

Culture and Land Administration in an Industrial Environment; the Residents' Perception – Case Study of Warri Region, Nigeria

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Key words: Industry, Culture, Conflict, Development, Land, Environment

SUMMARY

The study attempted to confirm the words of Tac-Il Lee (2000) that development (in African nations after Independence) has led to widening gaps between man and his natural environment, as well resulting in social cultural diversities and inequalities.

Reconnaissance survey on the study in Warri Region, Nigeria revealed that major industries in the area were oil mining, oil servicing and petro-chemical establishments. Thus, populations in the study area were concentrated around the major industries located in settlements like Ugorodo, Koko, Opuekeba, Efurun and Warri Centre

The study purposely sampled 1,205 houses located within a radius of 3kilometres to each of six industrial clustered zones in the region. Ten percent (120 respondents) of the household heads in the sample frame were systematically selected for questionnaire administration. Residents' Satisfaction Index (RSI) as reflected in Likert's (1961) scale was used to determine the impacts of industries on socio-cultural and economic variables that were directly related to land administration and management in the study area.

Research revealed that almost all the respondents (99.2%) were Christians, with about half (57.5%) of them engaged in white collar jobs, while 82.5% of the household heads migrated and settled in Warri within 1980 to date. Despite the promulgation of the 1978 Nigerian Land Use Act (LUA) that vested ownership of land on the Government of the country, findings showed that 66.7% of the household heads indicated that they secured ownerships of land from indigenes through customary land tenure system (that is after the promulgation of the LUA in Nigeria).

Similarly, 60% of the respondents agreed to have experienced conflicts on land in the area. Only 30.8% of the respondents indicated that the Nigerian Land Use Act of 1978 should be sustained. The RSI test revealed that the presence of industries had significant effects on socio-cultural variables relating to land than socio economic attributes on it in the study area. Residents' opinions on future industrial location identified preparation of Environmental Impact Assessment (EIA), public participation and location of industries far from human environment as means to sustainable living in the area.

The study recommended that clauses that generate conflicts on land in the 1978 LUA should be amended. The quest for socio economic development should be married with socio cultural life style of the residents through promotion of cultures that encourage morality, sanity, and unity; and preserve land values and antiquities in human society. There is the need to harmonise contributions from policy makers, professionals in the fields of social and environmental sciences and public opinions at the inception of industrial location so as to balance economic benefit with socio-cultural life style and physical development of cities in developing nations like Nigeria.

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1. INTRODUCTION

In the wake of globalisation, the hegemony of the urban economy resulted in cities becoming the export platforms agglomerating business through global communication networks that link it to other global cities. This has been made possible through location and localisation of industries. Paradoxically, it has led to the extent of widening gaps between man and his natural environment, as well, resulting in social cultural diversity and inequalities (Tac-Il Lee, 2000). One of the arguments that have been advanced for the policy of stimulating economic growth by the concentration of public and private investments in selected locations or growth centres is that such concentration is an effective means of inducing higher levels of development over a much wider area (Jessica, 1998). According to Berry (1969), growth impulses and economic development trickles to smaller places and ultimately infuses dynamism into the most tradition bound peripheries.

Economic growth and development needs space for it to be effective, in other words, the environment plays an important role towards economic growth and development. The term environment here refers to the surrounding in which man lives. Balance relationship between environment and development meets the needs of the present without compromising the potentials of future generations'.

In traditional societies like Warri, Nigeria, human settlement predates industrial location. Environment deals with the economy, culture, religion, family organisation, political and state of technology. These six elements of man's social environment constitute the ways man interacts with his environment. While one may not be sacrificed for the other, there is the need to promote harmony within competing uses. In African nations where culture and tradition are treasured, the two have been linked with peace, conscientious living and harmony among people (Fadipe, 1970; Tinashe, 2000; Keefe, 1992; Phinney, and Alipuria, 1990; Jane, 2001 and Beh, 2003). Industrialisation as a latecomer to the environment has been advocated and tested to transform the economies of many third world nations (Doeringer and Terkla, 1995; Ighalo, 1998). It has also been noted to have negative effects on social and cultural settings of the people by changing traditions, increasing environmental pollution and altering cultural traits of the indigenes (Jessica, 1998). These automatically result in loss of indigenous tradition, moral decadence, poor health and heterogeneous society, which if not well coordinated by policy makers, would affect cultural setting of the people and distort socio-economic development of the area in the long run. The study examined the socio cultural changes in Warri, Nigeria as caused by the location of industries in the area. It identified and analysed methods of land ownership practiced by the people and the socio-cultural conflicts arising from these in the study area. It also established the

relationship existing between moral decadence and industrial location in Warri Region, Nigeria.

