

The Territorial Distribution of Industries in Enugu Urban Area of Enugu State, Southeastern Nigeria

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Abstract: This study on the distribution of industries in Enugu urban area was necessitated in order to identify the spatial distribution, factors in the location, and the problems of industrial activities in the area. Management and employees of the industrial plants formed the study population, and survey research design and purposive sampling technique were used. Simple random sampling technique was used to select 84 (30.4%) from the available and registered 276 industrial plants in the area. Again, 196 employees of the sampled 98 industrial plants were purposively selected at the rate of 2 employees from each of them. Thus, 280 respondents were used in this study. Data were collected through the methods of questionnaire, interview, field observation, and documentary materials. Similar questionnaire and interview were prepared and administered on the 2 groups of our respondents, while the field data were analysed using the simple percentage ratio, and especially pie and bar graphs. The results of the analyses indicate that 13 different types of industry are established in the area. They are; bakery, construction, hotel, plastics, textile, oil and gas, block and concrete, auto-mobile, poultry, furniture, education, transport, and iron and steel industries. In the locations of these industrial plants, 7 factors were responsible- availability of transport facilities, market especially the local type, labour, energy resources, resources of space, agglomeration economies, and access to raw materials. Again, this study identified 9 factors that constitute drawbacks to the activities of industry in the area such as intermittent power supply, inadequate access road, poor market facilities, inadequate material input, shortage of financial capital, inadequate space, labour supply problems, competition from other similar industries in the area, and effects of government policies. In accordance with these findings, it is recommended for development in infrastructural facilities.

Key Words: Industry, problem, spatial distribution, type

I. INTRODUCTION

The results of industrial processes permeate all aspects of society because it is all-encompassing. Industry generates benefits such as the creation of wealth via the multiplier effect, prosperity, employment and is a vital component in foreign trade. It is one of the processes of spatial transformation especially with migration and information flows. There has been traditionally wide support for the leading role of industry in generating wealth and income, which in turn can support expansion in other sectors (Mano and Otsuka, 2000; Feldman, Aharonson and Baum, 2006). Development is based upon growth, which results from further industrialization and increased industrial productions. It provides the greatest avenue for employment generation, income, and provision of food. It contributes in the reduction

of regional imbalance in population distribution by reducing the mass movement of people to urban centers through rural industrialization. In agreement, Mitchell (2012) explained that there is correlation between the degree of industrialization and level of development.

Thus, geographers are often concerned with the spatial distribution of phenomena and human activities including industries, and the processes which influence that distribution. The processes which contribute to determine the distribution of industry are complex and dynamic (Badri, 2007 and Kefela, 2010). Also, not all industries choose the same site because their production (costs) and market needs differ. The location problem is complicated by changes occurring over time. For instance, a location because of high market demand may suffer a serious disadvantage when competitive industries begin to carve out that market (Rural Business Forum (RBF), 2007).

As a result of changes in location factors, the degree of industrial concentration fluctuates widely according to the type of industry, and industrial plants producing many different types of goods cluster in a region that provides the needed resources. Regions that provide such better location opportunities will attract industries and growth away from regions with less favourable initial conditions. At times a region may or may not possess all the location variables either as a result of geographical position/environmental conditions or due to spatial inhibitions in relation to variations in industrial location requirements. Therefore, the location decisions are tied to the degree of availability of the necessary and required variables. Moreover, in the recognition of importance of location of industrial activities, there is increase in research for better location decisions because location according to Martins (2010) can either make or break a business. However, many of such studies focus more on the characteristic descriptions and the effects of each of the location factors (Ogbu, 2008, 2011) without adequate involvement of some urban areas like Enugu urban. It is on this premise that this study was important in order to determine the spatial distribution of industries in Enugu urban area of Enugu state, Nigeria.

