RENEWABLE AND NON-RENEWABLE RESOURCES IN TARABA STATE.

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Abstract

This paper seeks to examine the socio-economic importance of renewable and non-renewable resources in Taraba state and how it has been underutilized. The paper has the objective of identifying renewable and non-renewable resources in Taraba state as well as highlighting the prospects and potentials of these resources in Taraba state. The state has about 16 local government areas. In the course of the study, both primary and secondary data were gathered. Findings shows that the state is endowed with vast untapped renewable and non-renewable resources, which would have better the state socio-economically out of her present situation given that the resources are effectively and efficiently utilized. The paper recommends that the government should enforce a realistic and appropriate environmental and natural resource management policy so as to obtain the benefits therein for socio-economic development of the state.

Key words: socio-economic, renewable resources, non-renewable resources.

INTRODUCTION

Historically, natural resources, is it renewable or non-renewable played the role of the main driver of the economics of Nations (Dendney and Flavin, 114). Similarly, the availability of natural resources became the major condition of the successful economic and technological development of other world powers including the United States, France, Germany and others (Kraft and Kameniecky, 158). At the same time, the significant role of Natural resources as the

major driver of the economy's socioeconomic development becomes obvious when the availability of natural resources, their uses and historical socio-economic and technological development of countries is compared. From the above assertion, we can confidently re-emphasize that the socioeconomic importance of the renewable and non-renewable resources in Taraba state cannot be over-emphasized.

Taraba state was created on August 27, 1991 out of the defunct Gongola. The state comprises of sixteen local government areas, which are; Ardo-kola, Bali, Donga, Gashaka, Gassol, Ibi, Jalingo, Karim lamido, Kurmi, Lau, Sardauna, Takum, Ussa, Wukari, Yorro, Zing. It also has a development area; Yangtu. The state has a land area of approximately 60,000 square kilometers, with the residence ignorantly sitting upon over forty (40) untapped natural resources.

Taraba state has an enviable topography that is made up wave like plains ad rising hills. The state is situated along rivers, one of which is the River Benue which rises from Cameroun Republic towards the River Niger southwards. Major tributaries of the state include Taraba (from which it the state got its name) and River Donga. These rivers apart from just being irrigation means also serve as source of fish, making fishing an occupation of many in the state. Generally, it is blessed with a land fertile enough for all round year farming which is attainable in some parts of the state. The state is also endowed with numerous natural non-renewable resources like barites, calcite, gold, kaolin, tin ore etc (NBS 2014).

The climate of Taraba is characterized by two (2) different seasons; the rainy season (usually from April to October) and the dry season (usually from November to March) (Abdul, 2009). With an average rainfall annually of 1,350mm, it is certain agriculture activities will blossom. It also has an annual temperature of around 28°C.

The highest point in the state is the Mambila Plateau which stands at well over 1830 meters above sea level confirming it as the highest in the country. Mambila Plateau has a near temperature climate in an otherwise tropical zone, and plains. The favourable climatic condition in the area is ideal for large-scale cultivation of some cash crops like tea and coffee as well as "Irish potatoes", wheat, pear, kola nut, apple, grape vines etc. one rich endowment of the Mambila Plateau is the over 3,000,000 herds of cattle being grazed in the area as such possessing the greatest potential for any prospective meat production and processing, dairy activities as well as leather works.

STATEMENT OF THE PROBLEM

The state is facing serious socioeconomic and political problems and challenges. The incidence of poverty increased from 28.1% in 1980 to 65.5% in 1996 and 75% by 2005 (UNFPA, 2008). More current studies revealed that about 70% of the population lives below \$1 per day while about 91% of the population lives below \$2 per day (ECN & UNDP, 2012). The State is solely dependent on subvention from federation account to meet its development and expenditure at the neglect of other resources.

Taraba State known as "nature's gift to the nation" is not just a fluke because for real Taraba State is really endowed with diverse natural resources both renewable and nonrenewable. Yet Taraba state is still amongst the poorest and less developed state in the country in terms of both infrastructures and socio-economic indicators. The presence of the Mambilla Plateau is also known as the habitat of wild animals, forest resources and even solid minerals. As a result of this, Taraba state is expected to be among the richest states in the country and contribute hugely to the nation's GDP, and also give good standard of living to its populace.