2. A REVIEW OF INDUSTRIAL LOCATION AND ITS SOCIO- CULTURAL EFFECTS ON HUMAN ENVIRONMENT

Previous works related to this study have revealed that industrial establishments within human environment produce both positive and negative impacts on host communities {Robinson and Solin (1971) Salvatore (1972), Moseley (1973), Marshal (1978), Balasubrahmanya (2000), VidyutJoshi in <http://www.unesco.org/csi/index.htm>}. Socio-culturally, industrial location has been noted to have effect on family value, heighten land value and altering its ownership, cause cultural commercialization, attract immigrants with their foreign heterogeneous life styles, disrupt indigenous social setting, erode local languages and promote moral decadence like prostitution, crime, gambling among others (Schilder and Boeve (1996), Sidhu (2000), Ndonwa et al (2004), Daniela (2004), Tracey and Tim (1999), Tac-II Lee (2000) and Jane (2001).

Tracey and Tim (1999) and Jane (2001) both comment that influx of foreigners into a traditional society lead to erosion of local languages. They further argue that the introduction of foreign languages or adulterated ones could also render indigenous languages to be inferior and unacceptable in normal transaction. This could be more pronounced where industrial workers are the ruling class both in term of population and economic status in local communities. Thus, local languages that were generally acceptable could become the languages of the poor and second-class citizens.

By implication, the poor indigenes would be forced to drop their languages, to learn that of the subjugators. The extended effect of this could spread to other aspects of the hosts' cultures and traditions. Along this line, UNESCO (1982) and Tac-II Lee (2000) raise the fear that a norm of 'less phenomenon' could eventually prevail. Perhaps, this is why the traditional indigenous cultures and values of African nations have been regarded as something retarded, out of style, and even inferior to Western cultures (Tracey and Tim (1999) and Tamara (1999).

Study conducted by Grindley (1997) in Kenya, on those of Mount Eglon as tourism industry reveal that tourism has exposed and weakened the significance of traditional believe of the indigenes living around the area. Circumcision of male children, which was usually conducted as ceremony on the mount, has been abolished, being exposed to foreigners, who always criticized this as barbaric. The cultural effect of this as showed in Grindley (1997) work was that youths who missed these rites because of shame were taken inferior to those few who still defied the shame to perform the circumcision Grindley (1997). This could be why UNEP (2002) in <http://www.uneptie.org/pc/tourism/sust-tourism/soc-drawbacks.htm> argues that tourists and industrial workers with their foreign cultures can cause change or loss of local identity and values, brought about by several closely related influences

Similarly, traditional marriage in the area (Mount Eglon, Kenya) was said to have negative effect on the purses of bride grooms' families who used to pay huge dowry on their brides before they could marry them. The influence of tourists on young ladies in the area has led many of them to pre marital sex and culturally cheapened the worth of spinsters in the area. This has automatically reduced dowry price and made marriage affordable to poor bachelors. The old practice, though not encouraging and different from western culture, was a measure against divorce in the area. Marriage as conceived by the indigenes is a permanent yoke that must never be broken. A change in the heavy dowry paid on women in the area is taken synonymous to false marriage that would automatically result in divorce and remarriage because of the 'cheapness' of women Grindley (1997).

The socio cultural effects of industrial location on land and its resources in the work of VidyutJoshi in <http://www.unesco.org/csi/index.htm> show that much of the agricultural land in the costal areas of India has been sold or rented for ship breaking industries. This made many of the farmers who sold their land to become jobless. Many of them were forced to seek engagement in industrial sector. These, coupled with influx of immigrants, representing 18 percent of the population heighten the prices of foodstuff. VidyutJoshi's study also reveals that land fragmentation and rise in its value in the costal area of India have resulted in communal conflicts in the area.

Similarly, the Niger Delta region of Nigeria has featured in global discourse as a region plagued by non-violent demonstrations, violent protests and intra communal wars over resource control. The underlying causes of agitation in this region being the presence of mining industries located in the area. About 95% of natural forest cover has been lost to deforestation, leaving 5% contained in the Southeast region, oil spill which is a common occurrence in the area contributed to change of agrarian living to a forceful search for industrial jobs Omisore and Abegunde (2002).

Effects of joblessness in the area make the men violent and their ladies engage in sex hawk to cope with the economic hardship. This has resulted in sporadic spread of AIDS in the area. The 2001 Nigerian Government HIV Sero-prevelence statistics demonstrated that the area was more infected than any other region in the country. The nine states (Abia, Akwa Ibom, Bayelsa, Cross River, Delta, Edo, Imo, Ondo and Rivers) that form Niger Delta region fall among the 10 Nigerian states with the highest sero-prevelence rate (Udonwa et al, 2004).

