

**HUMAN ACTIVITIES AND MANAGEMENT OF ENVIRONMENT WITHIN
THE SCHOOL SETTING IN MADI OPEI SUB-COUNTY**

LAMWO DISTRICT

BY

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DECLARATION

I Apiyo Lutto declare that this research report is my original work and it has never been submitted to any other university / college/institute for award of Diploma/ Degree.

Sign:.....*Apiyo*.....

Date:.....*11.10.2011*.....

APPROVAL

This research proposal entitled " Human activities and the management of environment within the school settings in Lamwo District the case of Madi Opei" was conducted and supervised by Mr. Mike Odongo

Sign:.....

Supervisor:.....

Date :.....

ABSTRACT

The study was conducted to investigate human activities and the management of the school environment in Madi Opei Sub-county, Lamwo District

The study was conducted through a qualitative design using survey data being collected during June –August 2011 .

Questionnaires, interview guide and observation were the main tools used for data collection from the respondents who included the officials from national forestry authority /(NFA), national environmental management authority (NEMA) teachers and head teachers, pupils and members of school management committees (SMC). The data was analyzed descriptive technique and the use of frequency and percentage tables

Chapter one is concerned the introduction and background to the study problem

Chapter two looks or reviews the literature related to the study problem

Chapter three on the other hand focuses on the research methodology while chapter four is about the presentation, interpretation and analysis of the data collected .

Finally chapter five covers the discussion, conclusion and recommendations of the study.

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CHAPTER ONE

1.0 INTRODUCTION

This chapter focuses on background of the study, problem statement, purpose of the study, objectives of the study, research questions, scope of the study, significance of the study, limitations and conceptual framework

1.1 Background of the study

Human activities are invariably a concern at a global perspective. In China for example, the burning of forest ,air pollution has led to poor human health and poor quality of air (Enger Smith;2006)

Fallaman (2003) contents that human kinds assault on the atmosphere presumably began with the industrial revolution . First on coal and then increasingly amount of petroleum and natural gas burned to power industry, heat and cool cities and drive vehicles

In Burkina Faso , intensive grazing pressure has destroyed vegetation , compact and then led to degradation and desertification (UNESCO 2000) Chikanda (2009) notes that urban growth , industrialization and mining activities have put environment under stress , leading to the outbreak of diseases that are a threat to human health.

Economic Commission for Africa (2001) holds that the present of land degradation for example in Nigeria is one of he most crucial challenges facing the country. It affected an estimated 50 million people in 1990 at an annual cost of us \$ 3 billion.

Likewise, Uganda has deprived the management of environment seriously, for example poor waste management practices in Kampala have led to the pollution of the environment and poor health, (environment inspection.

Capacity building for strengthening legislation and institution for the implementation of Rio 2007 urge that building on channels has led to poor water storage and flow

regulation, treatment of effluent water purification, climate amelioration , water recharge , flood control ,and biodiversity conservation

The environment is fundamental to any organization and society. This includes the atmosphere, water bodies, plants and animals, land among others. In Lamwo District most schools are located in open places where plants have been cut down to give infrastructures (buildings) this has led to destruction of buildings during rainy season and dry season. This is because the schools are not sheltered from agents of disasters. The effect of this is felt by the pupils since the lesson has to be interrupted. This affected performance of pupils in the area.

1.2 Problem Statement

Lamwo District, is a district that originated from Kitgum district is faced with a number of problems. The problems of human activities have caused significant effect on the environment. The burning of charcoal for fuel consumption has proved disastrous. This has led to desertification and destruction of natural species

The wetland areas have been encroached on for production of food. The school buildings are left open; thus facing the problems of wind destruction.

The government and local government have attempted to address this through sensitization of the community about the importance and repercussion of destroying the environment.

The establishment of NEMA office and National Forest Authority (NFA) has helped to control the problems .the policy of tree planting and prevention of poaches is among others solutions.

However the problem has still persisted amidst the above solution, which was why the researcher intended to investigate the effect of human activities on the environment of schools in Lamwo District.

1.3 Purpose of the study

The purpose of the study was to investigate human activities and the management of the school environment in Lamwo District.