Over the years, there has been yearning from various stake holders, academicians, research experts, engineers, nongovernmental organizations and others that knows how endowed the state is in terms of both natural, human and environmental resources which are yet to be identified and harnessed to better the populace of the state. This is due to the fact that the state has refused to stop being a "civil service" state, despite the resources which could have triggered the state and its people to better living. Therefore, it is against this background that this paper attempts to examine the socio-economic importance of renewable and non-renewable resources in Taraba state.

OBJECTIVES OF THE STUDY

The general objective of this paper is to assess the socio-economic importance of renewable and non-renewable resources in Taraba state. The specific objectives of the paper will include:

i. To determine the available

renewable and non-renewable resources and their impacts on Taraba state.

- ii. To evaluate the prospects and potentials of renewable and non-renewable resources in Taraba state.
- iii. To analyze the problems associated with harnessing and the usage of renewable and non-renewable resources in Taraba state.

LITERATURE REVIEW

Renewable and Nonrenewable resources have unique characteristics. In the case of non-renewable resources their rate of growth is zero and they are eventually exhausted when extracted and used as a productive input. This implies that their contribution to economic growth is mixed. The traditional way of analyzing growth and natural resources is to include them in the production function as an input. The neoclassical model of growth is compatible with this approach, see, for example, Stiglitz (1974), Dasgupta and Heal (1979), Hamilton and Hartwick (2005), and Romer (2006). The key assumption is that natural resources are an essential input into production. That is, there can be no production without the resource in question, such as coal, oil, or gas, agricultural resources and others.

Dasgupta and Heal (1979, Ch. 7) provide a detailed explanation of what constitute essential and inessential exhaustible resources and their importance. They argue that if the output of the economy

is sufficient in the absence of a resourcein which case, a lack of that resource does not pose a production problemthat resource is inessential. However, with this, theoretical approach to analyzing the socio-economic importance of natural resources have been applied for many years. Sachs and Warner (1995, 1997) developed a useful empirical approach to addressing the issue of resource dependence. Building on the Dutch disease literature, they devised the notion of the resource curse. The Dutch disease refers to a situation in which the discovery of natural resources shrinks the economy's manufacturing sector and lowers its international competitiveness by raising the real exchange rate (Corden and Neary, 1982). The resource curse phenomenon means that resource dependence tends to lower economic growth.

Sachs and Warner (1995, 1997) conducted a cross-section empirical study for the period 19701989. Their findings suggest that resource-rich economies tend to grow more slowly than resource-poor economies. They measured resource dependence as the share of primary-product exports in the GDP. Sachs and Warner (2001) found that including or excluding agriculture in primary-product exports does not affect the results. This suggests that using any resource to proxy natural resource dependence should yield similar results. This statement has motivated us to use the share of nonrenewable exports in GDP as an

alternative measure of resource dependence. Boschini et al. (2003) used various measures to obtain similar results. They used the share of primary-product exports in GNP, the value of ores and metals exports as a share of GDP, the share of mineral production in GNP, the value of gold, silver, and diamond production as a share of GDP and the value of ore, metals, and fuels exports as a share of GDP. However, none of their measures comprises all nonrenewable resources, that is, fuels, ores, metals, precious stones, and nonmonetary gold. They concluded that institutions and the natural resources a country possesses are key determinants of whether it has a resource curse. They argue that exhaustible resources such as gold, diamonds, and oil are expected to have a negative effect on economic growth in countries with weak institutions. Institutional quality emerged as the main reason for natural resources having a negative effect on economic growth. In most studies following those of Sachs and Warner (1995, 1997), both empirical and theoretical approaches are used to explain the role of institutions. For instance, Robinson et al. (2006) and Mehlum et al. (2006) developed theoretical models to explain why institutions may be the cause of the resource curse. In both studies, the importance of institutional quality is emphasized. These researchers argue that the resource curse is dominant in countries with weak

institutions. However, they differ on the types of institutions emphasized. Robinson et al. (2006) emphasized public accountability and argued that the resource curse results from politicians' choices. They assumed that the resource is publicly owned and that the government decides how to use the resource rent. In their model, an incumbent politician seeking re-election uses his or her access to the resource rent to secure employment for his or her supporters. This leads to a misallocation of the resources rent, which adversely affects economic growth and undermining its importance.

