ATTITUDE OF PEOPLE TOWARDS TREE PLANTING IN GOMBE LOCAL GOVERNMENT

BY

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BEING A RESEARCH PROJECT PRESENTED TO THE SCHOOL OF VOCATIONAL EDUCATION, AGRIC DEPARTMENT, FEDERAL COLLEGE OF EDUCATION (TECHICAL) GOMBE, GOMBE STATE, IN AFFILIATION WITH ABUBAKAR TAFAWA BALEWA UNIVERSITY BAUCHI, BAUCHI STATE.

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APPROVAL PAGE

This project has been supervised, approved as it meet the requirement for the award of Bachelor of Technology Education, Department of Agricultural Education, School of Agricultural Vocational Federal College of Education (Technical) Gombe, in Affiliation with Abubakar Tafawa Balewa University (ATBU), Bauchi.

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DEDICATION

This project is dedicated to my family as whole, I also dedicate this project to my beloved Husband and lovely children for their love and support over me, to my parents, in-laws, friends, and relatives.

ACKNOWLEDGMENT

I express my gratitude to Almighty God the maker of heaven and earth for giving me the opportunity from the beginning. I sincerely appreciate my husband, children, parents, In-laws, relatives and friends, who has contributed during studies may God bless you.

I sincerely thank my project supervisor Dr. Oguntunde Gabriel Ayodele for his effort to see this research as being conducted in a good manner successfully, Sir, may God bless you abundantly.

I also thank Mr. Sunday Musa James for his effort through typing my project may God continue to bless you. I also thank my lecturers in the School of Vocational, Agric Education for their advice and effort during my studies.

Abstract

The project assessed the attitude of people towards tree planting in Gombe Metropolis. A structured questionnaire was designed based on the objectives. It employed a descriptive survey design. The research targeted men, women and farmers of Gombe Local Government. A random sampling technique was used to randomly sample five (5) wards. Total of hundred (100) respondents were used for the survey, twenty (20) respondents were randomly selected from each wards and the result was analyzed using a simple descriptive statistics. The findings of the analyzed data indicated that destructive habits, individual activities and also government interest have put a threat on tree planting campaign. Apart from that, different social and economic factors hinder the community to conserve the existing forest resources and planting new trees to protect the natural environment. It therefore becomes highly imperative to employ necessary measures towards ensuring tree sustainability which go a long way in maintaining a balanced ecosystem.

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CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Natural resources are resources which are utilized and exploited by living things for their existence. These resources cover a wide range of both renewable and non-renewable resources such as, soil, forests, water (surface and ground water) wild animals, domestic animals, birds, climate, and minerals and so on. Human beings and all the above mentioned resources are dependent on each other for their existence (Haykal, 2010). Forest coverage is one of the indicators of the level of environmental degradation. The higher the percentage of land under forest cover, the lower is the degree of resource degradation (Ayele, 2000).

Forests sometimes contain many tree species only within a small area (as in tropical rain and temperate deciduous forests), or relatively few species over large areas (coniferous forests). Forests are often home to many animal and plant species, and biomass per unit area is high compared to other vegetation communities. A significant percentage of the world population has a direct relationship with forests and trees. Specifically in the developing countries, there are communities that live within or adjacent to forest areas and make their livelihood out of this resource (Ayele, 2000). Environmental degradation and their consequential results have been the major problems facing many developing countries in the world. The nature and type of environmental problem are different from countries to countries (FAO, 2000). Forest and the benefits that they provide in the form of wood, food, income and water shed protection play a critical role in enabling people to secure stable and adequate food supply. It is an established fact that forests play a key role in maintaining a balanced eco-system on the earth, forest means everything. It could be said that no forest-no life (Demel, 2001). A century ago (nineteenth century) forests covered about 40 percent of the total land area. This proportion has been reduced

to 16 percent in the early 1950s and to less than 3 percent today (MNRDEP, 1992).

The negative threat of environmental change in Africa, which often referred to as desert encroacbment and desertification by many authors is caused by both human and natural factors, since 1970s it has been on the agenda of the United Nation, International donor agencies and the scientific community (Rapp, 1974; UNCED, 1977; Mainguet, 1994; Koning & Smaling, 2005).

Rural communities have attracted the residents, since community developers and ecologies interpretation of the coexistences of the trees and grasses as the two layer model Walter, (1971). Many other hypotheses have shared for this coexistence (for example Scholes & Archer, 1997, Walker et al., 1981, Sankaran *et al.*, 2005).

The desire for sustainable community was an unattainable, until when the community perceived that they are in object poverty, inadequate facilities and devastating economy. Then the general dissatisfaction about environmental conditions of the community is now giving most people concerns about the future and sustainability of their community. That is why perception and participation is generally perceived as the best system which serves as framework for community development in this era Adesoji (2006) Variuos scholars like Vodouhe *et al.* (2000) are on the view that rural community's perception are function of their educational level. A lot of factors influence rural community the perceptions on their environment. These include, the education, and it level. Educations provide the environmental knowledge which may influence community behavior and attitude towards their environment.

An educational programmed has positive effects of all ages. Posited that the information gained from school by children can be transferred to their parents and the community at large.

