



Full Length Research Paper

A study of conflict and threat to the use of land in Dalori town of Borno State

*Bunu A., Kundili Y.M., Mustapha I., Abba Mani F.

Department of Agricultural Technology, Ramat Polytechnic, Maiduguri.

*Corresponding authors e-mail: ahmedbunu95@gmail.com

ABSTRACT

The study was carried out to assess threats to use of land and conflicts in uses of land around Dalori town, Borno state. Structured Questionnaires were administered randomly to two groups of twenty farmers and nineteen individual farmers. Field observations were made to confirm the information gathered from the discussion with the farmers. Dominant land tenure system is inheritance with 36.8%. The major threat to use of land is Bandits with area affected of 52.4%. The major conflict is that between farmers and pastoralist, which affect almost all the farmers and occurs every year.

Keywords: Conflict, Land use, Threat.

INTRODUCTION

Land as a non-renewable resource is affected as population increase with increase in demand for food. Thus, the misuse of land has led to degradation and complication in food production. Urban development and expansion also affect land by taking away land suitable for agriculture purposes. Land use planning is important to protect agricultural land towards achieving food security.

The problem of food insecurity is highest in sub Saharan African due to drought, desertification and erosion on agricultural land. Thus, if nothing is done, the sub Saharan region is heading for food crisis. Therefore this study was carried out with the following objectives:

1. To assess the land tenure system
2. To establish the types, extent and severity of threats to the use of land.
3. To establish the types and severity of conflicts in use of land.

Conflict in Use of Land

The demand for agricultural and non-agricultural uses of land in the same location can often generate conflict due to their potential in compatibility (Aglugub et al 1997).

The issue of rural-urban conflict can arise when there is

no separation between incompatible uses, let alone the misunderstanding which may exist about the purpose and character of a district (Monitoba, 1984).

Conflict Relating To Existing Use of Land

The cultivation of communal land which is sometimes shared among of community members or household may sometimes involve communal clashes. Even inherited or purchase land can cause clash between neighboring communities or household, which can lead to lots of life and properties as well as abandoning of a fertile land for years. (Parsons, 1970).

This form of conflict relating to existing use of land such as agricultural cultivation (rainfed and irrigated) is often called communal land conflict" (Oviawe, 1971).

Conflict between Land Ownership and Pastoralist

Conflict between farmers and the herder (pastoralists) is as a result of the constrained of limited amount of land for grazing, insufficient water and forage food and the lack of recognition for various encampment and hamlet (Gefu, 1987). On the other hand increase in human population and urbanization which continue to expand with higher food (of animal origin) demands without corresponding

expansion in the supply of adequate grazing areas bring about vandalization of farms by the nomadic pastoralist (Gefu, 1987).

Land Degradation

Land degradation is any variation to the original land that diminishes the land value and productivity.

According to (Kenyor, 1987), the causes of land degradation can be natural such as bushfire, droughts and floods initiated by climate factors, while others include the use of fire and poor farming practices attributed to human activities. Land degradation is further classified into three main types with the major subtypes listed in parentheses; soil erosion and deposition (water and wind erosion), soil degradation (soil salinity and degradation of soil structure) and ecosystem change (degradation of vegetation) (Kapoor, 1990).

Urban Expansion

Urban expansion has become a major form of land degradation, removing large areas of the agricultural land from production. For example in developing countries, in Asia and the Pacific accounted for just less than 54% of the world population nearly 3,000 million people. Yet these countries had only 17% of the world's land resources (Olson, 1984).

However, in Latin America, for example, land use per person was 0.44 hectares in 1990, due to urban expansion it is expected to decrease to about 0.35 hectares in 2010, with reserves remaining (Olson, et al 1984).

In South Asia, with virtually no reserve of land with crop production potential, the land in use per person will fall 0.17 hectares in 1990 to some 0.12 hectares in 2010 (Kapoor, 1990).

Man Made Land Degradation

It includes removal of natural vegetation (over grazing), clearing of forest, replacement of vegetation etc. (Sand, 2001). For example, in Nepal, excessive fuel wood harvesting and cutting for fodder have severely degraded forest-some 40% of buffalo feed and 25% of the feed for cows is traditionally provided by the leaves of trees (Sands, 2001).

Deforestation, clearing of forest or replacement of vegetation has led to a severe shortage of fuel wood and building materials in many areas (Monitoba, 1984). Crop residues and animal manures, which were previously returned to the soil to add valuable nutrients, are burnt for fuel (Monitoba, 1984).