Mehlum et al. (2006) emphasized the role of private-sector institutions because they protect the economy's entrepreneurs. They argue that the rule of law shapes the behavior of entrepreneurs in a resource-rich economy. Entrepreneurs are either rentseeks ("grabbers," to use their term) or productive. Weak institutions yield grabbers whereas strong institutions foster productive entrepreneurs. They concluded that the resource curse can be eliminated by improving institutions. Mehlum et al. (2006) also conducted an empirical study based on extending the Sachs and Warner (1995, 1997) dataset. They obtained a significant coefficient on the interaction term between resource dependence and institutional quality, which changes the negative resource effect into a positive one. However, because most of the resource-rich developing countries, especially from the 1990s, have adopted policies that attract multinational corporations in the extractive sector and the economy generally, they argue that rent-seeking behavior would have gradually disappeared from these economies to improve the efficiency of resource use.

Kolstad (2009) conducted an empirical study to determine which of the types of institution advocated by Robinson et al. (2006) and Mehlum et al. (2006) matter. Using the dataset of Sachs and Warner (1997), he concluded that only private institutions matter. These are the type of institutions that most developing countries have been working toward improving since the 1990s with the help of donors and international organizations. The initiatives aim to encourage private-sector participation in the economy.

RENEWABLE AND NON-RENEWABLE RESOURCES

Renewable resources

Renewable resources are resources that are replenished by the environment over relatively short periods of time. This type of resource is much more desirable to use because often a resource renews so fast that it will have regenerated by the time you've used it up. Examples are solar energy, animals, wind energy, plants, biofuels and others. Solar energy is one such resource because the sun shines all the time. Imagine trying to harness all of the sun's energy

before it ran out! Wind energy is another renewable resource. You can't stop the wind from blowing any more than you can stop the sun from shining, which makes it easy to 'renew.'

Any plants that are grown for use in food and manufactured products are also renewable resources. Trees used for timber, cotton used for clothes, and food crops, such as corn and wheat, can all be replanted and re-grown after the harvest is collected.

Animals are also considered a renewable resource because, like plants, you can breed them to make more. Livestock, like cows, pigs and chickens, all fall into this category. Fish are also considered renewable, but this one is a bit trickier because even though some fish are actually farmed for production, much of what we eat comes from wild stocks in lakes and oceans. Water is also sometimes considered a renewable resource. You can't really 'use up' water, but you also can't make more of it.

Liquid water can be used to generate hydroelectric power, which we get from water flowing through dams. This is considered a renewable resource because we don't actually take the water out of the system to get electricity. Like sunshine and wind, we simply sit back and let the resource do all the work.

In Taraba state various agro-based resources are found in most part of the State such as palm oil, palm kernel, cocoa, oranges, banana hides and skin and other

agricultural produce which are of greater benefit people of the State and government.

Non-renewable resources

Non-renewable resources are resources that are not easily replenished by the environment The fuels we use to heat our homes and drive our cars are non-renewable resources because there is just no way that the earth can regenerate them in a usable time frame. Minerals are also considered non-renewable resources because, not only do they take millions of years of heat and pressure to form deep underground, but they're also found in a very limited quantity on Earth. Not all non-renewable resources are usable only once, though. Example of non-renewable resources that we can identify in Taraba State are marble deposits and other minerals found in some part of the State. There is large deposit of blue stone in Sardauna L.G.A. Blue sapphire gemstone has been mined on the Mambila plateau in which over the years has been traded in different part of the world such as Thailand and Sri Lanka. Diamond has also been discovered in Mambila plateau over 2,000 ago which has created job opportunity for miners especially the teaming jobless youth in the area.

Taraba State is also blessed with vast deposit of sand that is used for building and other construction work. This resource (sand deposit) is found in all over the sixteen local government area of the state. They are found mostly around streams, rivers as well

as other water bodies. Mountain and hills are also found in some part of Taraba state. They are endowed with stones rich quarry industries.

Another most important natural resources that takes attention today in Taraba State is the Madrid "Madobiya". This resource according to the Taraba State Ministry of environment and Natural resources is found in the following local government area: Bali, Gashaka Takum Kurmi and Ussa. Gum handles, toilets seats, tiles etc can be produce from the tree. It was discovered that private investors have engaged in falling the tree. In an effort to regulate illegal and incessant falling of this tree the State government through the forestry department in the Ministry of environment is trying to conserve this resource by ensuring that the tree is replaced when it is cut down. Reports shows that the State is imposing high charges and levy on the product and by estimation the state can generate close to a billion naira annually.

PROBLEMS OF RENEWABLE AND NON-RENEWABLE RESOURCES IN TARABASTATE

Some problems faced include policy inconsistency and lack of adequate legislation, high risk and health hazards, weak regulation, lack of well equipped laboratories, unwholesome practices of stakeholders and inadequate number of trained personnel, access to capital, and environmental degradation and pollution.