Argued that not only knowledge has an influence on human perception, but also feelings and belief were shown to plays a major role transforming attitude toward environment and pro environmental behavior. The perception of community influence interactions, however

understanding community's perception is key to improved their relationship (McCla-rahan *et al.*, 2005; Cichy, 1998; Lindamann-Mathies, 2002; Voughan *et al.*, 2003; Kals *et al.*, 1999; Pooley and Connor, 2000; Ormshy & Kaplin, 2005; Ramakrishnan, 2007; Avelaji *et al.*, 2003) However, it is in line with this backdrop that this study wishes to determined factors that influence rural community's perception towards desert encroachment.

1.2 Statement of the Problem

Tree planting is the result of action by a number of agents. These agents are generally considered as individuals, groups of individuals or institutions that directly convert forest lands to other uses or that intervene in forest without necessarily causing deforestation but substantially reducing their productive capacity. Agents include shifting cultivators, private and government logging companies, mining and oil farming corporation, forest concessionaries and ranchers. Besides, rapid population growth, expansion of cropland and intensive harvesting of forest for fuel wood and wood export contribute to deforestation in different areas of the world. According to the World Bank (1994), the world has lost about half of its forest cover and continues to lose some 15 million hectares of forest every year.

Different research works related to the study may have been conducted in different parts of Nigeria and elsewhere in the world. But Peoples attitude and factors that identified by other researchers in other areas may be different from the study area related to the problem because of the variations in socio-economic, cultural and economic factors. Thus, the main purpose of this study is to assess people's attitudes towards tree planting in Gombe State.

1.3 Purpose of the Study

The general objective of this study is to assess the attitude of people towards tree planting. The Specific objectives of the study are:

1. To investigate perceptions of people on the actual and potential benefits of the surrounding forests;
2. To assess people's lack of awareness of the cause and consequences of tree planting and conservation practices among different age group.
3. To identify some of the factors that determine people's attitude towards tree planting, and
4. To identify the source of information for the peoples attitude towards forest reserve conservation.

1.4. Research Questions

Based on the specific objectives of the study, the following questions are posed as a basis for this research.

1. What are the factors that affect people's perceptions on the actual and potential benefits of the surrounding forests?
2. What are the factors that determine people's levels of awareness of the cause and consequences of tree planting and conservation practices among different age group?
3. What are the factors that determine people's attitude towards tree planting?
4. What are the sources of information for the local people with respect to forest reserve conservation practices?

1.5. Significance of the Study

The findings of this study are expected to identify the attitude of people towards tree planting. The study might help to utilize the bio-diversity resource of the country for in a

sustainable manner. Although, the study will be carried out for academic purpose and it is confined to a single district, the findings shall contribute deepen the knowledge of people's attitude towards tree planting practices in general and the study area in particular. Therefore, the outcomes of the study will be used in formulating future environmental policies and strategies at the local level. Above all the survey is the first of its kind in the area. So that it may be used to stimulus for further research to refine the conceptual and methodology of the present study. In general, it is useful for Bureaus, NGOs, Government agents, Policy makers, etc.

1.6. Scope of the study

The study was delimited to investigate the level of people's attitude towards tree planting in Gombe State. The scope of the study includes number of factors that affects people's attitude towards tree planting. It constitutes the demographic, socio-economic, political, cultural and psychological factors. Even though, those factors are many in number they are interrelated and multiple. The following determining factors such as age, educational status and access to information were taken into account to the sake of these studies.

1.7. Limitation of the Study

The study was confined to Gombe Local Government in Gombe State. This was due to the time and budget constraints for further study of the rest of the factors and geographical area.

1.8. Operational Definition of Terms

Attitude: people's feeling towards over exploitation of forest resource for fuel wood, construction, settlement, agricultural expansion and any other purpose.

Conservation practice: method of forest conservation of the local people that they have acquired from their ancestors or traditional method and acquired through modern environmental education from any form of media, agricultural experts etc.

Deforestation: the destruction and conversion of forest land to other land uses such as farm land, grazing land, building materials, fuel wood, etc.

Land tenure: is the land holding system, which is defined by proclamation, rule and regulation of the government.

Perception: positive or negative views of people towards forest degradation and conservation practice.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 Forest

A forest is one of the most complexes of natural ecosystems, and in man's use of natural forests and his attempts to imitate or improve on them these intricacies must be born in mind, since manipulation of the ecosystem for resource purposes can easily bring about deleterious effects which were not foreseen. The approaches and objectives of the community forest project differ widely from one country to another. To some, community forest means growing trees for environmental reasons, while to others; trees are to be used for meeting subsistence needs. Still others could use the community forest as a source of cash income (Alemneh, 1990).

2.2 Forest Distribution and Loss

In terms of extent of world's forest resources, a recent Forest Resources Assessment estimated the global forest cover at just over 4 billion hectares, which is 31% of total land area of the world which corresponds to an average of 0.6 ha per capita. The five most forest-rich countries (the Russian Federation, Brazil, Canada, the United States of America and China) account for more than half of the total forest area. Ten countries or areas have no forest at all and an additional 54 have forest on less than 10 percent of their total land area. Concerning deforestation, mainly the conversion of tropical forests to agricultural land, the same report indicated signs of decreasing in several countries but continues at a high rate in others. Around 13 million hectares of forest were converted to other uses or lost through natural causes each year in the last decade compared to 16 million hectares per year in the 1990s. Both Brazil and Indonesia, which had the highest net loss of forest in the 1990s, have significantly reduced their rate of loss (FAO, 2010).