In a country where oil constitutes over 90% of the nation's export, greed in the part of government and compromises in dealing with multinational companies have crippled the implementation of "goodwill" national policies and laws. The management structure at best is fragmentary, and there exists similar government agencies carrying out the same functions, often times leading to conflict between government agencies and stakeholders. Eno (2005) observes that the laws and customs of indigenous people have often been sidetracked. The socio cultural implications of resource depletion have far reaching multiplier effect and its importance is underscored by communal agitations and high national poverty statistics.

Reports by Anup (2004) and Eno (2005) show that there have been many clear examples of corporate influence in the Nigerian government repressing the indigenes' protesters. The military rulers have been accused of thousands of killings, house/village burnings, intimidating people, torture and so on. Oil firms like Shell have been accused of its involvement in the killing of Ken Saro-Wiwa while Chevron was marked to have used helicopters in carrying Nigerian military that opened fire upon protesters, the corporations are facing harsh criticisms for the way they have been handling (or encouraging) conflicts in the Niger Delta area of Nigeria (Anup, 2004; Eno, 2005). All these occurred due to the presence of oil companies on the land of the Niger Delta people.

It was also observed that the area supplies over 85% of external revenue that caters for about 130 million Nigerian population. This attracted immigrants who flood the place in search of jobs that could not even absorb all the working class of indigenes' populations. This has led to cultural exposure to both foreign and inter tribal migrants. All these resulted in high rise of food stuff, inter marriages, prostitution, loss of traditional values, high land values, communal and political conflicts on land and its resources, corruption and crime among others (Eno, 2005).

3. THE SOCIAL EXCHANGE THEORY

Relevant to this study is the Social Exchange Theory as seen in the works of Blau (1964); Coser and Rosenberg (1969); Ekeh (1974); Cook and Whitmeyer (1992); Chadwick-Jones (1976) and Cook and Whitmeyer. (1992). This theory, according to Coser and Rosenberg (1969), Ekeh (1974) and Chadwick-Jones (1976) is perceived high and balanced when the impacts of exchange of resources between commercial or industrial establishments and residents of host communities are positive and enjoyed by the people. In other words, the exchange of resources between the duo is low and imbalanced when only one side benefits (particularly the commercial or industrial establishments) while the host faces negative impact of the industrial establishments in the concerned areas (Cook and Whitmeyer, 1992).

Implicit in this is that a community will engage in exchanges of resources (in term of land, labour, raw materials and capital investment) and allow continual stay of industries located on its land if the resulting rewards are valued and produce growth and development of the host and perceived losses do not exceed perceived rewards (Daniela, 2004). In the corollary, the existence of an organisation that generates negative impact without satisfactory rewards that could benefit the residents would attract conflicts (Wright, 1984). This means that until there is a reversal, the host would continue to be hostile, irrespective of agreement formed, threats posed by the organisation and supporting agencies and false hope presented.

The original works of Ekeh (1974) and Cook and Whitmeyer (1992) focused on tourism industries and local residents as host. According to them, factors like economy, environment, social and culture of a place affect residents' perception of tourism and their support for or opposition to tourism industries in any given area. Significant in this is that there are no industrial activities without their effects on people. Proper planning and assessment would

therefore foresee negative effects to avoid, and open positive opportunities to effectively utilise. This, if done, would aid rewards to enjoy and avoid ill effects that could pose resistance from residents.

In Niger Delta region of Nigeria, where Warri town is located, the presence of oil as a natural resource deposit led to establishments of petroleum industries, which instead of benefiting the residents have generated severe negative impacts on the hosts. These firms could not be located in other areas where the oil deposit advantage is not found. Perhaps, this is why Doeringer and Terkla (1995) argue that the presence of positive externalities and availability of uncommon locational advantages explain the clustering process, whereas specific location sites for each cluster may depend on either 'historical accident' or the cost advantages provided by immobile factors that attracted the firms anchoring the cluster (Doeringer and Terkla, 1995).

Relevant in this theory as it affects the study area is that there is need to have an in-depth understanding of not only the environmental and economic settings of a place, but the social and cultural lifestyles of the people too. The exposure of the relationship between man and socio cultural environment unveils his ties, beliefs and customs. Attempts to strike a balance between these could lead to increment in rewards to be enjoyed by the people, harmonisation of socio-economic goal and true welfare of the people. This could even reduce resistance to the existence of industries that are not compatible with human environment

4. INDUSTRIAL LOCATION IN WARRI AND THE CULTURAL SETTING OF THE PEOPLE.

Warri is a port town located in the south central part of Delta State. It has an area cover of about 33.2sq.kilometres and lie along the northern bank of Warri River with typical coastal mangrove vegetation. It has a total population of 300,720 people with two local government councils. The two local government councils form Warri Region. Its south local government area has a population of 213,276 while the north local government area population is 87,444 (1991 census). Warri Region is located on latitude 5°31'N of the Equator and longitude 5°44'E of the Greenwich meridian.