1.4 Objectives of the study

The study was governed by the following specific objectives

- To examine the effects of deforestation on the management of the school environment in Madi Sub-county, Lamwo District
- To find out the extent to which over grazing affects the management of the school environment in Madi Opei sub-county in Lamwo District
- To analyze the effects of bush burning in the management of school environment in Madi Opei Sub-county in Lamwo District
- To assess the effect of compaction on the management of school environment in Madi Opei sub county in Lamwo District

1.5 Research questions

1. What are the effects of deforestation on the management of the school environment in Madi Opei Sub-county Lamwo District
2. to what extent does over grazing affect the management of the school environment Opei Sub county Lamwo District
3. How does bush burning affect the management of the school environment in Opei Sub county Lamwo District
4. What are the effects of soil compaction in the management of the school environment Opei Sub-county Lamwo District

1.6 The scope of the study

This study examined the geographical, time and content scope

1.6.1 Geographical location

The study was conducted in primary schools in Opei Sub-county Lamwo District which is located in the eastern part of Lamwo district and Lawmo district is found in the northern part of Uganda

1.6.2 Time scope

The study covered the period 2010-2011 .t he period was specifically chosen because it was the time when Lamwo District gained its status of as district and experienced relative peace as a result of stoppage of the L.R.A war in northern Uganda

1.6.3 Content scope

The study specifically focused on deforestation, overgrazing, bush burning and soil compaction and how they affect the management of school environment in Lamwo District

1.7 Significance of the study

- The findings of the study shall help teachers to develop in learners and the community .a round the awareness of the total environment and its problems , knowledge of the environment , attitudes about the environment, knowledge of the environment ,attitudes about the environment and the motivation to actively participate in the environmental improvement, to acquire the skills to identify and solve environmental problems , to provide the public with an opportunity to participate at all levels in working towards solving environmental problems
- Shall help the policy makers to come out with the appropriate policies in guiding the management of the environment
- Shall help the political leaders to sensitize the local people on how to manage the environment
- Shall help the donors to channel the necessary aids towards the management of school environment

1.8.0 Limitations of the study

The researcher has some constraints

1.8.1 Time

The time given to do the study was very short as the researcher has to teach in the class and at the same time carry out the study

However the researcher over came this limitation by following the work plan earlier on drawn by the researcher

An inadequate fund to facilitate the study was another problem that the researcher had. The researcher budgeted accordingly so as to solve the problem of money and thus followed the content of the budget

Further more, the researcher has poor responses form the respondents. The researcher overcame this problem by using self administered questionnaire where the researcher constructed the questionnaire immediately after filling

The researcher convinced and told the respondents that the response that they made would be kept confident between the researcher and themselves. Secondly, the researcher used questionnaires//interview guides to help in solving the problem of poor responses

1.9 Operational definition of terms

Soil Compaction. Is the situation where a piece of land or an area is continuously used by pupils for playing or movement?

Deforestation is cutting down trees in a large quantity

Over grazing is rearing animals in the same piece of land continuously without rest

1.10 Conceptual frameworks

Table I showing the conceptual relationship between the human activities and the environmental degradation

Independent variables

Human Activities



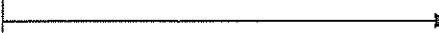
- Deforestation
- Overgrazing
- Bush burning
- Compaction

Dependent variables

Environment



- Land
- Water
- Air



In this conceptual framework, human activities were conceived as independent variable. It was believed that the dimension independent variables affect the environment which was viewed as dependent variables. If deforestation, over grazing, bush burning and soil compaction is withheld, then there shall be improved land use, control of water and controlled pollution. These are dimensions under dependent variables.

CHAPTER TWO

LITERATURE REVIEW

This chapter was concerned with theoretical review and actual review of related literature

2.1 Theoretical review

Activity theory is found on a number of interrelated basic concepts or principals that constitute a general conceptual system or frame work .this study is thus based on a number of theories but specifically activity theory.

Activity theory adopts Marx's dialectic materialistic view that activity and consciousness are interrelated to describe principles of unity and inseparability of consciousness and activity. Banon (1997) states that human mind comes to exist , develops and can only be understood within the context of meaningful , goal oriented and socially determined interrelated between human beings and their material environment

Consciousness is not a set of discrete acts , but the result of everyday practice and process of meaning making component and should therefore be analysed within the context of activity (Kaptelinini , 1996 Kaptelinini and Vadi , (1997 ; Jonassen & Ronrer- Murphy, 1999)

The principle of object oriented ness states that human beings live in a reality that is objective in a broad sense. The things that constitute this reality have not only the properties that are considered objective according to natural science but those socially/ culturally defined properties as well.

