# **PROJECT**

# THE EFFECTS OF MINING ON ENVIRONMEMTS A CASE STUDY OF NASARAWA LOCAL GOVERNMENT AREA OF NASARAWA STATE.

BY:

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# CERTIFICATION

I certify that this work was carried out by AHMED ABUBAKAR GORINGO a PGD student of Geography Department in partial fulfillment of the requirement for the award of PGD in Environmental Management.

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#### The aim of this Research

The aim of this research work is to find out the effects of mining on the land and socioeconomic activities of the Nasarawa people with a view to suggesting workable proposal to minimizing the adverse effects on the areas.

#### **Objectives**

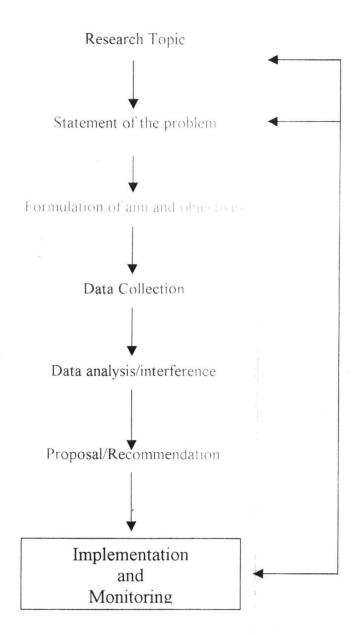
The objectives of this research are as follows:

- a. To identify the concepts and principles of mining in the study area.
- b. To examine the positive and adverse effects of mining on the social and economic life of the people.
- c. To identify the adverse effects on land topography with its environmental effects.
- d. To suggest ways and means of ameliorating the problems.

## **Scope and Limitation**

The study is principally concerned with the identification of the effects that mining has on Nasarawa', its effect on the social and economic life in the area with special reference to Nasarawa Local Government Area. Access to old mining records was hindered due to the fact that many were lost during the time of merger of the companies and creating of Nasarawa State from Plateau State.

Table 3.2 Conceptual Framework



#### Geographical Background

Nasarawa town is situated at the confluence of River Haderi and River Kurafe which are main tributaries of the Benue River. A by-pass has been constructed to the Northwest of the town between the core town and River Kurafe which was earlier a natural barrier towards the west and, presently becomes the major access to the town.

The predominant vegetation type is park savanna, which is characterized by a discontinuous canopy, shades and natural fires during dry season, which has forced the vegetation to develop characteristics enabling it to resist fires.

Among the common trees are the oil bean trees, the sheabutter tree, the locust bean tree and the Isoberline tree. A large part of the vegetation is crops and pasture land. The most important crops are yams, maize, sorghum, cassava, guinea corn and cowpea etc.

#### **Primary Data**

Direct questions were administered to the residents in the study areas. The questions were designed strictly towards the collection of vital information and statistical data required for the achievement of the measurable objectives of the study areas. Example of vital information designed for the questionnaire is:

A	-	Name				
В	-	Age				
C	-	Date				
D	-	Sex				
Ε .	-	Occupations	***************************************			
F	-	State				
G	-	L.G.A.				
H	-	Income Level				
I	-	How many ton	nes of tin you make in a day			
J	- '	What is the effect of mining in your environment				

#### **Sample Selection**

The study area cover the whole developed area of Nasarawa town consists of about 4-6 neighbourhood. Each has low, middle and high income groups. Although, in any social research, one is expected to cover ten percent (10%) of the total population but due to the scope of the study, a sample selection was randomly chosen. In all, three hundred (300) questionnaires were randomly administered in the study are.

#### **Secondary Data**

This data has been obtained through master plan, relevant text both published.

#### **Method of Data Analysis**

Data has been analysed with the use of maps and photographs.



Land Devastation/Loss of Land



Loss of Forest/Soil Erasion



Ponds

#### **CHAPTER FIVE**

## **SUMMARY OF FINDINGS AND RECOMMENDATIONS**

## **Summary of Findings**

After such an exhaustive study, it is necessary to give a summary of findings and law that guide the mining. These are given under appropriate headings.

- i. The study has shown that a wide expanse of land has been degraded and rendered infertile due to mining activities.
- ii. The land topography has been greatly scared and disfigured. The undulating plains have given way to mounds of spoils, pits, ponds and tailing dumps. In a nutshell the ecological set up of the area has been changed completely.
- iii. The mined areas suffer from both surface and gully erosion thereby reducing the soil fertility.
- iv. The cutting down of trees and grasses apart from exposing the land surface has destroyed the people's only source of firewood. As a result of the dwindling vegetation small animals like rabbits will soon disappeared.

# **Government Policies**

- i. The need to control the activities of miners necessitated some form of legislature to give some legal status through the securing of mining rights.
- ii. By this law, mined areas are expected to be reclaimed but the law came into being only in 1946 after a lot of damage had already been done to the soil.
- iii. Besides, there was no adequate legislature for the enforcement of the clause on reclamation.

- iv. Attempts to restore the devastated land however were not very successful as the relevant government agencies charged with the responsibility of monitoring the restoration work failed in the discharge of their assigned responsibility.
- v. With the decline in mining, the companies started disposing of their mining leases and expected by the mining act. This as discovered has created a lot of problems between the mining companies and the indigenous landowners.

#### Recommendations

It is considered crucial that having ascertained the numerous effects, mining activities have inflicted on the Nasarawa some recommendations have been made towards making life meaningful on the already mined land.

Therefore the following recommendations are made:

- 1. Government should make deliberate efforts to reclaim all the mined areas and see that their original fertility is regained or restored through tree planting and grass.
- 2. In this wise the Environmental Protection Agency or the Mined Areas Reclamation Unit charged with this responsibility should be properly and adequately funded.
- 3. Mining ponds that are found to be viable for irrigation/agriculture should be left intact for that purpose.
- 4. Government should assist both dry season and rainy season farmers by providing necessary farming inputs at subsidized rate.
- 5. Farmers should be encouraged by the Ministry of Agriculture to embark on fish farming using some of the ponds. The 10% of total revenue from tin mining given to the area should be used in developmental projects.

- 6. Apart from irrigation some of the ponds could become a useful source of rural water schemes.
- 7. Government in collaboration with the local community should set up mine rangers unit that will check the activities of illegal miners which is the present cause of deforestation in mining area.
- 8. Government in collaboration with the local community should set up mine rangers unit that will check that will check the activities of spillage on their farms and fishing industry.
- 9. There is the need to review the Mining Act to contain clause that makes land reclamation mandatory and a reclamation plan as a preconditioned for the issuance of mining lease.
- 10. Morê should be done on erosion control.
- 11. Government should see that the practice, where mining companies resort to selling their lease on expiration is stopped.

It is my firm belief that if the recommendation are accepted and implemented they would go a long way towards improving the situation in the affected areas.

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