 (2006 national population census NBS). The population projection for Sapele L.G, Delta State for the year 2015 was estimated at 221,676 (2006 national population projection of NBS). Because of the gap in census years, this projection was relied on and used for generating samples for this study. The research participants were titled chiefs, household heads, TMPs, forests administrators, health workers and religious adherents who were aged 40 and above. Inclusion criteria were age and residency. Those who were aged 40 and who are resident in Sapele were co-opted for the study. Thus, those below 40 years and who are not resident in Sapele were excluded.

Procedure-Multi stage sampling techniques which utilized both probability and non-probability sampling methods was adopted in the selection of the communities and respondents. First stage: stratified sampling technique was used in grouping the communities. Second stage: Using simple random sampling

method, five clans each were selected from the five major communities in Sapele LGA. Random selection was used in co-opting 421 participants amongst household heads, chiefs, TMPs, religious and forest custodian. Snowball method was used to select TMPs, religious and titled Chiefs.

Method of data collection-qualitative and quantitative instruments was triangulated for the collection of primary and secondary data. Among 421 respondents, quantitative data were gathered with the use of open ended questionnaire. Qualitative data was generated from 52 respondents with the use of IDI and KII. **Method of data analysis-**Quantitative data was analyzed with the use of statistical package for social sciences (SPSS) Version 15. Quantitative data was derived with probit regression model and qualitative data was content analyzed.

Data Presentation and Discussion

The mean age of respondents was 52±1.0 years. More than half (55.0%) were male. While 67.0% were Christians, 13.0% were Muslims and 15.0% were traditionalists. Majority (90.0%) agreed that the forest and related beliefs/practices were important for maintaining good health and group order. Significantly, 73.6% respondents revealed that 63% of their needs are largely forests derivatives. Outside the forest, they lose sense of relevance and existence as human. Thus, the people struggled to sustain the forest due to its spiritual, psychological and cultural functions. To achieve this, basic "mark off" taboos were created and its violation was criminalised. These taboos/beliefs epitomised in the norms and values efficiently regulated psychological and spiritual wellbeing. The function of the forest and beliefs/practices according to 76.2% lost it relevance with the onset of large scale deforestation. Significantly, 69.4% participants expressed changes that emerged with the depletion of the forest and degeneration of the beliefs and related practices. The changes have had a negative impact on the people's health and interactions. A total of 61% respondents revealed that the people have lost control over the forest, the beliefs and related practices. Large percentage of the participants (79.3%) revealed that they can rarely survive without the forests and sets of beliefs binding them together. As a result, (93%) respondents revealed that autonomous beliefs and practices untouched by external influences were put in place by their progenitors. These indigenous cultures and practices were preserved and conveyed across generations. The forest and the beliefs formed the integrative force which maintained wellness and peaceful relationships. These beliefs according to (49.8%) respondents discouraged spontaneity and impulsivity that characterised most preliterate societies. Within the convert of the forest, they were self reliant, inwardly oriented and hostile to intruders. The forests and existing beneficent practices modelled their lives, (52%) respondents. Unequivocally, the forest and inhibitive spirits maintained moral order. However, (47%) respondents attributed changes and concomitant challenges to depletion of the forest. Deforestation demeaned forest related beliefs/practices. Thus, dowsing/disintegration of the beliefs and systemic anomie were linked to industrial deforestation.

Deforestation and Disintegration of Beliefs and Practices Deforestation played major roles in the disintegration of beliefs and practices which helped the people maintain order