The Study Area

The study area, Enugu urban is located in 3 LGAs of Enugu East, Enugu North, and Enugu South. It lies approximately between latitudes 06° 21' and 06° 30' north of Equator, and

longitudes $07^{\circ} 26'$ and $07^{\circ} 51'$ east of prime meridian (Fig. 1). It is bounded in the east by Nkanu East, west by Udi, north by Igbo- Etiti and Isi-Uzo, and south by Nkanu west LGAs (Fig.

1). It covers an area of about 113 km^2 . In 1991 its population stood at 407756 inhabitants.

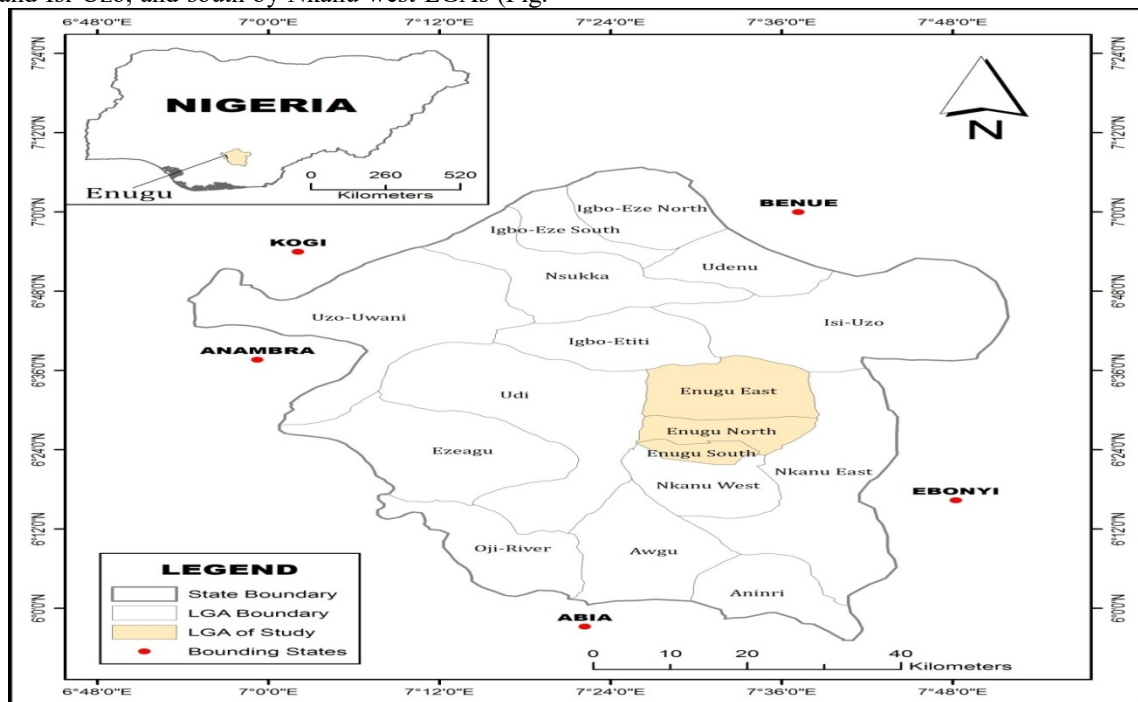


Fig. 1: Enugu state showing Enugu Urban Area

(Source: GIS Unit, Geography Department, UNN, 2018)

This was projected to 673164 in 2019 based on the annual growth rate of 2.83% (National Population Commission (NPC), 2006). The area is carved into many residential areas referred to as layouts (Fig. 2). In this study, some of them identified and used are; Abakpa, Awkunanaw, Coal Camp, Emene, Gariki, Independence Layout, New Haven, Ogui, Trans-Ekulu, and Uwani layouts. It is within the scarp land of southeastern Nigeria (Gore, 2006) made of hills and valleys with elevations of about 1000m and 300-600m above sea level (Owual, 2010). The highland area is underlain by sandstone rock materials especially of feralitic and lateritic types, while the lowland area is of shale material most of which are ravaged by soil erosion as along Ekulu, and Nyaba Rivers that flow easterly and south easterly directions. It is found within tropical rainforest region of Nigeria, but due to human intrusions most it have been reduced to savanna type of climate. The mean daily temperature is about 26.7°C (Raw, 2003). Wet and dry seasons are the main weather periods, and rainy season lasts from March to October and dry season is experienced in the months especially from late October to February.