Natural Processes of Land Degradation

The natural processes of land degradation include land

threats such as bushfire, drought, flood, salinity and acidity and erosion (U.S.D.A. 2000).

Natural land degradation such as erosion causes a detrimental effect on the various land use. For example, Philippines, it is estimated that soil erosion carried away a volume of soil equivalent to one metre deep over 200,000 hectares every year (U.S.D.A. 2000). Also Pakistan, 8.1 million hectares of land have been lost to wind erosion and 7.4 million hectares to water erosion (U.S.D.A. 1987).

Highway Construction

High way construction which requires sand or gravel as construction material of quarry has a tremendous effect on various agricultural lands. Thus, many cultivated lands are exposed to serious degradation. For example, in Pakistan, large quarry of about 350cm deep covered about 20 hectares of land meant for cultivation (U.S.D.A 2000).

Similar effect occurred in China when road side dwellers evaluated their houses because of high way construction which led to the occupying of about 0.6 hectares of land meant for residential and other uses (Figure 1)

MATERIALS AND METHODS

Background Information on the Study Area Location

The location of the study area is shown in Figure 3.1. Dalori town of Konduga local government area of Borno state. It is situated in North East corner of Nigeria. Dalori town lies on latitude 11°45N and Longitude 13°15E (Fig. 3.1).

Climate

The study area is characterized by semi-arid climate with average rainfall of 550mm and an average air temperature of 30°C (Department of meteorological services Maiduguri, (1997). The dry season starts from October to April which is followed by a wet season from May to its peak in August. The pattern of temperature in area is usually more constant than that of the rainfall. March-April is often the hottest months, while June-August is the rainfall duration.

Vegetation

The study is characterized by sparse natural grasses. The natural tree cover in the area is sparsely distributed. Indigenous and some exotic species of trees found in the area include.

Acacia spp Tamarindus indica (Tamarind)
Adonsonia digitata (Baobab)
Azargracha indica (Neem tree)
Eucalyptus