Policy inconsistency and lack of adequate legislation

Government policies regarding harnessing resources over the years tend to be unstable as they come and go with the government of the day. The inconsistencies and lack of adequate legislation have undermined the utilization of these resources.

High risk and health hazard

Because mining activities in the state is mainly driven by the artisanal and small scale miners who embark on low technology and crude/traditional methods in their activities, they are exposed to high risk from obnoxious and dangerous metals such as lead and radio- active waste (Davou and Dung-Gwom,2008; Akaolisa,2006).

Weak Regulation

Activities of the artisanal and small scale miners and illegal falling of Madrid tree and timbers in Taraba state are proving difficult to curtail by legislation, and Ministry professionals saddled with the responsibility of monitoring their sharp practices are poorly equipped to face the menace. Often times, these operators are armed and desperate. Weakness of the regulations is said to be as a result of the Governments consciousness of the need to allow locals earn their living wages through small scale exploitation of minerals to alleviate poverty.

Lack of well equipped laboratories

In Taraba state, there is an apparent

lack of well equipped laboratories for conducting text on mineral raw materials, and where they exist, their equipment are often old and outdated, while the few modern and high tech equipment laboratory that exist either lack adequately trained personnel to operate them, or are saddled with problems of inadequate supply and fluctuating electricity levels which sometimes destroy these equipment. Mineral samples are often taken overseas for reliable results.

Unwholesome Practices of Stakeholders

Most gem stone producing mines are artisanal in nature and Won stones are not declared but are hidden to avoid royalty. Such stones are smuggled out of the country to international markets without any value addition, and as such are valued lowly resulting in loses of lots of revenue by the Government and even the marketers themselves.

Access to capital

Access to necessary capital and finance is a big problem to many entrepreneurs who wants to venture into exploration of natural resources in the state. The conditions required for the issuance of loans by banks and the interest rates normally scares them away as their conditions are hash.

Environmental Degradation and Pollution

Mining of minerals and exploration of some resources in has always left behind a devastating effect on the environment. Damage to sensitive ecosystems that support fish and wild life, and human health risk from contaminated water sources are a common occurrence as witnessed in some parts of the state.

METHODOLOGY

The study adopted the use of qualitative and quantitative techniques of data collection were adopted. This paper is a result of desk study of relevant journals, conference and seminar papers and other interactions on renewable and non renewable resources, as well as personal knowledge and experience of the authors. The interactions of the authors with key players in the private, public and academic sector of the ministry of environment was also of immense benefit in putting this work together.

DATAANALYSIS

 TABLE 1: Renewable Resources Found In Taraba State (Agro-Based)

S/N	RAW	LOCAL	PROCESSED
	MATERIALS	GOVERNMENT(S)	PRODUCTS
		FOUND	
1	Apple	Sardauna	Juice, wine
2	Bambara nuts	Takum, Karim -lamido, Bali, Jalingo, Zing, Wukari	Vegetable oil

3	Banana/Plantain	Takum, Karim -lamido,	Wine, juice, jam,
		Donga, Wukari	livestock feeds
4	Benn seed	Takum, Karim -lamido,	Vgetable oil,
		Donga, Wukari	animal feeds
5	Borassus	Northern part of the state	Mat, broom, brush
6	Cashew	Wukari, Takum, Donga	Cashew oil, juice,
			dye
7	Cassava	All	Starch, glucose
8	Citrus	All	Chemicals, lime,
			juicxe
9	Cocoa	All	Beverage,
			chocolate
10	Coconut	Takum, Kurmi, Gashaka	Vegetable oil,
			carpets
11	Cocoyam	All	Food, starch
12	Coffee	Sardauna	Caffine, beverages,
			wine
13	Cotton	Jalingo, Lau, Gassol	Textiles, bags
14	Cowpea	All	Beans flour
15	Date palm	Northern part of the state	Jam
16	Grape	Karim-lamido, Gashaka	Juice, medicines
17	Grape Fruit	Kurmi, Sardauna ,	Juice, wine
		Gashaka	
18	Groundnut	All	Vegetable oil,
			Animal feed
19	Guava	All	Jam, juice
20	Guinea corn	All	Flour, animal feeds
21	Gum Arabic	Karim-lamido, Lau	Gum
22	Irish Potato	Sardauna	Chips
23	Maize	All	Semovita, animal
			feeds and vegetab le
			oil
24	Mango	All	Jam, juice
25	Milk	Jalingo, Gassol, Sardauna	
26	Millet	All (except Flour and animal	
		Sardauna)	feed
27	Onions	Northern zone of the state Seasoning, flavor	