and wellness. As time progressed and conditions changed, the people question the relevance of the cultural beliefs and practices initiated by their ancestors. With the advancement that followed industrial boom in timber production and the civilization, the beliefs and forests related practices were perceived as archaic and incapable of sustaining modern lifestyles. This perception under rated the use of forest. This increased the depletion of the forest, diminution of the beliefs, and the prevalence of disease and death. The sick and their relations only resort to the forest related cultural health practices when sickness defies modern medications or faith based practices. Respondents estimated (76%) ruins in the community that was once vibrant. As the social, economic and political circumstances surrounding their lives changed, the beliefs and practices of the people changed. There are disjuncture's in the connection and relationship that has existed among the structures. Constituent parts are no longer at ease with the disintegration and annihilations. Responses validated observation on inherent changes in the traditional spirituality, political economy, family, class structures and statuses. The forest which was seen as sacred was parceled out for appropriations by the capitalist. The interest for profit maximization led to exploitation of the forest without conscious effort for afforestation. The misconceptions and emergent enlightenment which followed deforestation led to the diminution of Sapele-Okpe beliefs and related practices. In correlating the nexus between deforestation and disintegration of beliefs, the respondents revealed that there is direct impact of deforestation on the beliefs ($X_1=2.182<.05$). This implies that, there is proportional correlation between deforestation and the disintegration of beliefs. Like a chain reaction, this affects the practices, health and development. As deforestation increased, reverence for beliefs and observance of the taboos decreased. Reduction in reverence for the common beliefs that moderates personal desires and means of actualization increased the use of unconventional means of satisfying life goals. Thus, anomie and afflictions increased. These affected health, peace, security and development. The correlation $x_3=.206<.05$ shows that deforestation altered the peaceful relationship that was enjoyed in the community. Control over the forests and fear of afflictions for trespasses is weakened. External control of the forest, the beliefs and practices increased. The direct correlation between forest and beliefs detailed that, as deforestation increased, disintegration of beliefs and diminution of taboos increased. This increased anomie and afflictions within the community. The consequences of deforestation on health, peace and beliefs impact negatively on lives, peace and development. As deforestation increased, the respect for the beliefs and practices diminished. The beliefs became disintegrated to the point that the people no longer share common cultural beliefs and goals. They adopt convenient multi faceted practices. Depletion of the forest and the diminution of beliefs weakened the conventional means of achieving life goals. Fear of the ancestral forces diminished, this increased crime rate as member's device many means (often illegitimate) of sustaining their life in the midst of lack. A total of (98%) participants agonized and groaned that the untoward consequences of deforestation on them are enormous. They attributed these social changes to greed and crave for immediate gratification. The short term benefit led constituted authorities into drafting policies that removed the control of the forest from the local people. They ceded the

forest to exploitation. Invariably, the desire for instant gratification exposed significant forests to deforestation. Consequently, deforestation brought changes which challenged their beliefs and continual practice of forests related practices that protects health of the people. Responses revealed that in the past, to prevent or cure diseases, cosmic forces were invoked by the spiritually inclined. Invocation was carried out to crave their indulgence and also to draw strength from the depth of their powers. The supernatural powers surrounding the beliefs and related rituals were effective in maintaining wellness and harmonious relationships. These practices suffer greater denigration because of forest depletion and cultural alterations. The challenges bite harder because modern doctrines which perceive these practices as idolatry is unable to meet the needs of the people. According to a respondent; 'ezaze okpe ve akpo wenere ifiki oyibo' (life has changed because of civilization). 'Our people no longer fear the gods and ancestral doctrines. Many commit all sorts of atrocities because nobody they ask them. That is why many they die before them reach ripe old age unlike before when people they live long because they use to do correct things because the people feared punishments for breaking custom. IDI Male, Age 56, Amukpe, 06/09/2014. Deforestation created major discontinuity in sustaining the beliefs and forests related rituals. Ancestral powers which were revered suffered disregard. Thus, sacred forests and shrines found thereof were desecrated. The change in the cognition and respect for spiritual powers, identity and communion with the ancestors challenges the people's wellness. Although 43.2 % participants believed there are manipulations from invisible forces on their fellow men, they believed that supernatural forces have influences over conformists and deviants. The belief in supernatural powers was weakened by derogatory adjectives. They are left with no other choice than to adapt to modern ways, whereas, their lives are modelled by indigenous culture. These changes created more rancour and anomalies than it were. In respect of the changes, a respondent revealed that; in the past, acrobatic dance and display of masquerade was performed in the bush to cut off those who do not know about it. Pregnant women were not allowed to watch these acrobats otherwise they can give birth to children that resemble the masquerades. Today things have change; women even pose to take pictures with masquerades and acrobats. IDI Male, Age 62, Okirigwre-Amukpe 25/01/2015. Grooming of new masquerade was performed in the nucleus of the forest to keep novice off. Pregnant women were not allowed to watch acrobats otherwise there is likelihood of giving birth to baby/ies that have semblance with the masquerade. They may also develop bad manners. Today, things have changed; women pose in pictures with masquerades and acrobats. Majority of girls/women even displayed these pictures on social media. Forests materials were used for decorations, protection and appellations of key persons before the commencement of cultural festivals. Forests derivatives were used to erect home stead, hut, construction of small gardens and bathing rooms. They derived ropes, clothing materials and soups from the forest. Respondents affirmed that life which revolved round the forest is challenged by deforestation. The taboos embedded in the beliefs preserved the resource because, Materials from bush were used to decorate and protect key players during cultural festivals; these forests materials were used to build house, hut, construction of