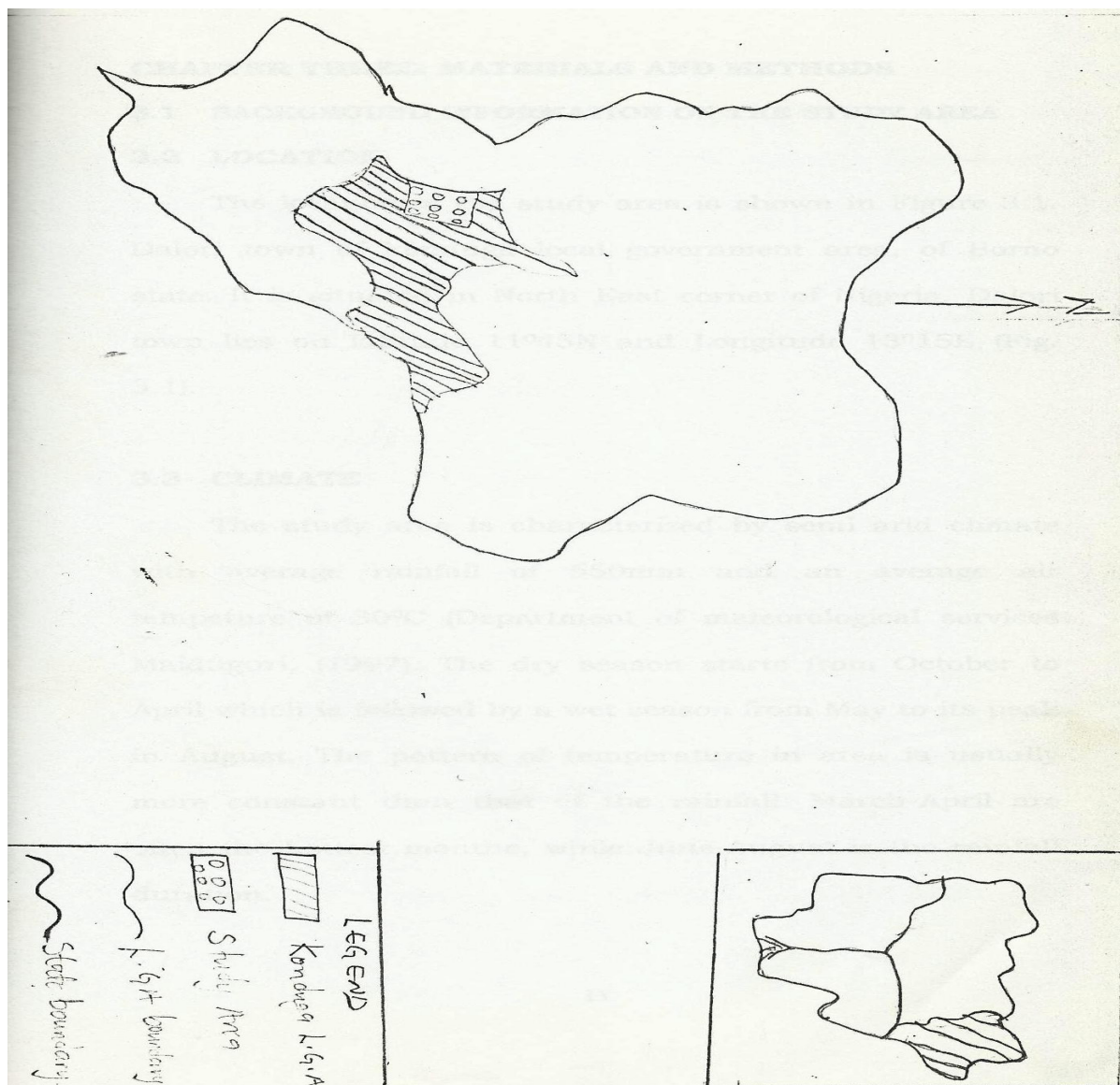


Figure 1.

Topography

The study area is characterized by flat to gentle terrain - No rocks and maintains (Iliyasu 2003)

Field Work

Reconnaissance survey of the study was made to have a feel of the locality. Questionnaires were administered to two groups of farmers to obtain the information types of land tenure system, land holdings, soil-suitability for agricultural purposes, and conflicts in the use of land, threats to use of land and the sketching of map to types of soil, land use and threat to use of land by farmers.

Questionnaires were administered to nineteen individuals farmer to obtain the similar was done to cross check the information obtained earlier from the group of farmers.

Field observations were along transects at intervals of 100m to confirm the information gathered from the farmers. Soil texture and colour were determined using hand feel method and laboratory analysis and colour chart. Soil suitability for agricultural uses was Appendix III.

Data Analysis

Simple percentage were used to analyze the data (Figure 2).