According to Kuti (1995), the basic unit of analysis constitutes a minimal meaning context for individual action. An activity is a form of doping and it is situated in the context of bring directed at an object and is distinguishable by that object. Kaptelinin and Nardi 1999 mediation activity theory empathizes that human activities is mediated by tools

A phenomenon can best be understood by knowing how it develops into its existing form

(Kapterlinin, 1996) . Activities are not static by dynamic under constant change and development, (Kutti, 19595)

2.2 Actual review of related literature

2.2.1 Deforestation and management of environment

According to the Jane Goodall Institute (2007) , deforestation is the conversion of forested areas to non forest land such as arable land , pasture , urban development or waste land . The destruction of significance areas of forest covers has resulted into environmental degradation with decline in habitants and biodiversity

However aforestation and reafforestation is put in place to form catchments for forest According to W. Katsikano et al (2004) cutting down of trees to give room for settlement and farming leaves ground bare and thereby encouraging soil erosion.

In addition to the above statement deforestation in a along run shall affect the water supply as it affects the source of the river. The Jane Goodall Inisisute (2007) emphases that deforestation has resulted in environmental degradation with decline in habitants and biodiversity

The loss of many trees affects the water cycle. When it rains, a lot of water is taken up by trees which in turn releases it into the atmosphere through the process if transpiration (path Haward , et al 2008)

B.T.J & Muller (2002) holds that deforestation shrinks the prevailing climate

Raven & berg (2001) puts it that clearing of forests reduces the long term potential for living in the areas to earn livelihood from the forest

They added on that, the loss of forest varied form destruction of songbird to habitat exacerbated global warming

According to John .L Allen (1999), deforestation has been linked to desertification in several parts of the world and this have implications for human populations as well as the remaining ecosystem.

He further urged that deforestation resulting permanent elimination of potential sources of food and drugs

Robert .B Et A; (1998) observers that the removal of forests and woodlands through cutting or deliberate fire at rates in excess of natural vegetation processes is perhaps the most obvious global pattern of resources degradation. Soil may subsequently be degraded quantitatively through its physical removal from one location to another or qualitatively referring to losses of fertility , in moisture and nutrients content of changes in chemical composition in soil flora and fauna (C.J Barrow 1995).

Although there is much concern advanced about environmental protection through forest conservation, Uganda is keen on clearing Mabira in central Uganda for sugar cane growing (New Vision 2011). The obvious concern is degradation and destruction of animals, birds and tree species in the country.

2.2.2 Overgrazing and management of environment

The Jane Goodall Institute (2006) state that over grazing is allowing animals to fed on the same area too often. This does not give enough time to plants to recover and grow their leaves again. The plants die, the ground becomes bare vegetation and the soil becomes susceptible to erosion

However livestock has been made to feed on paddock rotationally

According to Path Haward , et al (2008) over grazing of the land destroys the soil cover provided by the grass and soon degradation occurs when the numbers of animals is more than grass can support . States of the World (2002) urges that rearing of number of large animals in a piece of land leads the grass in that area to become shorter and thinner and patches of bear earth appear. And since there is not enough pasture for

animals to feed on, goats roam the country side surviving the dry season by causing desertification if rains fail

2.2.3 Bush burning and management of environment

According to Fountain Integrated Science Book Five (2006), bush burning leaves the ground bare and exposed to wind and rain. It has however, been advocated for that there must be no bush burning and whoever found doing must be reported to the authority

Katsikano W. et al (2004) holds that burning the bush or vegetation for firewood and to give room for settlement and farming makes the area have a new type of vegetation instead of original one . Fire kills the small animals, insects and destroys the homes of these living things and also leaves the ground bare

According to H.J. De blij /Peter O.Mueller (2002) bush burning reduces the quality of the prevailing climate

Raven & Berg (2001) emphasises that burning of forests' increases the carbon dioxide level in the atmosphere and this change the earth's climate. The increased carbon dioxide in the atmosphere de to bush burning brings about global warming which in turn could produce major shift in rainfall pattern and increase the ocean level due to melting of Greenland's ice sheet

Burning bushes/forests leads to loss of hundreds of species of plants a, animals and micro-organisms that live in the forest

Burn practices have adverse effects on the wild life outside the forest for example fish and other aquatic organisms may perish from the resulting sediment pollution, which clogs their gills and makes it difficult to find prey

2.2.4 Soil Compaction and management of environment

The Jane Goodall Institute (2007) emphasis that compaction is the reduction in the rate at which water can infiltrate and drain through the soil . It also reduces the availability of space for oxygen in the plant root zones. Compaction leads to poor drainage, poor aeration and hard pan surfaces which causes run off

According to raven & berg (2001) compaction comes as a result of heavy farm machinery and degrade the land

2.2.5 Pollution and management of the environment

Pollution occurs when something is released into the environment (soil, water and air) that negatively affects the organisms or environment.