Warri is the economic heartbeat of Delta State, being the divisional headquarter for Shell Petroleum Development Co-operations (SPDC), also a swamp location for exploration and production of oil for SPDC. Other oil companies as well as oil servicing companies are also situated in the town.

4.1 Industrial Activities in Warri Region.

Major industries in the area are oil mining, oil servicing, petro- chemicals and sculptural and bronze making establishments. The latter are classified as tourism industries, which are not well developed. They are the traditional industrial activities of Warri people carried out in cottage form and are dated back to pre-colonial era. One can not deny the fact that there is an

influx of tourists into the area to either see the huge damage done to the environment due to exploration and exploitation activities by Nigerian government and foreigners against the rich cultural heritage of the Ijaws and Urobhos who are the two dominant ethnic groups in the area (Gilbert, 1999).

The important areas of concentration of these industries are in Koko, the operational headquarter for western division for the Chevron Nigeria Limited (CNL); Warri Centre, Ugorodo community with its seven villages and Opuekeba community which is the location of the CNL production platform and Efurun, the oil exploration centre for some of the oil mining firms in the area.

The populations of these areas as seen in figure 1 are concentrated around these major industries located in the main settlements like Ugorodo, Koko, Opuekeba, Efurun and Warri Centre. Others are scattered in villages and fishing camps along the coastline, bank of rivers and creeks, swamps and islands. Fishing and agriculture are the main occupation of the villagers and canals are transportation means.

4.2 The Socio- cultural Life Style of the People in Warri

The major tribes occupying Warri are the Ijaws and Urhobos. Other minority groups include Isokos, Itshekiri and Ukwanis. Warri Kingdom is governed traditionally by 'Olu' (king) of Warri. The Olu of Warri and his chiefs, who are elected from all the tribes in the area, oversee the socio cultural activities of the kingdom. In other words, there exists traditional court system where cases are settled and judgment determined on issues that affect the land and the people.

Three types of religious worshippers are found in Warri Region. These include traditional, Christians and Moslems. According to Fadipe (1970), Christianity and Islam are foreign religions that came late to Africa nations, but have greatly influenced the physical, economic and social aspects of the societies. This assertion is common to Nigeria, and Warri in particular. The traditional religion in the area places values on land, and in every community, exerts restrictions on certain areas for conservation as grooves, shrines and historical sites. Such reserved areas provide green belts in human society and preserve natural resources, antiquities and heritages found in them.

These traditional values on restricted areas have been trampled upon in the study area. Some of those lands have been taken over by foreign investors and oil explorers who know nothing about the tradition of the land and give little attention to natural resources conservation and preservation. Nigerian government complicates this by issuing certificate right of occupancy to prospective investors without the consent of the indigenes. This has fuelled conflicts between government and the people of the area.

In essence, land in Warri is communally owned within the geographical limit of every ethnic group. Community land is then fragmented and shared within chiefs and clans who share

their land portions among families' male members. In other words, land in Warri is transferred as family land by heritage after fragmentation into parts depending on the number of male children in each family. In the past, it was a taboo for a female to own land in Warri. Although this practice is fast forgotten due to influence of western culture.

5. THE NIGERIAN LAND USE ACT AND SUSTAINABLE DEVELOPMENT IN WARRI

In 1978, the Nigeria government in his bid to abolish land tenure system and open land to investors who could use their entrepreneurships to promote economic development through effective utilization of land and its natural resources, promulgated a decree called the Land Use Act. The Land use Act, formerly known as Decree No. 6 of 1978, was a creation of the military government under General Obasanjo (as he then was).

It was based on four objectives. The first aimed at removing the bitter controversies on land and related issues, resulting at times in loss of lives and limbs. It also sets at streamlining and simplifying the management and ownership of land in the country. The act was also prepared to assist the citizens who need to secure land in any part of the country, irrespective of the socio-cultural background and remove disparity in land distribution by ethnicity. In addition, it aimed at enabling the government to bring under the control the use to which land can be put in all parts of the country and thus facilitate planning and zoning programmes for particular uses.

Thus, the land use act vested ownership and control of land in each State (except land vested in the Federal Government or its agencies) solely in the governor of the State, who would hold such land in trust for the people and would henceforth be responsible for allocation of land in all urban areas to individuals, residents in the state and to organisations for any development. Similarly, powers with respect to non-urban areas were conferred on local government chairmen.