2.3 Social, Economic and Environmental Roles of Forest

Historically, forests have been very important for the livelihoods of the people of. The poor obtained the bulk of their fodder, fuel wood and income from common property resources (FAO, 1998). Forest income is an important complement to household income and plays an important role in households, livelihoods by improving food security and reducing vulnerability (Warner, 2000). Forests serve as an important means of rural livelihood through providing inputs like fuel, medicinal and food products. Besides these, they diversify the farm household economy for they are characterized by easy access and require low skill and capital to be exploited (Campbell, 2002). People used trees for lumber for construction, and to fuel their cooking fires. They also made traditional medicines from trees and other forest plants. Forests were also important in religious beliefs; the people believed in holy spirits in the forest that they treat in the same way as human beings (FAO, 2007). Forest is an important resources base for a sustainable economic and social development. providing a large variety of wood products, non-wood products and services. The role of forest and trees with regarded to the protection of soil, water and the environment is of vital importance in many regions of the world and for most mountainous area (Militon, 1991).

FAO (1999) noted the role of forest as follow conservation of biological diversity, carbon storage and sequential for mitigation of global climate change, soil and water conservation, provision of employment and recreation as opportunities, enhancement of agricultural production system, improvements of urban and peri urban living conditions and protection of natural and cultural heritage. Trees are essential sources of fodder for livestock. They also provide fruits and nuts, honey, sums, oils, resins, medicines, tannins, fibers, and other materials. There is growing recognitions of the importance of small-scale forest-based enterprise as a source of on farm employment and income (WRI, 2006: a).

The recent IPCC report estimated that the global forest sector represents over 50% of global greenhouse mitigation potential. Consequently, forest became the focus of global climate change policy and is given a key position in international climate treaties. While sustainable management, planting and rehabilitation of forests can conserve or increase forest carbon stocks, deforestation, degradation and poor forest management reduce them(IPCC, 2007). The concept of ecological balance implies method or rate of resource use, which maintains the sustainable use of resource through wise managerial decision such as limiting harvest with in maximum sustainable yield or increasing the capacity of the resource base to carrying capacity. It can serve us a useful conceptual tool in diagnosing a given society's interaction with the environment (Terefe, 2004).

Forests and trees are essential factors for protecting environmental and human and habitat, they are most remarkable achievements in the evolution of nature, an in disable element of biodiversity and a significant part of many landscape (Militon, 1991). Scholars and practitioners often assert the need for local-level institutions in natural resource management schemes (Ostrom, 1990; Bromley *et al.,* 1992). The variation of local institutions discovered also discourages the view that template forest policies are likely to work when imposed on a country as a whole.

2.4 Factors Affecting People's Attitude and Practice towards Tree Conservation

Conservation is defined as the rational use of the earth's resource to achieve the highest quality of living for mankind (FAO. 1998). The concept varies with the type of the resource weather it is renewable or non-renewable. The purposes of natural resources conservation is therefore multi-dimensional out of which humanity secure biological, economic, ecological benefits and insure his survival (Oslon, 2002). Attempts to link conservation and community development through natural resource management are emerging as important conservation strategies in Africa, and elsewhere around the world (Ghimire and Pimbert 1997). However, there

is an extensive debate as to when and how such projects are likely to achieve effective results (Barrett and Arcese 1995; Shyamsundar 1996). The specific geographical, ecological, demographic, cultural, political and socioeconomic contexts in which conservation strategies are implemented make it difficult to generalize the outcomes. Therefore, a thorough understanding of the interactions between protected forests and communities is crucial for the successful implementation of conservation strategies.

2.4.1 Demographic Factors that Affect People's Attitude and Practice towards Tree Conservation

Sex: is one factor that substantially affects people's knowledge, attitude and practice towards tree conservation. Men have got the opportunity to command techno scientific component of the society that enabled them acquire scientific and technological knowledge to dominate nature and socialized un-ecological attitude towards environment. On the contrary women are denied of acquiring this knowledge because they have no access to the techno scientific knowledge. Despite this fact, they are socialized to ecological helpful roles of mother and nurture, as it is observed in their reproductive and child rearing activity in the community. So, for this view. men have more exploitive and negative view to the environment than women (Hayes, 2001)

Eco-feminist theory: It describes environmental problems as the result of men domination. For some people women are socialized to ecological helpful roles of mother and nurture, as it is observed in their reproductive and child rearing activity in the community. So, for those who promote this view, men have more exploitive and negative view to the environment than women. (Hayes, 2001).

Age: Is also other demographic factors that affect the attitude and practice of individuals towards environmental management (Torgler *et al.*, 2005). In the case of aging, older people are taught to

be more interested in protecting their social stand and wealth therefore they are less likely interested to invest in the prevailing social system for good of the future. Unlike the older people, the younger ones are more willing to attach to the new social system from which they taught is beneficiary in the future. In some studies negative correlation between age and attitude towards the environment is observed. For instance, older people are found to be more risk averters than the younger ones (Torgler and Gracia, 2005). On the other hand, IIED indicated that, in Tanzania there are positive attitudes towards environmental conservation at the younger and older ages (Flintan, 2003). The impact of age could also be seen from the people's consumption behavior perspective. As per capita consumption increases through time, distinct expenditures will follow distinct age pattern. Accordingly, studies show that there is higher consumption behavior at middle age and lower consumption at younger and older ages. As people become more consumers, they are more likely to negatively affect the environment (Pebly, 1998). Therefore, their knowledge and attitude would be under the domain of their consumption behavior.