The rainfall pattern favours the growth of dense vegetation and it is located in the transition zone between forest and guinea savanna vegetations. In view of Grath (2010), some trees are deciduous and have curious shapes and few leaves.

Example of trees include locust bean, Shea butter trees, while commonest grasses of the area are; elephant grass, giant, and star grasses. The means of livelihood in Enugu urban include mining especially river sand, commercial including industrial activities, artisans, urban agriculture, and animal husbandry. Different industrial productions are found in the area like manufacturing of different products and provisions of services mostly of oil and gas, and transport.

II. LITERATURE REVIEW

The variables reviewed include; definition of industry, factors in the location of industry and area attraction of industry.

Definition of industry

According to Monkhouse (1970), an industry is any work done for gain such as hotel, farming, tourism etc. In the opinion of Okeke (1982) an industry describes a wide range of activities that have different operational processes like extraction, processing, assembly, and service. An industry is a group of businesses that produce a similar product or provide a similar service (Comanor, 2003 and Cohn, 2003). Thus, in this study it is any profit-making and wide range of activities that have different operational processes like extraction, processing, manufacturing, assembly, fabrications, and services such as hotel, and transport.

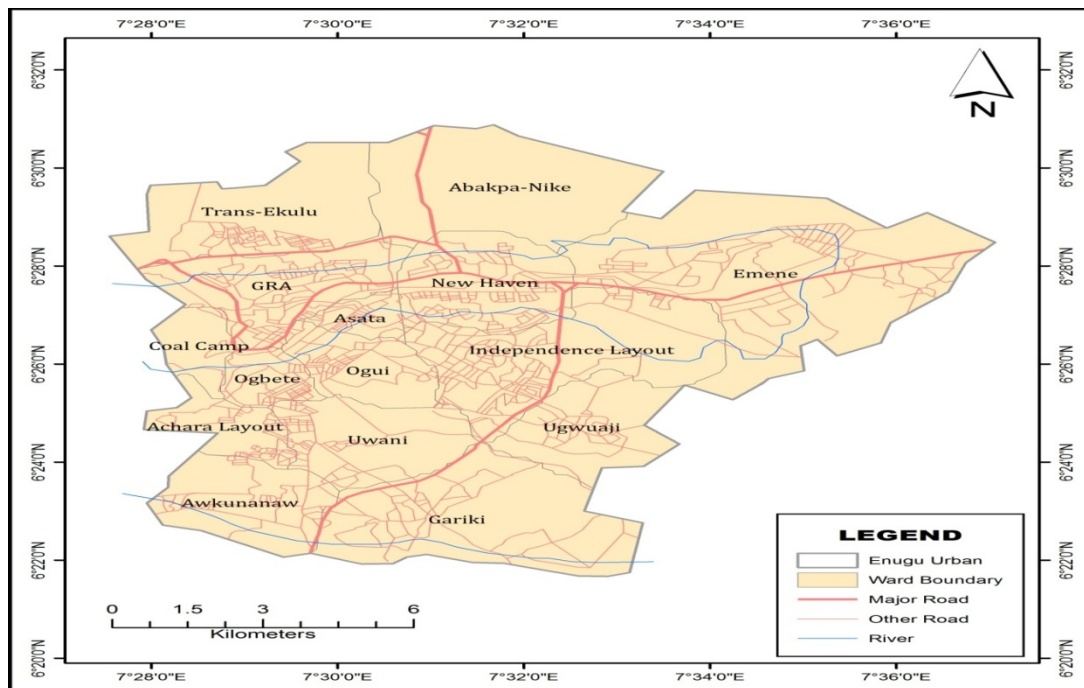


Fig 2: Enugu Urban Area

Source: GIS Lab. Geography Department, University of Nigeria, Nsukka. 2020

Industrial location factors

Many factors influence the locations of industries. They are raw material sources, market, transportation, capital, labour, land, government, agglomeration/deglomeration, power/energy, satisficer principles, entrepreneurial ability, and advertisement (Rohit, Jayant, and Cheng 2003).