The traditional system of land ownership which has been in practice even before colonization, recognises sacred lands like grooves, shrines and historical sites, it also considers the custom and belief of people in the community. The reverse is the case with the land use act. This has led to government granting certificate of occupancy to oil firms to encroach on lands that ought to be preserved or conserved. The procedure of securing the certificate of occupancy from government is cumbersome for individuals and illiterates and the cost unbearable for the poor, who ordinarily without the land use act would have had access to land for farming and housing. It should be noted that about 70% of Nigerians lack formal education.

In Ngor Okpala in Imo State, arable land belonging to local communities was taken without negotiations or consultations. In other words the act deprives poor people of security to land and fails to promote sustainable livelihoods among citizens of Nigeria where over 60% of the population earn less than 1 US dollar per day

(http://www4.worldbank.org/afr/poverty/monitoring/sustainability_en.htm). This contradicts the 1999 Constitution of Nigeria and other provisions under Section 16 (2) (d) that recognizes the right of the people over their properties. This could be why people of Warri clamoured for the withdrawal of the land use act from law, stressing that they have the control over their resources.

6. METHOD OF STUDY

Data used in this study were derived from primary source. This was done through preparation and administration of questionnaire designed to seek residents' opinions on the socio cultural impacts of industrial location in the study area. Direct observation and oral interviews at reconnaissance survey were also used to compliment data collected through questionnaire administration.

The study adopted cluster-sampling technique in counting of houses within radii of 3 kilometres to the identified points where there were concentrations of industries in the study area. Six clusters were identified in the Study area. A total number of 1,205 houses were identified and 120 household heads living in 10% of the systematically selected houses were interviewed. The data need cut across the socio economic and cultural variables of the people. Information collected on the socio economic life style of the people touched their income, age, gender, years of residency, household sizes, education and occupation. Other data need probed into methods of land ownership, building types and their ages, conflicts experienced due to industrial location and people's perceptions on the general effects of industrial location on the human environment in the study area.

Chi-squared (X^2) test and regression analysis were employed to show the degree of relationship existing between land use act of 1978 and degree of conflicts occurrence on land, and the impact of industrial concentration on the lifestyle (social and cultural) of the people. In the course of this study, variables with social, economic and cultural attributes were identified as socio-cultural indicators (SCI). They represented the perception of residents. These variables were termed the actual perception of residents (APR) in this study. The thirty-one variables used were rated using Likhert's (1961) scale as "very much satisfied", "satisfied", "just satisfied", "dissatisfied" or "very much dissatisfied" to indicate the residents' satisfaction on dissatisfaction as the case may be. During analysis, each of the ratings was assigned a weight value of 5,4,3,2, and 1 respectively. To arrive at the Residents' satisfaction index on each of the variables, the summation of the weight value (SWV) calculated was divided by the total number of questionnaires recovered. The SWV was calculated through the addition of the product of the numbers of responses to each of the variables and the weight value attached to each rating (see Afon, 2000 P.118).

7. ANALYSIS OF DATA

7.1 Socio-economic Characteristics of Residents in the Study Area

The socio economic characteristics of the respondents drawn for this study are summarized in table 1. The table shows that women who were household heads in the study area represented about one third (36%) of the respondents. It is evident also in the table that respondents between the age group of 21– 40years constituted the highest percentage (77) of household heads, next to this were those in age group 41– 60years with 22.5%. Respondents below 21years of age had 0.5%. No respondent indicated to be above 60years of age in the study area. The import of this is that most of the household heads in the study area were within the working class and were dominated by males.

Analysis of the marital status of the respondents revealed that single and married household heads in the area were 44% respectively. Those who were separated from their couples had the least percent (3.55%), while respondents who were widowed had 8.55 percent. It can be deduced that both single and married household heads dominated respondents in the study area. Table 1 also showed that most (70%) of the respondents had post secondary school education. Only 7% of the residents were illiterate.

Study also revealed that 4.4% of the residents earned less than 7,500 Naira per month (less than one Dollar per day) while 63.2% of them earned above 15,000 Naira monthly (above 2 Dollars per day). The rest 32.4% of the respondents earned between 7,500 and 15,000 Naira monthly (equivalent of 2 Dollars per day). In other words, almost two third of the household heads in Warri Region lived above poverty line.

Considering the occupations of the respondents in table 1, about half (57.5%) of them were civil servants while 25% of the respondents indicated that they were traders. Only 7.5 % were artisans. The rest 10% of the residents claimed not to be engaged in a specific vocation for living. The table also shows that Christianity was the dominant religion in Warri region as at the time of study. Only 0.8% of the residents were Traditional worshippers. None of the respondents indicated to be a Muslim. Information on residents' length of stay in table 1 showed that most (82.5%) of them migrated to the study area within 1980 and date. The rest 17.5% of them had stayed more than 25 years in Warri Region. This shows that most of the residents living in the study area settled in the place after the promulgation of the Nigeria Land Use Act of 1978.