2.2.5.1 Water pollution

The effect of water pollution leads to poor health of human kind

2.2.5.2 Soil pollution

Introduction of substances into the soil lowers the quality of the soil and affects the normal functioning and endangers the animals than live in the soil

2.2.5.3 Air pollution

Is degrading the air quality resulting from unwanted gases, chemicals and other materials in the air , chemicals and manufacturing , vehicle fuel powered lawn tools and movers , farm and construction equipment are the main sources of air pollution

2.2.6 Development and management of the environment

According to Biswas and Biswas (1985) development processes impact on the environment and the varied functions it performs often to the detriment.

The environment provides a number of interrelated resource functions for development of society as waste products of human activities, including economic production. (Robert B. Potter 1999). He added on that rarely do resources cease to exist in absolute terms as a result of development. Instead they become degraded in relation to the actual or possible future functions they can perform.

According to Charles C. Plummer et al mining of coal if done carelessly can release acid into water supplies.

Petroleum and metal deposits do not grow back after being harvested hence environments is further threatened.

CHAPTER THREE

METHODOLOGY

3.0 Introduction

This chapter deals with research design, population of the study, sampling method , data collection , data analysis and data reliability .

3.1 Research design

The researcher used the qualitative research design such as survey, descriptive and case study. This design was particularly chosen because it provides opportunity to collect in-depth information about the problem under investigation.

3.2 Population of the study

Table 1 showing area of the study in Madi Opei Sub-county

Primary schools	Parishes	Total population
Madi Opei P/S	Kal	423
Latolim P/S	Klal	218
Wanglango P/S	Okol	304
Kirombe P/S	okol	12

The above table revealed the area of the study and the total population of the study in Madi Opei Sub County

3.3 Sampling method

Table II showing the sampling selection method

Respondents	Total	Sample
NEMA	1	1
Forestry officer	2	2
Head teachers	4	4
Pupils	150	100
Teachers	25	20
smcs	15	10

Table II shall show the respondent of the study, their total number and the sample to be taken

Table III showing sampling method

Respondents	Sample	method
NEMA	1	Stratified sampling
Forestry officer	2	Stratified sampling
Head teachers	4	Stratified sampling
Pupils	10	Simple random sampling
Teachers	20	Simple random sampling
Smc	10	Stratified sampling

Table iii shows the method which shall be to sample the respondents

3.4 Data collection methods

3.4.1 Questionnaire

This was considered appropriate because they would cover large sample of respondents, allowed a reasonable degree of generalization of the findings. Both close and open ended questionnaires were designed and distributed.

Use of open ended questions enabled the respondents to feel free and afford them the opportunity to provide in depth responses. While closed ended questionnaires provided responses which were restricted.

3.4.2 Interview

The use of interview was employed to collect data from key respondents. This was applied because this category of respondents does not have time to fill the questionnaires. Interview also helps to gather detailed information (Mugenda and Mugenda 1995).

3.4.3 Observation

Was used to gather information on observable areas. The researcher shall physically access and verify on the existing items in the school

3.5.0 Data collection instrument

3.5.1 Questionnaire

Is a device for securing questions and answers by using a form which the respondents fill in her/him. Semi and structured questionnaires were designed and employed to gather information from pupils and teachers.

3.5.2 Interview guide

This is the tool which the research used as a guide for his/her interview. It helped the researcher to gather information from key informants. The key informants here included National Forestry Authority (NFA) officials, National Environmental Management Authority (NEMA).

3.5.3 Observation /checklist

This calls for researcher's understanding on what to record and does not need biasness. the researcher drafted a list of items which he intended to observe in the field . This included degraded areas, farm areas among others.

3.6 Procedures of data collection

Upon submission of the final copy of the proposal to the supervisor, letter of introduction from KIU was issued. The letter was then submitted to the CAO where another letter was given to the researcher introducing her to the field where the data was collected.

3.7 Data analysis method

Data was first presented on the statistical packages which included tables, graphs and pie charts and analysis was done accordingly.

3.8 Data Reliability and Validity

The researcher had applied protesting in the parish of Pobura, Kwoncok Primary School. This was done to ensure reliability and consistency of inferences.