28	Palm trees	All	Palm oil, soap, pomade, rugs, palm wine, broom, margarine, candles
29	Pawpaw	A11	Jam, pepin
30	Pear (Avogarados)	Sardauna	Oil, jam, pomade
31	Pepper	A11	Spice
32	Pineapples	Sardauna, Kurmi, Takum, Gashaka	Jam, juice
33	Rice	All	Cheese/Butter, ice cream, caramel
34	Rubber	Kurmi	Latex, tubes, raisins, tires, gum
35	Soya Beans	All	Powder milk, local maggi, vegetable oil
36	Sugar Cane	All	Sugar
34	Sun Falower	Sardauna, Donga	Vegetable oil, animal feeds, flowers
37	Sweet potatoes	All	Malt
38	Tamarine	Northern part of the state	Dye, jam
39	Tea	Sardauna	Beverages, wine
40	Timber	Sardauna, Kurmi	Timber, furnitures, fuel(wood)
41	Tomatoes	All	Juice, Puree
42	Water/Sweet Melon All		Vegetable oil
43	Wheat	All	Flour, beer
44	Yam	All	Yam flour, animal feeds

SOURCE: field survey, 2016

Agriculture, Forestry and Water Resources

One of the most important assets of the state is the abundant arable land suitable for cultivation of a variety of both food and cash crops. In fact, it is estimated that more than forty percent of the total area of the state is arable, yet not more than forty percent of this is presently cultivated. Crops cultivated in the state include some oil palm, coffee, tea, coconut, citru fruit, cotton, groundnut, beans, rice, maize (corn; Guinea corn, millet, sweet potatoes, yam, bambar) and other forest products.

Agriculture is, so far, the greatest employer of labour with over, eighty (80) percent of the labour believed to be engaged in farming. This is made possible by the availability of richly fertile farmlands and favourable climatic conditions. Agricultural activities are coordinated by the Taraba Agricultural Development Programme (TADP) which renders extension services to small scale farmers.

Other agencies, liki the Upper Benue River Basin Development Authority and the Natiqonal Agricultural Lam Development Authority (NALDA) are also engage in promoting food production, especially among small scale farmers. There are a few large scale farm projects like Abiola Farms at Dakka, T.Y. Area Takum and Cattle Ranches on the Mambilla Plateau et cetera. The southern part of Taraba state is an embodiment of forest resources. Forest reserves have been established in various parts of the state, either for timber development or fuelwood exploitation. These include the forest reserves at Chicory, Gembu, Bissaula, River Amboi, Kamatan, Kurmi, Donkin, and Gongon.

Others are at Jalingo and Bakin Dutse, Garbachede, Dakka, River Suntai and Gongola valleys. There are several other smaller forest reserves all over the state. These forest reserves cover an estimated land area of about 1,442 sq km. So far, the Baissa Timber Company is the largest timber industry in Taraba State. Fishery and fish smoking activities are the major occupations engaging a substantial number of people especially in Ibi, Karim, Lamido, Lau and Ardo Kola Local Government Areas.

The Rivers Benue, Donga, Taraba and Mayo-Ranewo provide sufficient opportunities for fishery activities in the state, other important basic activities in the state include poultry and nomadic cattle rearing. With over one million heads of cattle, Taraba State has sufficient raw materials for the dairy industry.

TABLE 2: Non Renewable Resources Found In Taraba State

S/N	RESOURCE	LOCAL GOVERNMENT	USAGE
1	Barites	Ibi, Wukari, Karim - lamido, Lau	White paint, wall paper, drilling mud
2	Bauxite	Sardauna	Aluminum, abrasive, refractory bricks, aluminum compounds
3	Calcite	Ibi, Lau, Yorro	Glass, fertilizer, lime, paint, bleaching powder, soap, flux and paper making
4	Cassiterite (Tin Ore)	Gashaka, Sardauna	Metal alloys, Tin Oxide, Tin Chloride
5	Feldspar	Jalingo, Ussa, Takum, Donga, Ibi	Ceramics, Glass, Sanitary wares, Tiles, artificial teeth, mild abrasives, soap