Table 1: Socio-economic Characteristics of Respondents in Warri Region, Nigeria

SEX		
VARIABLE	FREQUENCY	PERCENTAGE
MALE	77	64
FEMALE	43	36
TOTAL	120	100
AGE GROUP		
BELOW 21 YEARS	01	0.8
21-40 YEARS	92	77
41-60 YEARS	27	22.2
TOTAL	120	100
MARITAL STATUS		
SINGLE	53	44
MARRIED	53	44
DIVORCED	04	3.55
WIDOWED	10	8.55
TOTAL	120	100
EDUCATIONAL STATUS		
ILLITERATE	08	07
SECONDARY SCHOOL	28	23
POST SECONDARY	84	70
TOTAL	120	100
MONTHLY INCOME (IN NAIRA)		
BELOW 7,501	05	4.4
7,501-15,000	39	32.4
ABOVE 15,000	76	63.2
TOTAL	120	100
OCCUPATION		
CIVIL SERVANTS	69	57.5
TRADERS	30	25
ARTISANS	09	7.5
UNEMPLOYED	12	10
TOTAL	120	100
RELIGION		
CHRISTIANITY	119	99.2
ISLAM	NIL	-
TRADITIONAL	01	0.8
TOTAL	120	100
LENGTH OF STAY IN THE STUDY AREA		
BEFORE 1980	21	17.5
1980-2000	87	72.5
YEAR 2001 TO DATE	12	10
TOTAL	120	100

Source: Author's Field Survey, 2004.

7.2 Acquisition of and Conflicts on Land in Warri Region, Nigeria

Table 2 showed that most of the pieces of land in the study area were owned by the community and trusted under individuals' families. This accounted for 66.7% of the total respondents. The rest 33.3% indicated that land in Warri Region belonged to the state government. This statistics confirms the result in the same table 2 which shows that 64.2% of the house hold heads procured their plots of land from private individuals while the rest 35.8% secured theirs both from the State government and individual families that owned the pieces of land in the study area.

Table 2: Prevailing Land Tenure System and Methods of Land Acquisition in Warri Region, Nigeria

LAND TENANCY		
OWNERSHIP	FREQUENCY	PERCENTAGE
STATE GOVERNMENT	40	33.3
COMMUNITY	80	66.7
TOTAL	120	100
METHODS OF LAND ACQUISITION		
TYPES	FREQUENCY	PERCENTAGE
CUSTOMARY	77	64.2
STATUTORY	43	35.8
TOTAL	120	100

Source: Author's Field Survey Data, 2004.

7.3 Residents' Experiences on Conflicts on Land and their Perceptions on Land Use Decree

In table 3, 60.8% of the respondents agreed that there had been conflicts on land ownership between individuals or the government and members of the community in Warri Region. This could be why 47.5% of the household heads in the table indicated that the 1978 Land Use Act should be abolished. Though there was no clarity as to why 21.7% of the respondents in the table were indifferent to the 1978 Land Use Act. Only 30.8% of the respondents agreed that the LUA should be sustained.

Table 3: Residents' Experiences on Conflicts on Land and their Perceptions on Land Use Decree

CONFLICTS ON LAND OWNERSHIP IN THE AREA		
RESPONSES	FREQUENCY	PERCENTAGE
YES	73	60.8
NO	47	39.2
TOTAL	120	100
PERCEPTION OF RESPONDENTS TO LAND USE DECREE		
PERCEPTION	FREQUENCY	PERCENTAGE
SHOULD BE ABOLISHED	57	47.5
SHOULD BE SUSTAINED	37	30.8
INDIFFERENT	26	21.7
TOTAL	120	100

Source: Author's Field Survey Data, 2004.

7.4 Impacts of Industrial Location and Socio-cultural Indicators

Table 4 shows the Socio Cultural Indicators (SCI) arranged in diminishing order of satisfaction. The mean of each of the SCI's distribution was also computed. Furthermore, the deviation about mean of each variable, the variance and standard deviation of the distributions were calculated to measure the scatter around the mean i.e. how larger observations fluctuate above it or how smaller observations distribute below it (Berenson and Levine, 1996). The coefficients of variations were calculated to measure the scatter in the data relative to the mean in percentages.