Married and unmarried people: Married and unmarried people show variation in knowledge and attitude towards the conservation of the environment. When people get married, they establish strong social network within the community, therefore, they are expected to involve in community activities than unmarried. Their parental effect also makes them wish have conducive environment so that the future of their children is secured. Married people are more concerned with environmental problems than unmarried. Therefore, according to Torgler study married people are expected to have better knowledge of the environment and better attitude than the single ones (Torgler and Gracia, 2005).

On the contrary, Flintan (2003) showed that married women as compared to the unmarried ones are busy of activities like housekeeping, raising families, cooking and other activities as a result of which they are less involved in the community based activities. This, therefore, has limited

their knowledge of environmental conservation activities than men. It is also tried to look the impact of marital status in attitude and practice of environmental conservation from the household formation and consumption behavior perspective. As household formation occurs, the consumption behavior of the household will automatically be changed. Therefore with increasing number of households, there is always growth in the volume of consumption (Pebly, 1998). Therefore, with the change in consumption behavior like growth in the energy consumption and increasing volume of waste disposal, people tend to be more destructive to the physical environment.

2.4.2 Socio-economic factors that Affect People's Attitude and Practice towards Tree Conservation

People's attitude and practice towards tree conservation is also affected by socio economic factors like education, type of activity or industry, access to farm land, contact with conservation agents, and place of residence, access to media and income. At present accessible high forest areas are exposed to various development project pressures including coffee and tea cash cropping, human resettlement, grazing and logging operations (MOA, 1991). Education could be taken as an optimal measure of the socio-economic status. As a result, it has strong correlation with economic status, access to information, resource and many other benefits. Educating women, raises women level of awareness on environmental issues and increases their role in the conservation activities. For instance, universal primary education is given due emphasis in the Millennium Development Goals of United Nations implying that it is one of the development challenges of the developing countries. Once women are educated, because of their role in the household and the community, they could serve as conservation knowledge conveying agents to the rest of the communities. Studies indicate that women in the developing countries, as compared

to men, have less access to education and resources. This fact has been confirmed in the EDHS (2005) that there is large disparity between the educational attainment level of men and women. Education, therefore, will have a remarkable impact on women's relation with the physical environment through affecting their social and economical status. So that uneducated women are highly likely to lack knowledge and resource to be invested on environmental conservation as compared to men. In the study of Flintan (2003) uneducated women failed to understand the link between conservation and development as compared to men and have also little understanding about linkages between rights to resources and conservation responsibilities.

The type of activity or industry that an individual engaged has also impact on his/her knowledge and attitude towards the environment. For instance, in Ethiopia, according to the 2005 National Labor Force Survey, 75 percent of women and 84.3 percent of men are engaged in Agriculture, Hunting and Forestry related activities. Based on the type of individual's economic activity, it is expected that men who deal with the environment in larger proportion than women have better knowledge of the environment and attitude towards it (Temesgen. 2007).

Urban areas have better infrastructural development like education, health, media (television, newspaper etc.) than rural areas. People in urban areas have better access to make use of these opportunities and they could easily access different environmental research findings and become aware of issues concerning the environment. The study conducted in Costa Rica shows that urban lower class feels more strongly the effect of environmental degradation than the rural groups. There is also variation between the lower and upper classes in Costa Rica where lower classes have better knowledge than the upper classes (Holl, 1995). According to the action program. rural people are against their environment not because they have no knowledge of the environment but it is their poverty that leaves them to over utilize the resource (MNRDEP. 1994).

The type of activities at the two places of residences also differs. In urban areas, non-agricultural

activities are dominant while the reverse is true in the rural areas. So that it is obvious that their perception towards the environment vary accordingly. Out of the total population of the country, 80.2 percent are engaged in agriculture related and, forestry activities. Of these, only 13.0 percent are living in urban while 88.5 percent are living in rural areas. The employment to population ratio is also high in rural areas, which is about 82.0 percent and 50 percent in urban areas (CSA, 2005). As described earlier, the largest proportion the ratio in rural areas is engaged in agriculture and related activities and the reverse is true in urban areas. Therefore, rural people as compared to their urban counterpart, have close day to day interaction with their environment in order to sustain their life. Moreover, they are expected to develop positive attitude towards the environment and acquire better knowledge of the environment. The environmental policy has recognized and identified Environmental education and awareness as a key strategy to transform knowledge of environmental issues to the people (EPA, 1997). Demarcation and area enclosure without community participation resulted in failure as learned from experience. State demarcation and management planning of forest land which often encompassed farming communities was under taken with little or no participation of those communities. This coupled with the inability of the government forestry agency to effectively police all the protected forest land led forest to being increasingly encroached up and cleared and turned to farm land because this farm land was "illicitly" obtained. Farmer perceived that they had even less security of tenure on it and consequently had no desire to invest in soil conservation work (EPA, 1997).