small gardens and bath rooms. ropes, clothing materials and soups and soap we bring them from the bush. the scarcity of many things we get from forest make us face hardship because of deforestation. IDI Male, Age, Oton-Sapele, 30/01/2014. In the past, endemic corpse was deposited in the forest to save the community from calamity. It was reported that few months before the commencement of this research; a dog dragged an object abandoned in the forest by an unknown person into the community. This fact reiterated the realities in the proximity of the forests to residential houses. Corpse and objects deposited in the forest are at the reach of man and cannibals. This shows that corpse deposited in the forest if they dare embark on these practices today is likely to find themselves back into the streets. Infidelity and ritual cleansing in the forest are no longer in practice. The enlightenment that accompanied the economic vamp/deforestation presented these practices as inimical. Young girls and married women became easy spoils to men especially expatriate who engage in expropriation of the forests. The research gathered that because the region had inflow of foreign workers, many girls including those who are not resident in Sapele trooped into the town in search of prospective admirers for various reasons which range from night stand for economic gains/pleasure to that of companion and life partners. In-depth interview revealed that there is fractionation among the people who previously maintained communal lifestyle. The expediency of individual isolation and the independence of the nuclear family in modern society disrupted the traditional ties which sufficiently sustained collective responsibility. The people now experience three-fold alienation; they are alienated from their environment, their normative beliefs, and practices and from their fellow being. The unintended consequences of this fractionation created stringent individualistic lifestyles. A total of (73%) participants revealed that many women who delved into politics engaged in unwholesome acts that contravened the laws of the land. Prior to this time, women have the responsibility of keeping their households. They had limited avenues for promiscuous activities. While ritual cleansing is regarded as unchristian, infidelity has increase. Therefore, large numbers of women hide under the umbrella of modernity and Christianity to indulge in practices that were seen as sacrilegious (taboo). Participants revealed that, although there are report cases of promiscuity while women embark on their businesses overseas, in the bush or at the hotels with their political affiliates, little or nothing is done. They enrich and elate themselves with their acts. Many have become so influential that they are called to chair occasions instead of the men. The situation has taken a new dimension as women dominate. About 34% respondent revealed that the men assume the position of a driver, while their wives wear 'canopy' (headgear) to social functions. Interments of dead bodies in the forest for those who have not fared well are no longer in practice. In the past evil personalities were interred in the forest. Evil people now enjoy elaborate funerals. When there are premonitions that interment of a corpse will create conflicts, they are taken to church. Also, when they perceive that burying an evil person will expose the family to torment; the deceased are interred in the cemetery after funeral services in the church. The castration of impotent man who was unable to reproduce while alive is no longer in practice. The culture which permits a kinsman to inherit his brother's wife is no longer in practice. Rather, modern