(a) Raw material

The attractions of raw materials vary in bulk, weight, perishable, availability, and means of transportation, handling, and storage facilities. Industries whose products weigh less than the materials or whose materials are bulky, perishable or difficult to handle are attracted to their raw material sources. This is common in sub-saharan African countries like Nigeria by Ogbu (2020), Botswana by Siphambe (2006), and Uganda by Obwona and Egesa (2006). However, industries are rarely attracted to raw material sources because there is greater efficiency in the use of raw materials, transport of raw materials is more efficient and relatively cheaper, and components are relatively small in size and light in weight. This is due to improved transport and technology, greater sophistication, and the relative increase in the importance of other factors.

(b) Market Facilities

According to Kinkel (2007) manufacturers must have a market – people with desire for goods and the ability to buy them. The market strength in attracting production activities varies according to weight of raw materials/products, fragility,

perishable, value and availability, and it is this strength that attracts industrial locations.

(c) Transport Facilities

Studies in China by Badri (2007) found that location change is simply produced by the construction of route ways, which increases the competitive advantage of places affected by them. Thus, in a country's economic development, a precondition to the take-off period is increase in investment in transport and communications resources, in which other nations may have economic interest (Mano and Otsuka, 2000). The attraction of transport in location decision dwells mainly on low transportation cost of movements. Such findings were made in USA by Wong (2007), and Barcelona (Spain) by Barcelona Field Study Center (BFSC) (2007), Nigeria by Musa and Ndawayo (2011), and Israel (Nefesh, 2006).

(d) Capital

Capital is not only financial (money) capital, but includes fixed or physical capital equipment (Sloagett and Woods, 2003 and 2005). Money is mobile and can be used within and exchanged between countries. It is attractive if it is borrowed from government who might direct industries to certain areas. Fixed capital (building and machinery equipment) is not mobile, but considered an important or crucial factor in the attractions of firms, both local and foreign because of great cost of the purchase and installation of heavy capital goods. Industries requiring such equipment are generally attracted in the already well-established industrial centers.

(e) Labour characteristics

Enterprisers seeking to establish industries will seek information concerning the labour (SEV, 2002b). But its requirements depend upon the nature of business and important in an industry only if direct money payments for it vary geographically for the same kind of labour input. It is costs of labour, quality, quantity, labour union, and availability that are important in attraction of industries. However, as industries become more mechanized, automated, and transport improvement allow for greater mobility, firms can locate and their workforce can travel more freely, and given the fact that labour can be readily obtained in most areas, availability of labour ranks very low as a factor in the attraction of industry as in Nigeria (Ogbu, 2008).

(f) The Resources of Land

Land consists of soil, mineral and climate or the natural endowment of the earth's surface, and site in terms of suitable plot of land. These components of land form the bases of many contributors on the importance of land in the attractions of industries in Nigeria, Brazil, USA, England, and Barcelona. Such contributors are Jones (1995), Auty (1995), and BFSC (2007). Again, Ogbu (1998), Wong (2007), and BFSC (2007) observed that as in Nigeria, USA, and Barcelona the main direction of movements of industries is to the urban periphery for more land space. Another feature of land as discovered by Wong (2007) is the cost of land. Large industrial plants like car assembly seek out locations where land is relatively cheap.

(g) The Attitude of Government

Government's influence is either positive or negative where it respectively encourages new industrial location and growth or inhibits them. Such areas of influence are in plant ownership, subsidization or tax benefits, establishment of estates, reduction differences in employment, investment within a country. Others are reservation of some areas for certain industries, financial support, control of land use, stable government for safe and secure investment climate, and provisions of basic infrastructure and sanitary amenities. Also, included are legislation, licensing in favour of some industries, housing development in some areas, avoidance of tariffs for some firms, erection of tariff barriers, and provisions of incentives (Sambo, 2010).