Land tenure system

Land tenure is the relationship, whether legally or customarily defined, among people, as individuals or groups, with respect to land. It can be defined how access is granted to rights to use, control, and transfer land, as well as associated responsibilities and restraints. In simple terms, land tenure systems determine who can use what resources for how long, and under what

conditions. Land tenure is an important part of social, political and economic structures. It is multi-dimensional, bringing into play social, technical, economic, institutional, legal and political aspects that are often ignored but must be taken into account. Land tenure relationships may be well-defined and enforceable in a formal court of law or through customary structures in a community (FAO, 2000). Alternatively, they may be relatively poorly defined with ambiguities open to exploitation. The long duration of human settlement, land tenure system together with increasing demands of the growing human and animal population, exploitative land use practices including excessive deforestation for expansion of cultivation, grazing, fuel wood and timber have resulted in reduced protective forest cover (REST, 2004).

2.4.3 Institutional Factors that Affect People's Attitude and Practice towards Tree Conservation

Institutions are commonly understood rules and norms that stipulate what actions are required, permitted, or forbidden in particular situations (Ostrom 2000). The broadest definitions of institution include both formal institutions such as administrative structures, and also informal institutions such as customs and practices (Cortner *et al.*, 1998).

Institutions are crucial determinants of societies' capacity to manage and govern natural resources (Ostrom, 2000). While environmental degradation is the result of aggregated individual decisions and choices, individual choices are responses to incentives and other forms of guidance from governments and other national institutions via laws, taxes, and even normative pronouncements. Militon (1991) indicate that the traditional tools of forest policy such as legislation, institutions, and forest policy alone unable to solve the problems as long as a number of political, education, economic, social and organization prerequisites do not exist in a country. Without effective institutions to limit and regulate harvesting levels and management practices, natural resources

such as forest resources can be overharvested and even irreversibly destroyed, as is often the case in "open access" forests (Ostrom 2000). Local institutions can be taken to be those institutions that emerge in a particular situation or that are practiced or constituted by people who have had a degree of continuity of living in, and using resource of an area. Local institutions represent established local systems of authority and other phenomena derived from the Socio-cultural and historical processes of a given society (Watson, 2003).

2.4.4 Education and Research Factor that Affect People's Attitude and Practice towards Tree Conservation

Environmental Education is also learning process that increases people's knowledge and awareness about the environment and associated challenges, develops the necessary skills and expertise to address the challenges, and foster attitude, motivations, and commitments to make informed decisions and take responsible action. The basic aim of environmental education is to succeed in making individuals and communities understand the complex nature of the natural and built environments resulting from the interaction of their biological, physical, social, economic, and cultural aspects, and acquire the knowledge, values, attitudes, and practical skills to participate in responsible and effective way in anticipating and solving environmental problems, and in the management of the quality of the environment (Haykal, 2010).

As indicated earlier the environmental policy has recognized and identified Environmental education and awareness as a key strategy to transform knowledge of environmental issues to the people (EPA, 1997). Education could be taken as an optimal measure of the socio economic status. As a result it has strong correlation with economic status, access to information, resource and many other benefits. Educating women, raises women level of awareness on environmental issues and increases their role in the conservation activities. For instance, universal primary

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Adequate forestry and natural resource education, research, and extension service are needed to meet the demand for and challenges of managing natural resources on a sustainable basis. Strengthening the country's education and research institutions to train qualified forestry and natural resource professionals with appropriate knowledge of forestry and agriculture is required. Research in agro forestry in general should emphasize the development of appropriate technologies to increase agricultural productivity and the reclamation of degraded highlands. Research in plantation forestry should also focus on production of fiber and other benefits while maintaining ecosystems (Badege, 2001). Conservation of the natural forests should be given adequate attention, and research in these forests should focus on improving the natural regeneration of the various species forest resources. A multidisciplinary approach is needed for success in agro forestry and natural resource education, research, and extension. All professionals

CHAPTER THREE

RESEARCH METHODOLOGY

This describes the design study, area of the study, instrument for data collection, method for data collection and method of data analysis.

3.1 Design of the Study

The design used for the study was a survey design. This design is appropriate, as it will involve the collection of data on the opinions of people about their attitudes toward tree planting. Sources includes research questionnaires, study of previous researches and direct contact with individuals, groups and communities.

3.2 Area of the Study

The study was carried out in Gombe Local Government Area of Gombe State in Northeaster Nigeria. Gombe L.G.A is one of the eleven L.G.As of Gombe State. The State has an area of 52km^2 with a population of 268,000 as of 2006 census. The inhabitants of Gombe L.G.A are general traders, farmers. tailors. cattle and fish rearers and civil servants.

3.3 Population of the Study

The population of the study is 268,000. It is important to note that out of the above population, hundred (100) respondents were targeted. including male and female in the selected area or Wards in Gombe L.G.A.

3.4 Sample and Sampling Techniques

Gombe Local Government Area is politically divided into eleven Wards. namely Ajiya, Bajoga, Bolari East, Dawaki, Herwagana, Jeka Dafari, Kumbiya-Kumbiya, Nasarawa, Pantami and Shamaki. The procedure that was used regarding the selection of respondents in the study vary according to the requirement of the particular data.

Five (5) Wards were selected using simple random sampling which are (1) Herwagana (2) Jekadafari (3) Kumbiya-Kumbiya, (4) Nasarawo and (5) Pantami. A total one hundred (100) questionnaires was administered in the five (5) selected Wards.