practices have devised various means such as artificial insemination for those with fertility problem. The above practice is similar to the operation that was carried out on a maiden who gave up their ghost during gestation or at child birth. In recent time, they are taken to the hospitals where they are operated upon. This practice which acts as deterrents to young ones has been down played. Young people now rely heavily on hospitals for any eventualities. This has increased the number of deaths and damaged systems resulting from bad operations among the younger generations. Also, the exorcism of patients from evil spirits before the commencement of treatment or for dead bodies before they are buried is no longer in practice. If pastors and priest exorcise both the living and the dead to drive out demons and make either the place or the person pure-holy, what is wrong with traditional methods of exorcising those who are to be cured or those who are about to embark on a festival, coronation ceremony or the journey to eternity. The destruction of the forest rituals that restores the sick to normalcy or the fortification of individual as emblem of protection contributed to the congestion that place heavy burden on limited and under equipped modern health care delivery centers. According to a participant "men are no longer men; little arrows knocks us down". While those who condemn the practice acquire and embellish it to enhance and attract patronage, local people let go to pay heavily to get these services. The use of the forest as spiritual temples and religious sanctuaries is gradually becoming a thing of the past. Shrines are now erected in town and ritual practices are performed before the presences of all. The long distance which people have to walk to locate forests and the problem of loss of artefacts discouraged people from erecting shrines in the forests. Igbe devotees now erect their shrine in town. Sacred sections which were held in the forest are now staged in town. This further demeans the sacredness of ancestral spiritualism and mysticism of curative practices. The forests no longer serve as means of social security for unwholesome activities. Rather, forests have become a hideout, a haven for syndicates where they carry out their criminal activities. People take precaution while embarking on any activity in the forest because of the dangers associated with the forest in recent time. This present situation negates the past experiences where people see the forest as a strong tower and safe haven for protection, succour, peace and comfort. The use of the forest for the perpetration of evils or the elimination of harmful persons was exemplified by the actions of the syndicates who conspired to terminate the life of their awry and tyrannical brother (Esezi). That is, the first monarch of Okpe kingdom. The forest was useful for the execution of delicate task that could threaten the peace and wellness of the members if performed within the community. The forest was used for convenience activities. Families easily locate and use thick forests behind their building. Forest animals have easy access to the consumption of the wastes. As designated for the eradication of waste, the forest was known for the disposal of waste either through what is called 'short put' or that of direct excretion in the forest. They rarely waste resources for the excavation of sewage pits. The offensive odour which the conveniences located in living apartments of today emits especially during periods of epileptic supply of power prevents them from keeping the system clean. These were averted by the use of the forest. The location of convenience in the forest instead of living apartments boasted the rearing

of free ranged animals which becomes (source of protein). The wastes also served as compost manure for plants. According to a key informant in one of the interactions; the forest played vital roles in providing shelter for women in homes where some deities which forbids blood are situated. In Okpe, few people are entitled to domesticate some deities inside living apartments. This deity according to the people forbids blood. Women who are within child bearing age do not share the same roof with selected deities when they are under their monthly circle. The forest served as alternative shelter for women who were under their menstruation. The above informant reiterated that forest served other functions such as protecting initiates in the process of entry into sacred groups. New dance was learned in the nucleus of the forest. This was to keep the secret of the dance from the community. It also ensures that the dance when lunched appears new, strange and mysterious to non-members. This was captured as follows; growing up in the past, the learning of new dance were done inside inside the forest. This helps us keep the secret of the dance from the community. Also it makes sure that the dance that is never heard of appear new, strange and confusing to those who are not members. KII Female, Age 46, Elume, 02/12/2015 For courtship and engagement, boys were not allowed to invite their partners to their father's apartment until they are legally married. They were only permitted to receive their maiden the night she is escorted to the hut prepared for the newly married at the nucleus of a virgin forest adjacent to that of the parents. It is expected that the newly married will have knowledge of themselves from that night. Forest gods of fertility are present to bless the new couples with pregnancy and other favors that are bestowed on conformists. A maiden who dies before the customary bride price was paid were buried at the corner of the compound adjacent the forest. This is done to restrain her ghost from returning to torment her family and partner. These practices have been eroded because children now have personal rooms where they are free to do whatever they like without the control of their busy parents or anybody else. The disintegration of beliefs (76%), economic inequality (63%), increased crime rate (53.6%) and proliferation of armed groups (73.7%) were reported as features of the incorporation of the forest economy into a global market-driven industrial capitalism, which undermined customary regard for personal dignity and honour. According to participants, "there are lots of changes in forest ownership. Before one can boast of land handed over to us by our ancestor. Today, it is not like that again. Because of poverty, many people sell their land". Also, government encroachment on local lands makes ownership temporal. The right over land has been truncated by tenure system. This encroachment affects the performance of ritual practices/beliefs that safe guide the lives of community member. From table 2 while (74.2%) participants agreed that changes and alteration in the cultural belief gave greater leverage to the industrial deforestation, (69.1%) respondents challenged the above notion. They believe that industrial scale deforestation veered the people towards downplaying the taboos. Thus, obvious changes in their beliefs and practices increased. This percentage boldly upheld the assertion that, changes in the beliefs exposed their forest to destruction. This was validated by (99.5%) participant who revealed that deforestation heightened the depletion of the forest. This intercepted its usefulness for relevant cultural practices. Consequently, deforestation is a major catalyst