3.9 Ethical Considerations

3.9.1 The researcher observed all the ethical issues and respected the views of the respondent as far as confidentiality and anonymity was concerned.

Anonymity

The researcher made sure that any behavior which would bring humiliation and tension among the respondents were prevented

CHAPTER FOUR

PRESENTATION AND INTERPRETATION OF DATA

4.0 INTRODUCTION

This chapter presents a data description of the result realized after the data analysis

The study investigated the Human activities and the management within the school setting in Lamwo District – case study of Madi-Opei Sub-county.

The data collected was analyzed using descriptive data analysis technique

4.1 The Effects of Deforestation on the Management of the school environment On Madi-Opei Sub-County – Lamwo District

The first objective of the study was to examine the effects of the deforestation on the sub-county Lamwo District. To achieve these objectives, NEMA official, Forestry officer, Head teachers, Pupils, Teachers, Members of SMC and Local community members were asked to give in their opinions or views on what they think are the effects on deforestation on the management of the school environment in Madi-Opei Sub-county Lamwo District. Data on it was analyzed under the research question. “What are the effects of deforestation on the management of the school environment in Madi-Opei Sub-county –Lamwo District?” the results of the findings are presented in the subsection below:

4.1.1 Head teachers and teachers' responses on the effects of deforestation on the management of the school environment in Madi-Opei sub-county –Lamwo District.

Table IV. Head teachers and teachers' responses on the effects of deforestation on the management of the school environment in Madi-Opei Sub-county –Lamwo District.

Head teachers and Teachers' views	O P I N I O N			
	YES	NO	NOT SURE	TOTAL
1. Human activities carried out within school environment				
a). Cutting trees for timber and fire wood				
Frequency (f)				
Percentage (%)				
	101	03	00	104
	97	03	00	100
b). Farming				
Frequency (f)	98	05	01	104
Percentage (%)	94	05	01	100
c). Grazing cattle, sheep and goats				

Frequency (f)				
Percentage (%)	87	10	07	104
	84	10	06	100
d). quarrying				
frequency (f)	66	34	04	104
Percentage (%)	63		05	100
e). Charcoal burning				
Frequency (f)				
Percentage (%)	62	42	00	104
	60	40	00	100
2. Do these activities affect the management of environment around school?				
Frequency (f)				
Percentage (%)				
	104	00	00	104
	100	00	00	100

<p>3. the effects of deforestation on the management of school environment in Madi –Opei Sub-county</p> <p>a). Destruction of school building due to violent winds and storms</p> <p>Frequency (f)</p> <p>Percentage (%)</p>				
	100	07	04	104
	96	06	05	100
<p>b). Air pollution due to charcoal burning</p> <p>Frequency (f)</p> <p>Percentage (%)</p>				
	93	07	04	014
	89	06	05	100

Table iv. reveals that majority of the respondents (teachers and head teachers) stated that the main human activities carried out in most schools which affect the management of the environment are cutting down trees (97%), others are farming (94%), grazing (84%), u0r7ryiong (63%) and charcoal burning (60%) among others. they all (100%) agreed that these Human activities affect the management of school environment.

The table also reveals that the schools of deforestation on the management of the school environment among other are destruction of school building due to violent wind and storms (96%) and air pollution due charcoals and burning.

4.1.2. PUPIL'S RESPONSES ON THE EFFECTS OF DEFORESTATION ON THE MANAGEMENT IN MADI-OPEI SUB-COUNTY –LAMWO DISTRICT

Table v, Pupils' responses on the effect of deforestation on the management of school environment in Madi-Opei sub-county – Lamwo District.

PUPILS' VIEWS ON THE EFFECTS OF DEFORESTATION ON MANAGEMENT OF SCHOOL ENVIRONMENT.	OPINION			TOTAL
	YES	NO	NOT SURE	
1. Soil erosion				
Frequency (f)	79	10	11	100
Percentage (%)	79	10	11	100
2. Lack of shade for pupils during funny weather				
Frequency (f)	96	03	01	100
Percentage (%)	96	03	01	100
3. Lack of wind brakes				
Frequency (f)	64	18	18	100
Percentage (%)	64	18	18	100
4. Bitterness of the school compound				

Frequency (f)	58	27	15	100
Percentage (%)	58	27	15	100

Table v indicates that the major effects of deforestation on the management of school environment according to pupils are lack of school shades for pupils during fenny weather, soil erosion, lack of protective wind breaks and lack of vegetative our (Barrenness) of the school compound to mention some but a few.