3.5 Instruments for Data Collection

The instrument used for data collection was questionnaire structured by the researcher, through random sampling technique. The questionnaire was based on demographic factors, socioeconomic factors, land tenure system, institutional factors, forest policies, education and research factors. Other instruments are sex, age, eco-feminist theory and marital status.

3.6 Method of Data Collection

Data was collected through a survey where semi-structured questionnaires was distributed to different classes of people, ages and gender. The result was later documented using the Leslie Kish formula.

3.7 Method of Data Analysis

Questions stated in chapter one, the data which was gathered through questionnaire and interview was analyzed based on previous findings. The collected data was summarized and analyzed using the questionnaire and quantitative data analysis of the present results. Data which was collected through structured questionnaire will be analyzed by interpretation to give appropriate recommendation and conclusion to support quantities data. The quantitative data will be analyze by simple descriptive statistics like percentage, average, and the result will be summarized in the form of table. The five (5) point likert scale that will be use to analyze the quantitative data, will be weighted according to the degree of agreement.

concerned with agriculture, forestry, and natural resources should come together and work toward developing strategies for sustainable agro forestry and natural resource management that will ensure food security for the rural poor and long term sustainability of the resource base upon which other development sectors depend (Badege, 2001).

2.5 Forest Policy

The conservation efforts that have been made have basically one common characteristic that they all have been drafted based on particular events like famine, particular scientific studies and the interest of supporting groups (EPA, 1997). Badege (2001) indicated that without clear policy, it is difficult to adopt forest conservation practices. Forest conservation system requires long duration tenure system that guarantees continued ownership of land. The land tenure policy should be changed. Therefore, without clear policy, it is difficult to adopt forest conservation practices (Badege Bishaw, 2001). In the use of community forests there is no clear legal base for determining ownership. Farmers tend to assume that the forests belong to the State and they don't have the right to use and own these forests. Also, the massive national soil conservation and afforestation efforts were often seen as government-imposed activities, and since they were not accompanied by education, the advantages of these efforts were not associated with individual benefits (Gamachu, 1990).

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND INTERPRETATION

This chapter analyzed and present the data collected via questionnaire that were distributed to the population concerned for the study.

Data analyzed helped the researchers to draw conclusion upon the population concerned.

4.1 Data Presentation and Analysis

The respondents have been given one-hundred (100) questionnaire, and all the questionnaires were answered and collected. Below is the analysis and presentation of the question.

Table 1: Age of the Respondents

Options	No. of Respondents	Percentage (%)
18-25 years	25	25%
26-30 Years	40	40%
31 and above	35	35%
Total	100	100%

Source: 2017 field survey

The table above showed that 25 of the respondents were of age 18-25 representing 25%. 40 were of age 26-30 which is 40%, 35 falls between 31 and above that is 35% respectively. This therefore showed that the majority of the respondents falls between 26-30 years of age.

Table 2: Numbers of males and females that responded

Options	No. of Respondents	Percentage (%)
Males	55	55%
Females	45	45%
Total	100	100%

Source: 2017 field survey

From the table above, 55 males responded to the questionnaire that was distributed, which resulted to 55%, while 45 females responded which is 45% only. This however showed that male formed the majority of the respondents hence, they formed 55% which is more than 45% of the female in the study area.

Table 3: Education Background of Respondents

Options	No. of Respondents	Percentage (%)
Primary School	8	8%
Secondary School	27	27%
Diploma	50	50%
Above Diploma	15	15%
Total	100	100%

Source: 2017 field survey

From the table above, 55 of the respondents were farmers. 27 were traders. 10 of the respondents were fishing while 8 of the respondents were students. This however showed that the majority of the respondents were farmers.

Table 4: Occupation of Respondents

Options	No. of Respondents	Percentage (%)
Farming	55	55%
Trading	27	27%
Fishing	10	10%
Student	8	8%
Total	100	100%

Source: 2017 field survey

From the table above, 55 of the respondents were farmers, 27 were traders, 10 of the respondents were fishing while 8 of the respondents were students. This however showed that the majority of the respondents were farmers.

Table 5: What are the people's perceptions on the potential benefits of the surrounding forest?

ITEMS	SA(4)	A(3)	D(2)	SD(1)	N	MEAN	REMARK
People are becoming more informed about tree planting.	61	38	1	0	100	3.6	Agree
People are getting less involved in forest protection and conservation.	43	35	12	10	100	3.1	Agree
People are getting less involved in cutting down trees and bush burning.	38	32	18	12	100	3.0	Agree
People are realizing the importance of forest in soil conservation and erosion control.	41	25	22	12	100	3.0	Agree
People are finding other sources of energy apart from the forest and tree plantations.	53	32	9	6	100	3.3	Agree
Most people were not informed about the importance of tree planting.	48	32	12	8	100		Agree
People are not willing to get involved in practicing tree planting.	59	24	11	6	100	3.4	Agree
People are getting more knowledge about the potential benefit of the surrounding forest.	42	32	19	7	100	3.1	Agree

Source: Field Survey, 2017

Table 4 shows that, 61 respondents strongly agreed and 38 agreed that people are becoming more informed about tree planting. While, 1 respondent disagreed. 43 respondents strongly agreed, and