that heightened the disintegration of beliefs and practices. Total of (65.6%) participants revealed that deforestation is high and this was rated at (65%) to (96%). Coherently, (73%) participants agreed that disintegration of belief exists in reality. The rituals involved in rite of passage which demands that young ones abstain from sex till marriage has been watered down. Before 1940, young ones were not allowed to access the forest until they have been initiated and presented to the gods of the land/forest. Before these periods, parents ensured that their wards are chaste and this is maintained till they are given a legal approval by performing socially recognized ceremony. Children in their teen age now indulge in risky behaviors. The value which honors chastity has been bastardized. Calculated mean value of $X=1.2$ shows that an average participant believed that disintegration is mainly as a result of deforestation (alteration of the forest). These innumerable changes in the beliefs largely affected every aspects of their life. Significant percent (99.5%) of participants alluded to the fact that, deforestation decreased the richness of the forest and its efficacies. To this effect, (12.9%) participants revealed that they no longer believe in the use of the forest for maintaining wellness. They now prefer to use modern medicines. Hence, a total of (6.7%) participants revealed that there are changes in the practice of invoking or sedating ancestral spirits in the forest for various purposes unlike it was in the past. The people now prefer to go to clergy men who will pray and perform certain rituals. The clergies charged high bills to fast on behalf of their patronizers. The charges are justified by slogans like "there is no free lunch, not even in free town". When church fails to restore need harmony, they resort to cultural practices. Divination previously performed in the forest to gain better inspiration and strength is no longer in practice. A total of (16%) participants affirmed that divination and apprenticeship which was domiciled in the forest are now carried out amidst residential houses where access to spirits is minimal and afflictions maximum. This is worrisome as members especially novices are exposed to afflictions by spirits connected with various divination. To this effect, (6.2%) participants groan that erection of shrines which are legal edifice where ritual sacrifices are performed in the forest have become a thing of the past. A participant revealed that in "the past, people do not step or urinate on forests that have economic value". Certain activities such as dumping of refuse on designated forest were forbidden. Presently, people pass their waste on forests and the useful products found thereof. Illicit affairs which disgust the gods have now become a rampant occurrence in the forest. A participant recounted that, some oyibo people fornicate with our girls including our wives as they work inside bush. we are aware that it happens, but we cannot do anything because they give them money. this desecrate bush and it drives away the spirits that help us. IDI Male, Age 61, Gana-Sapele 21/09/2014 In tandem with the above response, (17.65%) participants confirm that, "foreigners fornicate with our wives and young girls while at work in the forest". This reality is claimed to be known to them but there is little that can be done because of hardship. They offer them money and foreign products. These entice and lures majority into committing these abominable acts inside the forest. All these disconcert the spirits and other vital forces of the forest which are useful to TMPs in the health provisioning for the entire people in Sapele and neighbouring communities.