6	Galena	Wukari, Karim-lamido	Lead metal, cable covering, paint, ammunition, metal alloys
7	Gemstones	Donga, Sardauna, Yorro, Gashaka, Kurmi, Karim-lamido	Jewelries, ornaments
8	Gold	Kurmi, Sardauna, Gashaka	Jewelry, Coinage, serve as money
9	Graphite	Gashaka	Lead pencil, dry batteries, paints, dynamo brushes, lubricants
10	Kaolin	Sardauna, Donga	Ceramics, paper, paints, porcelain insulators, toothpaste, pharmaceutical products
11	Limestone	Ardo-kola, Lau, Karim-lamido	Cement, Lime, fertilizer, flux (used in melting iron
12	Muscovite (Mica)	Takum, Gashaka, Ussa	Electrical insulators, paint, lubricants
13	Quartzite	Yorro, Donga, Takum, Ussa, Jalingo, Ardo - kola	Abrasive, glass, toothpaste
14	Sapphire	Gashaka, Sardauna	Metal alloys, Tin Oxide and Chlorine
15	Tomaline	Kurmi, Sardauna, Gashaka	Jewelry, coinage, used as money
16	Topa	Takum, Ussa	Abrasive, ornaments
17	Uranium	Yorro, Zing	Nuclear energy, Uranium for glass stain, dye, photography, radium for treatment of cancer
18	Zircon	Takum, Ussa	Spark plugs, electrical furnace, amour plate

SOURCE: field work, 2016

Mineral Resources

Not much utilization and exploration has been done yet about the vast natural resources of Taraba State. However, the geological structure of the area suggests great potentialities. Preliminary surveys have shown the existence of large deposits of marble at Lanadu (Zing LGA), graphite at MayoButali (Jalingo LGA), gelano and barytes in Ibi and Lau LGAs, salt deposits at Akwana (Wukari LGA), lead/zinc at Arufu (in Wukari LGA) and iron stone at Jalingo amongst others.

FINDINGS

In the course of this study it was discovered that there are numerous and vast unexplored and untapped renewable and non-renewable resources in Taraba State which are

essential for industrial and household use for socio-economic development of the State In essence these resources are useful for industrial ventures which include:

- ➤ Breakfast cereal production
- > Fisheries
- Flour mill industries
- Fruits and vegetable processing industries
- Machine tools and light engineering industries
- Mechanized dairy and livestock farming
- Packaging and canning
- Paper production industries
- Leather and tannery work industries.

Even though, some government and private owned enterprises have set the pace towards ensuring that some if not large, but are medium scale enterprises to take advantage of the vast endowment of natural resources available in the state that has prompted some socio-economic progress within the state. Some of these enterprises and industries include:

- Highland tea located in Sardauna local government making use of the available tea plant that are essential for caffeine extraction, beverages etc.
- Numerous table (pure) water factories located in almost all the local governments of the state making use of the water sources endowment in the state.
- ➤ Block industries located in all the local governments of the state and they

make use of the vast endowment of sand in all part of the state mostly from rivers and other water bodies.

- Rice processing factory one available close to the new central bank building that makes use of the rice from agricultural sector processed in the form of foreign rice.
- Gashaka gumti national park located at Gashaka local government serves as tourist centre and recreational park for tourist both local and international. And others.

In as much as these resources has supported the socio-economic development of the state, some activities of the resource extraction and processing (mostly done illegally) will have negative effect on the environment both in the short and long run. In the short run, noise, land, water and even air pollution causes health issues to the society at large. Also the issue of "Madrid" exploitation will in the long run cause deforestation which will lead atmospheric degradation that will later cause issues like Global warming (Green House Effect).

C O N C L U S I O N A N D RECOMMENDATION

Conclusion

Taraba State like other States is blessed with abundant natural resources (both renewable and non-renewable resources) which have potentials of making the State an industrialized, self reliant and resourceful State. Research has shown that out of all the natural resources embedded on earth only two (2) that Taraba State is lacking. Despite the fact that the State is endowed with numerous natural resources but these resources are mis-utilized and under-utilized.

Recommendation

Taraba State is blessed with natural resources which can be harnessed for industrial and socio-economic development to improve the quality of life of the people. In recognition of these, the following recommendations were put forward, they are:

- 1. The environmental impact of natural resources development processes though numerous and quite challenging, can be addressed through the development and enforcement of a realistic and appropriate environmental management plan.
- 2. The Government should ensure consistent and business friendly policies, while at the same time give guarantees and grants to investor in mineral resources sector as is applicable in the agricultural sector.
- 3. The environmental protection policies and the requirement for environmental assessment initiative should be strictly enforced by the relevant government agencies empowered by law to do so.

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