35 agreed that people are getting less involved if forest protection and conservation. While 12 disagreed, and 10 strongly disagreed. 38 respondents strongly agreed, and 32 agreed that people are getting less involved in cutting down of trees and bush burning. While, 18 disagreed, and 12 strongly disagreed. 41 respondents strongly agreed, and 25 agreed that people are realizing the importance of forest in soil conservation, erosion control and balance. While, 22 disagreed, and 12 strongly disagreed. 53 respondents strongly agreed, and 32 agreed that people are finding other sources of power apart from the forest and tree plantations. While, 9 disagreed, and 6 strongly disagreed. 48 respondents strongly agreed, and 32 agreed that most people were not informed about the importance of tree planting. While, 12 disagreed, and 8 strongly disagreed. 59 respondents strongly agreed, and 24 agreed that people are not willing to get involved in practicing tree planting. While, 11 disagreed, and 6 strongly disagreed. 42 respondents strongly agreed, and 32 agreed that people are getting more knowledge about the potential benefit of the surrounding forest. While, 19 disagreed, and 7 strongly disagreed respectively.

Table 6: What is the level of awareness of the consequences of deforestation among different age groups?

ITEMS	H(4)	MH(3)	M(2)	L(1)	N	MEAN	REMARK
The elderly people are more informed and aware of the consequences of the deforestation.	65	30	5	0	100	3.6	Agree
The male are more informed than female about the effect of deforestation.	57	32	7	4	100	3.4	Agree
The youth are less concerned about the consequences of deforestation.	58	34	6	2	100	3.5	Agree
People in the rural areas are less informed about the effect of deforestation than those in urban areas.	68	21	5	6	100	3.5	Agree

Source: Field Survey, 2017

Table 6 shows that, 65 respondents strongly agreed and 30 respondents agreed that the elderly people are more informed and aware of the consequences of the deforestation. While, 5 respondents disagreed. 57 respondents strongly agreed, and 32 agreed that the male are more informed than female about the effect of deforestation while, 7 respondents disagreed, and 4 respondents strongly disagreed. 58 respondents strongly agreed, and 34 agreed that the youth are

less concerned about the consequences of deforestation. While, 6 respondents disagreed, and 2 strongly disagreed. 68 respondents strongly agreed, and 21 agreed that people in the rural areas are less informed about the effect of deforestation than those in urban areas. While, 5 disagreed, and 6 strongly disagreed respectively.

Table 7: What are the people's attitude towards tree planting?

ITEMS	SA(4)	A(3)	D(2)	SD(1)	N	MEAN	REMARK
People plant trees and care for them until they mature.	48	37	15	0	100	3.3	Agree
People are more interested in economic trees.	57	32	7	4	100	3.4	Agree
Elderly people are more interested in planting trees.	58	34	6	2	100	3.5	Agree
Women are getting more involved in practicing tree planting.	48	42	8	4	100	3.4	Agree
Most people plant trees in place of each tree that has been cut down.	32	40	20	8	100	3.0	Agree
People plant trees and nurture them throughout until it gets to stage of maturity	56	38	6	-	100	3.5	Agree

Source: 2017 Field Survey

The above table shows that 48 respondents strongly agreed, and 37 agreed that people plant trees and care for them until they mature. while 15 disagreed and 0 strongly disagreed. 57 strongly agreed, and 32 agreed that people are more interested in economic trees. while 7 disagreed, and 4 strongly disagreed. 58 strongly agreed, and 34 agreed that elderly people are more interested in planting trees, while 6 disagreed, and 2 strongly disagreed. 48 strongly agreed. and 42 agreed that women are getting more involved in practicing tree planting. while 8 disagreed, and 4 strongly disagreed. 32 strongly agreed, and 40 agreed that most people plant trees in place of each tree that has been cut down. while 20 disagreed, and 8 strongly disagreed. 56 strongly agreed, and 38 agreed that people plant trees and nurture them throughout until it gets to stage of maturity, while 6 disagreed respectively.

Table 8: What are the sources of information for the people's attitude towards forest reserve conservation?

ITEMS	SA(4)	A(3)	D(2)	SD(1)	N	MEAN	REMARK
Through radio	42	55	3	0	100	3.4	Agree
News papers	35	48	13	4	100	3.1	Agree
Television	32	52	10	6	100	3.1	Agree
Workshop and training	52	35	7	6	100	3.3	Agree
Seminars	59	24	11	6	100	3.4	Agree
Mobile phone	22	34	42	2	100	2.8	Agree

Source: 2017 Field Survey

From table 7 above, 42 of the respondents strongly agreed and 55 agreed that the sources of information for the people's attitude towards forest reserve conservation is through radio. While, 3 disagreed, and 0 strongly disagreed. 35 strongly agreed, and 48 agreed that the sources of information is through newspaper. While, 13 disagreed, and 4 strongly disagreed. 52 strongly agreed, and 35 agreed that the sources of information is television. While, 7 disagreed, and 6 strongly disagreed. 52 strongly agreed, and 35 agreed that the sources of information is through workshop and training. While, 7 disagreed, and 6 strongly disagreed. 59 strongly agreed, and 24 agreed that the sources of information is through seminars. While, 11 disagreed, and 6 strongly disagreed respectively. 22 strongly agreed, and 34 agreed that the sources of information is through mobile phones. While, 42 disagreed, and 2 strongly disagreed respectively.