Invariably, sexual relations between some foreigners and girls while at work in the forest are tolerated because of the little financial and material benefits. All these activities destroy the forests and inhabiting forces which safe guard lives, properties and peace. Perhaps the health of the entire community members is put in jeopardy. Girls especially house wives who are identified to be promiscuous were shamefully escorted back to their parents in rags clothes and animal shells. Personified satirical songs, derogatory innuendos and ostracism were used as punishment. Adultery were least tolerated from women because it leads to death of the children. Respondents revealed that today, adultery are seen as a part of life. For years, intimate affairs in the forest and adultery were abominable act punishable with death. It was an abominable act capable of destroying farm produce and lives of those living in the community. The height of practices which the people considered sacrilegious exposed them to debilitating illnesses because the people's beliefs hold and work for them. The indigenous political economy of the people has been altered. Previously, land was allocated to aliens in the forest where they can carry out their business. This safe guarded their lives. Today they erect mansions and dwell in town. This exposed the depth of their wealth. Lack and frustration coerce the deprived members against them. The level at which they are exposed to danger has increased. They have become easy prey to kidnappers and gbege boys. The culture which stipulates that novice does not encounter defied trees, relics and spirits in the forest on designated days because of their vulnerability to life threatening diseases or death has been altered. People now engage in activities in the forest throughout the month of the year even on festive periods when people are supposed to rest. The level of afflictions revealed that, there is increase in contacts with ancestral spirits which come to commemorate with the community on designated sacred days. Christian doctrines and religious practices demeaned cultural beliefs such as reverence for forest based ancestral spirits as well as going to certain forest on designated days. Christians fast and abstain on certain days to hear from God and avoid ill luck. If this is practiced in Christendom, what is wrong with indigenous people forbidding members from going to the forest on certain for the good of the individual. A total of 84.8% participants agreed that deforestation led to loss of beneficial function of the forest. Probit value of $x_2=0.267$ revealed that health of the people had been deteriorating due to desecration of forests taboos. Average participant with mean of $X=1.13$ and >91.7 probit value also revealed that deforestation destroyed and dis-approved the sacredness of the forest. To this effect, forests are now hide outs for kidnappers, and it has become haven for unwholesome practices. These implied that, the past disposition of the forest has become demeaned with recent happenings. According to a participant; before, people they fear forest and the power way they inside because to us they protect or punish person way do otherwise in the forest. Today, people no get yam bane for the bush again. we use pickup to pack the farm produce to the house because if you leave them inside bush, thieves go help you move them and you no fit see them again because hunger too much for the town now a day. This they stress us because we spend extra time and money to pack them come town. KII Male, Age 55, Ugboren, 18/10/2014 Things kept in the forest were secured because they dreaded forest deities which afflict non-conformists. Today, people no longer have yam bane in the

forest. Farm produce are moved to town to avoid losing them to thieves. The biting hardship and hunger is a flaw which exposed the people towards disobeying taboos/beliefs that forbid certain acts. According to a participant, "those who are not supposed to be buried in town are given elaborate burial rites because one or two of their children is wealthy, or that his relations are influential". In table 2, under belief that changed, (34%) participants revealed that dumping of endemic corpse in the forest is no longer practiced. There are evidences which show that people steal or inherit properties of people which were deposited in the forest. These were considered as a taboo capable of attracting ill luck to those who inherited them. This is relegated and the implications are no longer considered. Because of the depth of their wealth, people associate and struggle to inherit properties of relative who were known for atrocities. Confessed witches were buried in the forest. These practices which segregate evil people and their properties from others are no longer adhered to. People now hide to retain or steal properties of those who were deposited inside the forest or in front of shrines of the gods that are responsible for their death. According to a participant during FGD; before them they throw way people way confess and those way do bad for we community. but now, because of money, them they bury them for town. some people way their mama confess them bury them for house because say e get pikin way dey for government. evil people and their property way them they throw way for bush or in front of the juju way kill them, no dey happen again. if you throw them away today, people go hide go pick them. today life don spoil the tradition. IDI Male, Age, Ozum, 21/11/2014. To the above respondent's notable political office holders whose parents died abominable deaths were celebrated with colourful burial. 'Those who have little fear for the gods take such people to cemetery'. This relegation encourages re-occurrence of abominable acts. To a respondent, the perpetration of evils and non-observance of the beliefs has continued because; "there is scarcity of forests to deposit those who died abominable death. The whole community don turn residential houses or industrial complex, reserved forest known as the 'evil forest' or reserve area is scarce today. before you see bush everywhere, now you go waka go far distance. some people even they go uproot the dead body of people them bury for bush to town or cemetery. Because people this things, that is why many they die young nowadays. Extract from FGD Male, Age, 46, Sapele, 09/09/2014. The shrinkage in forest led to scarcity of forests that were used in disposing those who died abominable death. The whole community has become residential area or industrial complex, reserved forest known as the 'evil forest' or reserve area is no more today. People must go miles to locate thick forest where they are to carry out necessary rituals. Because these sites are far off, some relations secretly exhume the bodies of relations and are buried in the community or relocated to cemetery by night. Unknown to others, this spell doom to all in the community. This increase in atrocities hinged on the peoples believes that the traditions are superstitious. A participant revealed that, the change in burying evil people in the forest started by; if the relation are wealthy. To avoid shame, they will appeal to elders to bury the person in town. After paying some token, the remains of the evil man will be buried in the house. at night, the dead body will be uprooted and is taken to the bush. This cover up practice gradually graduated to