4.1.3. NATIONAL FORESTRY AUTHORITY AND NEMA OFFICALS RESPONSES ON THE PROBLEMS OF DEFORESTATION ON THE MANAGEMENT OF SCHOOL ENVIRONMENT IN MADI-OPEI SUB-COUNTY – LAMWO DISTRICT

Table vi, responses from NEA and NEMA official on the problems of deforestation on the management of school environment in Madi-Opei Sub-county –Lamwo District.

Problems of deforestation on the management of school environment	O P I N I O N			
	YES	NO	NOT SURE	TOTAL
1. Leads to loss of soil nutrient				
Frequency (f)	02	01	00	03
Percentage (%)	67	33	00	100
2. Destroy the area's ecosystem				
Frequency (f)	03	00	00	03
Percentage (%)	100	00	00	100
3. over exploitation of land/soil				
Frequency (f)	02	00	01	03
Percentage (%)	67	00	34	100
4. indiscriminate destruction of different and rare species of tree in the environment				
Frequency (f)				

Percentage (%)	02	01	00	03
	67	34	00	100
5. Destroys or trees the bio-physical habitat of the school				
Frequency (f)	01	01	01	03
Percentage (%)	33½	33½	33½	100

Table Vi shows that the respondents (NFA and NEMA Officials) stated that the problems of deforestation affecting the management of school environment in Madi-Opei include destruction of the ecosystem, different and rare species of trees in the environment, over exploitation of land/ soil and destruction of bio-physical habitual of the school.

4.2 The extent to which over grazing affects the management of the school environment in Madi-Opei Sub-county –Lamwo District

The second objective of their study was to establishment of the school environment in Madi-Opei Sub-county – Lamwo District. Data analysis and the interpretation of questionnaire, interviews and physical observations revealed the following finding table below:

4.2.1 Teachers' responses on how overgrazing affect the management of school environment in Madi-Opei Sub-County – Lamwo District

Table VII, teachers' response on how overgrazing affect the management of school environment in Madi-Opei Sub-county.

HOW OVERGRAZING AFFECT THE MANAGEMENT OF ENVIRONMENT	O P I N I O N			
	YES	NO	NOT SURE	TOTAL
1. Encourages soil erosion				

Frequency (f)	17	02	01	20
Percentage (%)	85	10	05	100
2. Lead to soil compact				
Frequency (f)	15	03	02	20
Percentage (%)	75	15	10	100
3. Destroys the vegetative cover				
Frequency (f)	12	07	01	20
Percentage (%)	60	35	05	100
5. Lead to the breeding of wild finger millet which is a difficult types of weed to control in school compound				
Frequency (f)				
Percentage (%)	11	06	03	20
	55	30	15	100
5. Lead to soil barrenness				
Frequency (f)	09	04	07	20
Percentage (%)	45	20	35	100

Table vii, reveals that the respondents stated that the ways overgrazing affect the management of school environment are encourage soil erosion, lead to breeding of wild finger millet weed in the school compound and soil barrenness as indicated by the percentages of 85,75,60,,55 and 45 respectively

4.3 Effects of bush burning on the management of school environment in Madi-Opei Sub-County – Lamwo District

4.3.1 Responses by NEMA official and members of school management committee (SMC) on the effects of bush burning on the management of school environment in Madi-Opei Sub-County lamwo district.

Table VIII, NEMA officials and members of SMC response on the effects of bush burning on the management of school environment in Madi-Opei Sub-county Lamwo District.

VIEWS OF NEMA OFFICAL AND SMC MEMBERS ON THE EFFECTS OF BUSH BURNING ON THE MANAGEMENT OF SCHOOL ENVIRONMENT	O P I N I O N			
	YES	NO	NOT SURE	TOTAL
1. Destruction of forest and bush land				
Frequency (f)	08	01	01	10
Percentage (%)	08	10	10	100
2. Removal of soil vegetative cover leading to soil erosion				
Frequency (f)	7	02	01	10
Percentage (%)	70	20	10	100
3. Causing air pollution through smoke				
Frequency (f)	05	01	04	10
Percentage (%)	50	10	40	100
4. Extinction of some plant species				
Frequency (f)	06	03	01	10
Percentage (%)	60	30	10	100

Table VIII. shows that the respondents stated that the effects of bush burning in the management of the school environment in Madi-Opei Sub-county – Lamawo District are destruction of forest and bush land, removal of the vegetative cover of the soil leading to

soil erosion,, causing air pollution and the extinction of some of plant species, as shown by 80%, 70%, 50% and 60% respectively.