To determine the degree of importance placed on each of the variables in the socio-cultural indicators' quality in relation to industrial location, the residents' Actual Perceptions Index (API) was computed. From the table, the highest API was 4.77 with a positive deviation about the mean of 1.17, while the least was 2.22 and as usual, with a deviation about the mean of -1.48. The average API was 3.70. Among some of the socio-cultural indicators with high API include cost of land, conflicts on land, general price of goods, noise, house rent, indigenous dialects, prostitution, individual crime, littering, among others. Indeed, the residents' API on each of the above was higher than the mean value for the area. In essence, they had positive deviation about the mean of the API. Variables with low API include the mode of dressing, mutual confidence among people, morality, general infrastructure among others.

Two groupings of particular interest in the table- the positive and the negative deviations about the mean of API. The positive indicates that the presence of these industries have had a huge impact on the socio-cultural indicators relating to land in the area. While the negative indicates that industrial presence has not had any tremendous change in those variables. The computed API variance was 0.4883 and a standard deviation of 0.70 having a co-efficient of variation 18.92%. From these computations, it could be inferred that the scatter of the data relative to the mean is reliable since it gives a clear picture of the degree of effects of the location of industries on socio-cultural indicators that affects land administration and management in the study area. These include cost of land, crime, conflicts on land and noise in the environment among others.

Table 4: Actual Perception Index of Residents on Impacts of Industrial Location and Socio-Cultural Indicators.

SOCIO-CULTURAL INDICATORS	SWV (a)	API (a/120)	(X-ā)	(X-ā) ²
COST OF LAND	572	4.77	1.07	1.1449
CRIME	551	4.59	0.89	0.7921
CONFLICTS ON LAND	548	4.57	0.87	0.7569
NOISE IN THE ENVIRONMENT	545	4.54	0.84	0.7056
HOUSE RENTS	544	4.53	0.83	0.6889
PROSTITUTION	540	4.5	0.8	0.64
TRADITIONAL BELIEVES	529	4.41	0.71	0.5041
COST OF LAND	526	4.38	0.68	0.4624
VANDALISM	525	4.38	0.68	0.4624
PRACTICE OF TRADITIONAL RELIGION	508	4.23	0.53	0.2809

SOCIO-CULTURAL INDICATORS	SWV (a)	API (a/120)	(X-ā)	(X-ā) ²
INDIGENEOUS LANGUAGE/DIALET	489	4.08	0.38	0.1444
MORALITY	487	4.06	0.36	0.1296
PUBLIC SECURITY	473	3.94	0.24	0.0576
UNEMPLOYMENT	472	3.93	0.23	0.0529
CONSERVATION OF CUSTOMS	467	3.89	0.19	0.0361
GOOD MANNERS/COURTESY	459	3.83	0.13	0.0169
MODE OF DRESSING	421	3.51	-0.19	0.0361
MUTUAL CONFIDENCE AMONG PEOPLE	414	3.45	-0.25	0.0625
TRAFFIC CONDITION	404	3.37	-0.33	0.1089
CULTURAL FACILITIES	403	3.36	-0.34	0.1156
TRADITIONAL BELIEFS	402	3.35	-0.35	0.1225
GENERAL INFRASTRUCTURE	394	3.28	-0.42	0.1764
RELIGION	383	3.19	-0.51	0.2601
QUALITY OF LIFE	381	3.18	-0.52	0.2704
HOUSE CONDITIONS	381	3.18	-0.52	0.2704
CULTURAL IDENTITY	380	3.17	-0.53	0.2809
RITUALS	359	2.99	-0.71	0.5041
STANDARD OF LIVING	344	2.87	-0.83	0.6889
OPPORTUNITY TO LEARN ABOUT OTHER PEOPLE	294	2.45	-1.25	1.5625
EMPLOYMENT OPPORTUNITIES	291	2.43	-1.27	1.6129
DESIRE FOR FORMAL EDUCATION	266	2.22	-1.48	2.1904
TOTAL		114.63		15.1383

Source: Author's Field Survey, 2004

$$\bar{A} = \frac{\sum API}{N} = \frac{114.63}{31} = 3.70$$

N 31

$$\text{Variance} = \frac{\sum (X - \bar{a})^2}{N} = \frac{15.1383}{31} = 0.4883$$

N 31

$$\text{Standard Deviation (S.D)} = \sqrt{\text{variance}} = \sqrt{0.4883} = 0.6987 \approx 0.70$$

$$\text{Co-efficient of variation} = \frac{\text{S.D} \times 100\%}{\bar{X}} = \frac{0.70 \times 100}{3.70} = 18.92\%$$

X 3.70

7.5 Residents' Perceptions on Future Industrial Location in Warri Region, Nigeria

Table 5 and figure 1 reflect the opinions of respondents in Warri region on future location of industries in the area. It is evident from their suggestions that the use of Environmental Impact Assessment (EIA) (24.2%) to foresee the impacts of industrial establishments and Public Participation (24.2%) at the inception of industrial location constitute the highest percentages. About 22% of the respondents recognised the need to separate industrial sites from human environment. The least acceptance of policy makers (10.8%) in industrial location revealed the lack of confidence in government's involvement in Industrial location in Warri Region, Nigeria. The import of this is that industrial development planning should not be done in isolation from those it is meant for. In addition, there is the need to involve planners in the location of industries at the initial stage of their development.