permanent interment of those who left a bad legacy in town. Extract from FGD Male, Age, 46, Sapele, 09/09/2014. Although family remained the major social unit that inculcate morals, the annihilation of practices (47%) revealed that the youths have become radical thugs who easily give in to servitude and risky behaviours which endanger their life. While evidences revealed that this act cut across all age and sexes, findings revealed that larger proportion of the victims are women. Changes also affected mortar and pestle that were used for preparing food. They were locally made from forests trees. These forest derivatives enhanced health and hospitable spirits that enhances brotherhood. The use of blender and grinding stone hardens the heart of modern man in perpetrating atrocities as well as harming neighbour at will. The destruction of the forests and the introduction of alien practices heightened the prevalent rate of disease and ill health. According to a participant, the alien culture we delved into is the foundation for the destruction of our beliefs and the forest. Those who confess are set free. This gave other courage. Let's not destroy the good aspect of beliefs. FGD Extract Male, Age 47, Oton Sapele, 13/09/2014 The change in the status and the role of women presented a gory situation. While modern woman claim that they were marginalised, responses revealed that they maintained and enjoyed their boundaries in the past. Their needs were met with hectares of land provided for their farming activities. Handful of women was given freedom to engage in the sale of cloths and production of ogogoro. Shelter and safety was never a problem. They were not allowed to veer out of the care of their husband and immediate/extended family. In-laws played major roles in the affairs of their children unlike the recent practices where social workers, house maids and nannies dominant the affairs in the homes. This stresses the finance of modern couples. Security was provided for woman as long as they maintain a humble baron position that is expected of them. Using the McClelland theory of needs, satisfaction which is the measures of scaling the self actualization of individuals, responses revealed that women were self actualised in their crude state of subordination. Western modernization now present Okpe woman as subjugated personalities because modern rational and criteria has classified them as subjugated class. Ostensive as it appears, the above assertion was confirmed to be true because lands that were given to the women to cultivate were on rent-tenancy. Today, working class wife can acquire landed properties and cars. This presents a basis on which the authority of men is now challenged no matter how complimentary the roles are played. In the past, women never meddle in the affairs of men. Presently, woman tail their men and harass both the innocent and the guilty. Like a one chanced motor car, which is meant to carry only one passenger, the man is discouraged from caring for those who are outside the nucleus of the nuclear family. Men are coerced to chorus I surrender and this must be displayed before their spouse on daily basis to enjoy peace as a family. Okpe women who spare no suspects have developed poisonous venom with which they harm suspected intruders' like concubine including unwanted family members (Mother, father, and sister or brother in-law).

Conclusion

Forest was luxuriant in sustaining health and social order in Sapele. Deforestation depleted the forest and demeaned the efficacy in the use of the forest in sustaining health and systemic stability. As deforestation increased, the beliefs and forest related disintegrated. Despite the changes and loss of control over the forest, responses revealed that non-conforming members are subjected to appropriate sanctions till date.

References

- [1]. Agarwal, S.K., 2011. Environmental Management. New Delhi, APH. x+390
- [2]. Anth ony and Jo-Ansie 2008. Implications of deforestation on Livelihoods. Accessed 24/09/2014 from <http://livelihoods/deforestation/Extinction//13752>.
- [3]. Bronfenbrenner U. 1994. Ecological Models of Human Development. In T. Husen and T.N Postlethwaite Ed. International Encyclopedia of Education. Oxford, England: Pergamon Press. 2nd Ed. Vol 3. pp 1643-1647.
- [4]. 1994. International Encyclopedia of Education Vol 3. 2nd Ed, Oxford Elsevier.
- [5]. 1997. The Ecology of Human Development. Experiments by Nature and Designs. Cambridge MA, Harvard University Press.
- [6]. Dafinone, D.O. 2011. History of Sapele and Sapele Local Government Area in Okpe Kingdom Delta State. Accessed 11.19.2013 from <http://en.wikipedia.org/wiki/Sapele>, Delta#mw-head.
- [7]. Dean, C. Ernst, L. and Sara, S. J. 1995. Deforestation. World Bank Research Observer. Vol.10.1:Pg34-56.
- [8]. Enabor E. E. 1992. Deforestation and Desertification in Nigeria: The Challenges of National Survival. Inaugural lecture delivered in University of Ibadan on Behalf of Faculty of Agriculture/Forestry.
- [9]. Eko ng 2006. Sociology of health and medicine. Accessed 14/11/2015 from http://culture_health_and/medicine//.com
- [10]. Ekwund 1966. The pains and gains of deforestation in Sapele, Delta State, Nigeria. Accessed 20/12/2012 from <http://livelihoods/deforestation/Extinction//1654>.
- [11]. Mebitaghan S..A 2001. Brief History of Okpe Kingdom. Ughelli, Nigeria, New Era Publication. Ki tavi 2012. Deforestation in Kenya Parks. Accessed 20/12/2012 from <http://www.deforestation.extinction//1457>.