CHAPTER FIVE

DISCUSSION, CONCLUSION AND RECOMMENDATIONS

5.0 Introduction

This chapter discusses the results of the findings as presented in chapter four of the research study. The study investigated the human activities and management of environment within the school setting in Madi Opei Sub County- Lamwo District.

It was conducted through a qualitative research design using survey. The main tools for data collection were questionnaires, interview guide and physical observations

5.1 The effects of deforestation on the management of the school environment in Madi –Opei Subcounty- Lamwo District

The first objective of the study was to examine the effects of the deforestation on the management of the school environment in Madi-Opei lamwo district. Data analysis and interpretation of questionnaires, interview responses and physical observation from teachers, officials form NFA and NEMA members of SMC and pupils revealed the following major finding under the objective

The study found out that in most schools in Madi Opei Sub-county-Lamwo district a number of human activities which are often done without being mindful of our environment. These often result into mismanagement of the environment with its consequential degradation. The study found out that the human activities common in most schools in the sub-county include among others were cutting down trees for timber, charcoal and firewood, monocropping, animal grazing on limited supply of pastureland , charcoal burning and rock for building construction and road maintenance

It should be noted that all the above human activities have adverse effects on environmental management and conservation but at the peak of all is the deforestation.

Forestry sector has continued to play a significant role in the provision of goods and services to the people. It also helps to maintain our environment healthy. However

according to this study human activities within school environment and immediate surroundings are exerting undue pressure on the forestry sector in terms of deforestation. Deforestation is caused by a number of pressures especially population increase

Harvesting forest products for timber production, charcoal burning firewood harvesting and cutting down trees for farming are the main constraints facing the management of school environment in Madi Opei Sub-county. This is because these human activities affect the natural good state of the environment in one way or another. For instance, cutting down trees sets in agents of soil erosion such as running water and wind to remove the good top soil meant for agricultural practices, charcoal burning both pollute the air with smoke and harmful gases of carbon and carbon dioxide. It also leaves the schools not only open to violent winds but also deprived them of the natural beauties offered by trees of forest.

Deforestation also creates imbalance in the ecosystem setting of a place and destroy the natural habitant of a place yet there is interdependence between or among humans and other animals and plants in the ecosystem for healthy living

5.2 The extent to which overgrazing affects the management of the school environment in Madi Opei Subcounty Lamwo District'

The second objective of the study was to establish the extent to which over grazing affects the management of the school environment in Madi Opei Sub-county-Lamwo District. The findings are discussed below

The study found out that over grazing deprives the soil of its protective vegetative cover which allows erosive agents of soil to carry away the top soil that support plant life . it also encourages leaching down of plant mineral nutrients below the level in the ground unreachable plant root system

Continuous grazing of animals on the same piece of land leads to soil compaction due to pressure exerted by animals' footwork traction and soil barrenness because the soil has become compacted and hard that no plant can thrive on such soils

Over grazing as the name indicates result into total loss of vegetation life of an area and this creates imbalance in the ecosystem and its interdependencies in biodiversity of lives of living organisms

The study also found that over grazing leads to the breeding and accumulation of wild finger millet which is a difficult type of weeds to management and control. This pollutes the school environment of grass of most school play grounds and compounds

5.3 The effects of bush burning in the management of school environment in Madi-Opei Subcounty-Lamwo District

The third objective of the study was to analyze the effects of bush burning in the management of environment in Madi Opei Sub-county-Lamwo district. The results of the findings are as below;

Bush burning leads to massive and indiscriminate destruction of forest and bush land. In most schools visited often during the dry season most schools loses plenty of acreage of agro forestry fields within hours yet it might have taken years to establish such a project

Bush burning also removes the soil of its vegetative cover leading to the process of soil erosion with its multiplier effects on the environmental management

Bush burning cause's environmental pollution in terms of smoke and the toxic emission of carbon dioxide into the atmosphere and adds to universal global warming

Last but not least the w wild bush fire may cause the extinction of some rare but important species plants. This also affects the biodiversity of an area.