(h) Agglomeration Tendencies / Economies

Industries are attracted to areas where production factors are concentrated as in USA and China by Cortright (2001b), and Akerman (2003) because such areas are associated with such facilities as labour force, market, low wages, non-unionized labour, numerous factories, and relatively cheap land (Muro, 2002 and Wong, 2007). Thus, the effect of industrial agglomeration is more pronounced in the western world that is more developed. In sub-saharan Africa like Nigeria, agglomeration facilities are mainly on market, and development in infrastructural facilities (Ogbu, 2008 and

Sambo, 2010). Such close location of firms in the similar production activities result in severe market competitions, and hiding of information on the techniques of production and sources of input materials (Ogbu, 2014).

(i) Power/Energy Resources

According to Sloagett and Woods (2003), Intel Corporation, (2005), Wong (2007) in Nigeria, Zimbabwe, USA, and U. K. electrical energy and coal are essential in the attractions of industries. Also, its cost is a very significant factor for industries (Gates, 2006) like aluminium smelting and the production of fertilizers. However, during the 20th century, energy became a ubiquitous resource as newer forms of it were introduced and the means of transmitting it were made easier and cheaper. This attraction factor has reduced particularly in more developed economy (Wong, 2007), but in Nigeria, Cameroon, and Ghana its availability remains vital in the economic attractions (Monday, 2011; Khan and Bamou, 2006; and Asante, 2006).

Area attraction of industry

The final decision to establish an industry in a particular place rests upon the maximum net advantages of alternative sites (Russall, 2011). On this basis, Romney (2013) identified such variables as physical, human, and economic factors. Physical factors are available raw material, energy supply, climatic variables, and natural route systems. The human factors are the quality of the available labour, market systems and processes, available transport facilities, cost and nature of land, capital available, and personal preferences, while the economic factors include acquired advantages, external intervention, political consideration (Stanlake and Grant, 2002). Thus, the attractiveness of an area to economic activities depends on the availability of resources, natural environment or geographical position, and comparable cost of production (Couse, 2006).

III. MATERIALS AND METHODS

This study was based on the industrial types identified by Walcek (2007) because they are mainly the types of industries found in the study area. They are; bakery, poultry, automobile, furniture, transport, plastic, textile, energy industries. Survey research design was used and the study population comprises customers and managements of the industries like administrative, production, marketing managers, and account. One person from any of those management positions in each industrial plant was selected to represent each industrial plant surveyed. The choice of many administrative cadres was to ensure that one of them was present at the time of data collection and to reduce number of visits in case of absence by the researcher. Simple random sampling technique was used to select 98 industrial plants (35.5%) from the available and registered 276 industrial plants in the area (Table 1). The variation in the numbers selected is dependent on the variations in the available number of industrial plants from each layout as found on Table 1. Again, 196 employees of the

sampled 98 industrial plants were purposively selected at the rate of 2 employees from each of them. This choice was based on the fact that majority of the employees refused to attend to the researcher and similar information was obtained from the management of each the industrial plants sampled. Thus, 294 respondents were used in this study, and they are sizeable enough and formed good representation of the entire members of the study population. Data were collected through the methods of questionnaire, interview, field observation, and documentary materials. Similar questionnaire and guided interview were prepared and administered on the 2 groups of our respondents, while the field data were analysed using the simple percentage ratio, and especially pie and bar graphs.

IV. RESULTS AND DISCUSSIONS

The difficulties of restrictions on the release of information and the complaint of being busy with the company works reduced the copies of questionnaire returned to only 280 copies or 95.2% return, while 14 copies or 4.8% of the questionnaire were not returned. Thus, the findings of this study were based on the sincere opinions of 280 respondents.