- [12]. Obono, O. 2016. The Nature of Social Order, Institutions and Environmental Precedence in Africa. In Olatunji Oyeshile and Francis Offor (eds). Ethics, Government and Social Order in Nigeria: Essays in Honour of Godwin Sogolo. Ibadan: Zenith Book House.
- [13]. Owumi B. 1989. Physician Patient Relationship in an Alternative Healthcare System. PhD Thesis Dept. of Sociology, Faculty of the Social Sciences, University of Ibadan, Ibadan.
- [14]. Re thead 1960. Deforestation and extinction of Endangered species. Accessed 20/12/2012 from <http://deforestation/endangered species/Extinction//1654>.
- [15]. Rim-Rukeh A., Irehievwie and Agbozu I.E. 2013. Traditional Beliefs and Conservation of Natural Resource. Evidence from Selected Communities in Delta State, Nigeria. International Journal of Biodiversity and Conservation Vol. 5.7: Pg 426-432 Shakuntala, S. Vijay, P. Singh, Surjit, K. Rita, B.K. Mahadevi, S. and Rachna, T. 2010. Deforestation, Wildlife Extinction and Loss of Biodiversity Measures for Conservation. In Singh, Lotfi Aleya, Vinod, Singh, Mahadevi Singh ed. (2010) Environmental Disasters. New Delhi, APH. Wayne M. 2012. Deforestation in Papua New Guinea: Potential Impact on Health Care. Tropical Infectious and Parasitic Diseases Unit, School of Public Health and Tropical Medicine, James Cook University. Accessed 11.08.2012 from <http://deforestation/disease>.

Reduction of Divination in the forest	67	16.0%
Spirituality & shrines in forests reduced	26	6.2%
Human sacrifice in the forest is extinct	24	5.7%
Killing of twins in the forest	28	6.7%
Deforestation led to loss of unique function of the forest	313	84.8%
Deforestation destroyed sacred forests	56	15.1%
Deforestation decreased richness of the forest and practices	320	86.7%
Is deforestation high	369	99.5%
Degree rated at	2	5%
	242	65.6%
		65-96%

Appendix 2



Authors Profile

The author received MSc and PhD degrees in Medical Sociology from University of Ibadan in 2010 and 2017 respectively. She obtained her B.Sc from Delta State University, Abraka in 2005 begging an award as the best graduating student. Currently she is a Lecturer at the Delta state university, Department of Sociology, Abraka.

Appendixes

Table 1: Probity Analysis on Effects of Deforestation on Peace & Health

	Dependent Variables X	Coefficient	Deforestation Y	Correlation
X ₁	Beliefs & Practices	2.182	.301	Significant
X ₂	Health	0.267	.301	Significant
X ₃	Peace	0.206	.301	Significant
X ₄	Development	0.312	.301	Significant
X ₅	Dignity & Honour	0.473	.301	Significant

0.05% level of significance

Table 2 Disintegration of Forest Related Beliefs and its Effects

Value Labels	Freq uency	Percenta ge
Change in belief led to deforestation	274	74.2%
Deforestation changed the beliefs	255	69.1%
There is disintegration of belief	305	73.0%
Deforestation caused disintegration	259	70.2%
Deforestation depleted the forest	367	99.5%
Beliefs that Changed	Freq uency	Percenta ge
Burying of people in the forest stopped	142	34.0%
People no longer believe in the use of the forest for curing	54	12.9%
Loss of reverence for forest and spirits	28	6.7%