5.4 Conclusion

The study investigated human activities and management of environment within school setting in Madi Opei Sub-county-Lamwo district. The study established that, most of the human activities carried within different stakeholders in environmental wellbeing and leadership in the district should set clear policy guidelines in the management of environment

Lastly the researcher advocates that a similar study should be conducted in other parts of the district and country at large to find out whether the results will concur with the one that was conducted in Madi-Opei Sub-county in Lamwo district and near schools in Madi Opei Sub-county in Lamwo district negative impact other management of school environment. The human activities include cutting down trees, charcoal burning, monocropping or culture, quarry work and sand mining

Deforestation affects the environmental management because it leads to soil erosion, charcoal burning, pollute the environment and lead to over grazing

Bush burning destroys soil vegetative cover, pollute the environment, causes extinction of plant and animal species and affect the biodiversity of life in an area.

Over grazing leads to total loss of vegetation in an area, create soil compaction leading to the barrenness of the soil. it also breed and accumulates a species of wild finger millet which is a difficult specie of wed to manage and control in an environment

5.5 Recommendations/ suggestions

Basing on the strength and generalization of the study findings the study, the researcher recommends that:

The communities neighboring the schools should be sensitized on the danger of poor management of the environment

The school managers should endeavor to form school environment clubs and societies to oversee and monitor environmental activities within the school and the immediate surrounding areas of the school

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APPENDIX A:

BUDGET

ITEM	AMOUNT
Stationeries	50000
Travel	80000
Services (printing , photocopying and binding)	150000
Research assistance	100000
Contingency	200000
Total	580000

APPENDIX B:

TIME FRAME

Activity	Jan	Feb	Mar	Apri	May	Jun	July	Au	Sep	Oct	Nov
Topic identified											
Writing proposal											
First draft proposal											
Final draft											
Writing dissertation											
presentation											

APPENDIX C

QUESTIONNAIRE FOR HEADTEACHERS AND TEACHERS

You have been chosen to participate in this research study titled "human activities and management of the environment in primary schools in Madi Opei Subcounty-Lamwo District

The information given shall be kept confidential and purely for study purpose only

INSTRUCTIONS

1. Kindly attempt all the questions where possible
2. Answer the questions by either filling the blank spaces with correct information or ticking the correct option boxes as the case may be

1a) Name of the school..... Grade.....

b) Gender male female

2a) what are some of the human activities carried out within your school immediate environment?

.....

b) Do these activities have any effect on the management of the environment around the school

Yes No

c) If yes, what are the effects of deforestation on the management of school environment in Madi-Opei Subcounty-Lamwo district?

3. Do you have cases of over grazing within your school environment ?

Yes no

b) To what extent does over grazing affect the management of your school environment?

.....

4. State the ways bush burning as a form of human activity is affecting the management of environment around your school

.....
.....
.....

5(do some of the pupils activities affect on the management of environment in your school

Yes no cant tell

b) Mention some of the pupil's activities that affect the management of the school environment

.....
.....
.....

5. Give suggestions how the management of the school environment in Madi Opei Subcounty- Lamwo district should be improved

.....
.....
.....

THANK YOU FOR THE COOPERATION

APPENDIX D

QUESTIONNAIRE FOR PUPILS (UPPER PRIMARY CLASSES)

You are kindly requested to assist in giving some information on the topic of a study
“human activities and management of environment within your school

INSTRUCTIONS

1. Try to answer all questions if possible
2. Answer the questions by either filling in the blank spaces or ticking the boxes with the correct information as the case may be

1a) Name of the school class

b) Sex male female

3. List down the effects of deforestation on the management of environment in your school

.....
.....

4. How does over grazing affect the management of your school environment

.....

5. Does bush burning affect the management of your school environment

Yes no not sure

b) if yes ,list the ways how it affects the management of your school environment

THANK YOU

APPENDIX E

INTERVIEW GUIDE FOR NFA AND NEMA OFFICIALS AND SMC MEMBERS

1. What in your view is the problem of deforestation to your community?
2. Mention how the government is solving the problem of environmental degradation
3. What have the school authorities done to solve the problem of grazing within the school environment?
4. What do you think should be done to combat the problem of soil compaction in the school environment
5. How does burning of bushes affect the environment?
6. Why do you think the environment should be protected?

APPENDIX F

OBSERVATION CHECKLIST

1. Nature of the physical school environment
2. Presence of forest or trees with the school environment
3. Kind of human activities within the school setting
4. Evidence of deforestation , afforestation and reafforestation
5. Cases of bush burning
6. Incidence of over grazing
7. Nature or state of the school general compound in term of environment setting
8. Any sense of environmental awareness or care
9. Any environmental club or societies

Plan for environmental protection for the school

Cases of visit by both NEMA and NFA