Table 5: Perceived Residents' Opinions on Future Industrial Location in Warri Region, Nigeria.

OPINIONS/RECOMMENDATIONS	FREQUENCY	PERCENTAGE
USE OF EIA	29	24.2
PUBLIC PARTICIPATION	29	24.2
OUTSKIRT LOCATION	26	21.7
INVOLVEMENT OF POLICY MAKERS	13	10.8
ENVIRONMENTAL FRIENDLY APPROACH OF PRODUCTION	23	19.2
TOTAL	120	100

Source : Author's Field Survey Data, 2004.

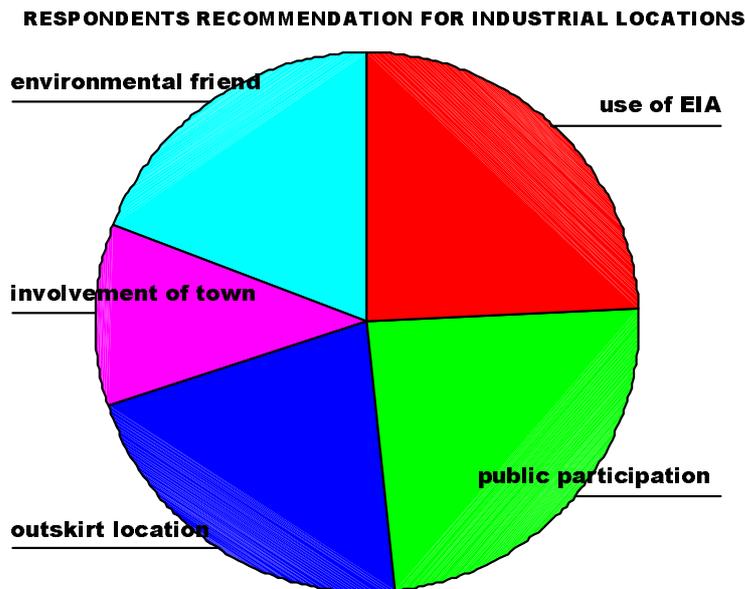


Figure 1: Perceived Residents' Opinions on Future Industrial Location in Warri Region, Nigeria.

8. SUMMARY OF FINDINGS AND CONCLUSION

The study showed that location and concentration of oil and petro-chemical industries in Warri region had attracted labour migrants to the area. This is because 77% of the residents were within age group 21 and 40 years while 82.5% of the house hold heads migrated to Warri Region within 1980 and date. Findings on income of respondents revealed that more than two third of them earned above 15,000 Naira monthly (equivalent of more than 2 Dollars per day). While these have boosted the economy of the area, analysis of industrial location and its socio cultural indicators revealed that there had been an increase in the cost of and conflicts on land, noise pollution in the environment, crime rate, general price of goods, prostitution, house rent, loss of indigenous dialect among others.

Study also revealed that 64.2% of the house hold heads procured their plots of land from private individuals while the rest 35.8% secured theirs both from the State government and individual families that owned the pieces of land in the study area. In addition, 60.6% of the

household heads agreed that they have experienced conflicts on land. In addition, only 30.8% of them wanted the Nigerian Land Use Act that took the ownership of land from individuals and the community to be sustained.

The opinions of residents to future location of industries in the area showed that the people desired that there should be preparation of Environmental Impact Assessment (EIA) (24.2%) to foresee the impacts of industrial establishments, acceptance of Public Participation (24.2%) at the inception of industrial location and location of industries at the outskirts, far from residential zone.

9. RECOMMENDATIONS

This study has revealed that balanced industrial planning transcends socio economic and physical developments of the people. Poor economic development planning could produce negative effects on culture and social life styles of the people. These could lead to moral decadence, conflicts and anarchy, which if not curtailed would finally produce economic regression.

The study recommended that clauses generating conflicts on land among the people in Warri Region should be amended. Customary land tenure system could be built into the Land Use Act by retaining some rights to land to the members of the communities. There is the need to harmonise contributions from policy makers, professionals in the fields of social and environmental sciences and public opinions at the inception of industrial location so as to balance economic benefit with social, cultural and physical developments of cities in developing nations like Nigeria.

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