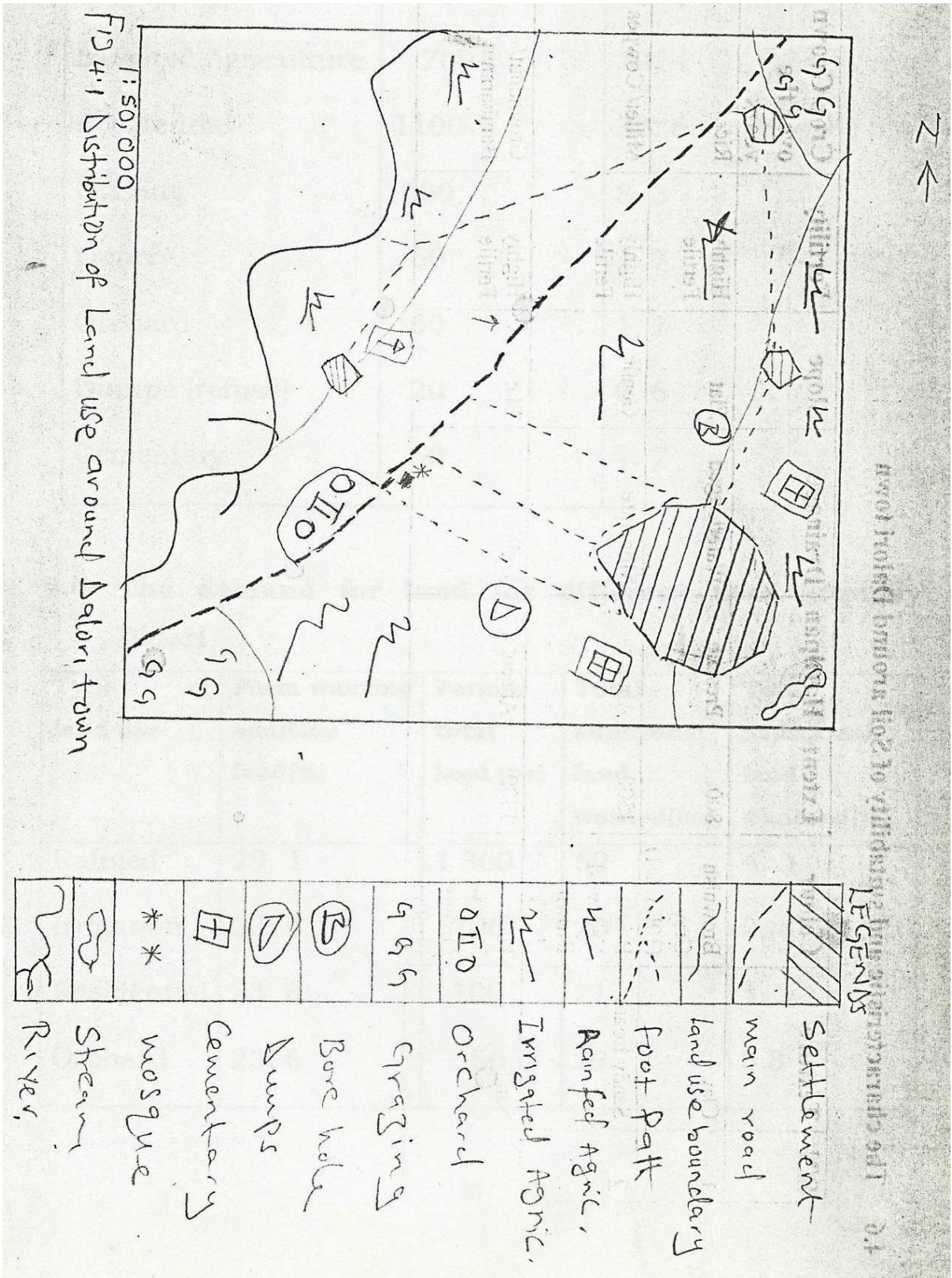


Figure 2.

Table 1. Land Tenure System around Dalori Town

S/No.	Types of Land Tenure	Percentage (%)
1	Inheritance	36.8
2	Rent	28.9
3	Free lease	15.8
4	Purchase	18.4

Table 4.2. Threats to Use of Land around Dalori Town

S/No.	Type of Threat	Farmer Affect (%)	Area Affected (ha)	Area Affected (%)	Severity Frequency
1	Bandit	52.4	35.5	71	Once in 2-5 years
2	Bush fire	14.3	5	10.3	Once only
3	Flood	23.8	8	16.5	Once last 3 years
4	Quarry	9.5	1	2.1	Not severe

Table 4.3. Conflict in Use of Land around Dalori Town

S/No.	Type of Conflict	Farmers Affected (%)	Frequency of Occurrence
1	Inheritance	5	Only once
2	Pastoralist and Famer	94	Every year
3	Sale or Purchase	1	Only once

Land Tenure System

The results of land tenure system in the study area presented in Table 1. Inheritance with 36.8% is major system. About 44.7% (Rentage and free lease) of people do not own land.

In inheritance, land shared into smaller fragment will not be conducive for Agricultural mechanization. Farmers that do not own land may be discourage from adopting long term soil conservation and management practice if such system continue, it will land to land degradation

Threats to Use of Land

The results of threat to use of land are presented in Table 2. The distribution of threats to use of land in the study area is shown in Figure 4.3. The major threat is Bandits with 35.

These threats should be avoided to overcome food insecurity and land abandoning.

Conflicts in the Use of Land

The results of conflicts in the use of land of the study area are presented in the Table 3. The dominant conflict in the use of land is that between farmers and pastoralists which affect almost all the farmers and occurs every year. These lead to discourage Farmers,

reduction of crop production and abandoning of fertile land. Grazing area should be allocated to reduce conflicts.

CONCLUSION

The result of the study area shows that inheritance is the major land tenure systems. About 45% of people do not own land which may discourage the farmers from adopting long term soil conservation and management practices. Land shared into smaller fragment making land holding too small to support the family, leading to the problem of food insecurity and land degradation.

There is loss of agricultural land to other uses which will result in land shortage and food insecurity farmers are growing crops according to the suitable type of soil. However, there are few cases where they are not growing crops according to suitable type of soil. The major threat to use of land is Bandits with 34.5ha. The conflict in the use of land is that between farmers and pastoralists which affects all the farmers and occur every year.

The result of the study area shows that major threat to use of land is Bandits with 34.5ha. The conflict in the use of land is that between farmers and pastoralists which affects all the farmers and occur every year. The following are recommended.

1. Appropriate soil conservation practices should be carried out to improve soil fertility.
2. Cultivated land should be insured against Bandits and pastoralist.
3. Similar study of land use should be carried out in every place to provide a basis for planning land use.

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