4.2 Findings of the Study

The field survey shows that respondents in the community are becoming more informed about the importance of tree planting, forest protection and conservation. People are also finding other sources of power and getting less involved in cutting down trees as a source of energy.

People are also realizing the importance of forest in soil conservation, erosion control and

balance and also the potential benefit of the surrounding forests. The study also shows that people in rural areas are less informed about effects of deforestation than those in the urban areas. Furthermore to sources of information for the people towards forest reserve conservation is basically through radio, television, workshops and training.

The study also shows that the elderly people are more informed about consequences of deforestation and the male are more informed than females while the youths are less concerned. This survey study also shows that people now plant trees and nurture them to the stage of maturity.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

The research work is on attitude of people toward tree planting in Gombe Metropolis. The study comprises of five chapters. Chapter one which is the general introduction of the study, also comprises background of the study, statement of the problem, objectives of the study, research questions, significance of the study, scope and limitation of the study and also definition of terms were all in the first chapter. Chapter two reviewed related literatures that are related to the topic under study. Chapter three dealt with the research methodology, where a survey research design was adopted, also population of the study, instrument used for data collection and method of data analysis were all in chapter three. Chapter four discuss the results and analyze the data collected from the respondents and lastly chapter five dealt with the summary, conclusion and recommendations of the study.

5.1 Conclusion

Conclusively, the researcher have concluded that people of Gombe metropolis have negative attitude towards tree planting coupled with the destructive habits, individual activities and government interest have put a treat on tree planting campaign that strengthen further. It therefore becomes highly imperative to employ necessary measures towards ensuring tree planting sustainability which will go a long way in maintaining a balance ecosystem.

5.2 Recommendations

Based on the finding of the study. The following recommendation points are forwarded to promote the attitude of people toward tree planting in Gombe metropolis.

1. Environmental education has to be a priority for further forest resource conservation practices.
2. Development agent workers showed treat farmers as people with valuable information and knowledge is vital for providing insights on how the needs of people can be met. Local people also need information and environmental education cause they do not have deep knowledge about the results conservation practice.
3. Forest management and conservation initiative (development agent workers, district and zonal agricultural office) should consider people livehood as an integral component. The concerned bodies (community elders, community representatives, officials) should also legally prohibit unwise exploitation of the forest resource.
4. The participation of NGOs is highly needed in the study area and local people association is important to attract NGOs.

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Appendix I

Federal college of education (Tech)
Gombe,
P.M.B 60,
Gombe state.
22nd April, 2018.

Dear Respondent,

I am a final year student of the above institution, department of Agricultural Education. I am carrying out a research on the attitude of people towards tree planting in Gombe local government. Please, kindly fill this questionnaire for me. All your responses will be treated as confidential.

Thank you.

Yours faithfully.
Jummai Lawal Alison

APPENDIX II

QUESTIONNAIRE

Instruction: Tick (✓) in the space(s) you the correct, in both section A, B, C, D and E
SA = Strongly Agreed, A = Agree, SD = Strongly Disagree, D = Disagree.

SECTION A

PERSONAL Data

1. Age: 18 – 25 ( ) 26 – 30 ( ) 31 and above ( )
2. Sex: Male ( ) Female ( )
3. Educational background: Primary School ( ) Secondary School ( ) Diploma ( ) above Diploma ( )
4. Occupation: Farming ( ) Trading ( ) Fishing ( ) Students ( )

Section B

Research Question 1: What are the people's perceptions on the potential benefits of the surrounding forest?

S/N	ITEM	SA	A	SD	D
1.	People are becoming more informed about tree planting.				
2.	People are getting less involved in forest protection and conservation.				
3.	People are getting less involved in cutting down on trees and bush burning.				
4.	People are realizing the importance of forest in soil conservation, erosion control, and balance.				
5.	People are finding other sources of energy apart from the forest and tree plantations.				
6.	Most people were not informed about the importance of about the importance of tree of planting.				
7.	People are not willing to get involved in practicing tree planting.				
8.	People are getting more knowledge about the potential benefit of the surrounding forest.				

SECTION C

Research Question 2: What are the people's levels of awareness of the consequences of deforestation among different age group?

S/N	ITEM	H	MH	M	L
1.	The elderly people are more informed and aware of the consequences of the deforestation.				
2.	The male are more informed than female about the effects of deforestation.				
3.	The youth are less concerned about the consequences of deforestation.				
4.	People in the rural areas are less informed about the effects of deforestation, than those in the urban areas.				

SECTION D

Research Question 3: What are the people's attitude towards tree planting?

S/N	ITEM	SA	A	SD	D
1.	People plant trees and care for them until they mature.				
2.	People are more interested in economic trees.				
3.	Elderly people are more interested in planting trees.				
4.	Women are getting more involved in practicing tree planting.				
5.	Most people plant trees in place of each tree that has been cut down.				
6.	People plant tree, and nurture them throughout until it gets to stage of maturity.				

SECTION E

Research Question 4: What are the source of information for the people's attitude towards forest reserve conservation?

S/N	ITEM	SA	A	SD	D
1.	Through radio				
2.	News papers				
3.	Television				
4.	Workshops and training				
5.	Seminars				
6.	Mobile phone				