Types of industry in Enugu urban area

The result of the field survey reveals that there are 276 registered industrial plants in the study area and their distributions among the 10 identified layouts are as found on Table 1. Emene has the highest number with 62 industrial plants that represent 22.4%. An examination of Table 1 indicates that Emene at least 2 industrial plants in each of the 13 identified industrial plants in Enugu urban area except in hotel services. Also, Emene has the only 3 and 2 available textile and automobile industrial plants respectively in the area (Table 1). Emene is followed by Abakpa with 40 industrial plants or 14.5% of the 276 different industrial activities in the area. The 3rd position is occupied by Gariki that has 32 (11.6%) out of 276 industrial plants that are registered in Enugu urban area. Coal Camp picked the rear position of 10th with 3.6% or 10 industrial plants, while other industrial activities and their scores are found on Table 1 which also, shows the number of plants in each industrial type and according to the layouts in the area. For clearer visualization this finding is further illustrated on Fig. 3 where Emene featured prominently, unlike Coal Camp that obtained the lowest score of only 10 plants.

Table 1: Types of industrial plants in Enugu urban area

S/N	Type of industry	Layout										Total	Perc (%)	Rank
		Emene	Abakpa	Ogui	Uwani	Ind. Layout	New Haven	Trans Ekulu	Coal Camp	Gariki	Awkunanaw			
1	Bakery	6	2	3	2	1	1	6	2	2	4	29	10.5%	5 th
2	Construct.	4	2	-	-	-	-	-	1	-	-	7	2.5%	10 th
3	Hotel	-	1	2	1	9	7	2	-	7	6	35	12.7%	3 rd
4	Plastics	2	1	-	-	-	-	-	1	-	-	4	1.4%	11 th
5	Textile	3	-	-	-	-	-	-	-	-	-	3	1.1%	12 th
6	Oil & gas	6	3	4	3	5	3	2	2	2	-	30	10.9%	4 th
7	Block	3	1	1	2	-	-	-	-	3	5	15	5.4%	8 th
8	Automobile	2	-	-	-	-	-	-	-	-	-	2	0.8%	13 th
9	Poultry	6	3	-	-	8	-	2	2	-	-	21	7.6%	6 th
10	Furniture	6	5	-	-	-	-	7	-	-	-	18	6.5%	7 th
11	Education	8	12	9	9	-	9	6	-	5	3	61	22.1%	1 st
12	Transport	3	3	-	-	-	-	8	12	5	6	37	13.4%	2 nd
13	Iron & steel	5	1	-	-	-	-	-	8	-	-	14	5.1%	9 th
	Total	62(22.4%)	40(14.5%)	20(7.2%)	19(6.9%)	25(9.1%)	24(8.7%)	30(10.9%)	10(3.6%)	32(11.6%)	14(5.1%)	276	100%	
	Rank	1 st	2 nd	7 th	8 th	5 th	6 th	4 th	10 th	3 rd	9 th			

Source: Fieldwork, 2019

There are 13 different types of industrial activities in the area, and education industry has the highest number of 61 (22.1%) industrial plants (Table 1). Transport industry obtained 13.4% or 37 firms to be in the 2nd position. The 3rd position went to hotel service providing plants with 35 plants that are

equivalent to 12.7%. The 13th and rear position was picked by automobile industry that obtained 2 plants or 0.8% of the available 276 different industrial activities in the study area. This result is further illustrated on Fig.4 which clearly shows

education industry as the most outstanding with 61 plants, while automobile is the least with 2 plants.

Factors in the Location of Industry in Enugu Urban Area

The result on Table 2 shows the 7 identified variables in the location of industrial activities in the study area in which availability of market facilities obtained 90 responses that represent 32.1% of 280 responses is found in the 1st position. Market is people with desire and ability to pay for a commodity, and proximity to market reflects an attempt to minimize transportation costs or time (Rohit et al, 2003). Enugu is a large urban environment with influx of people due to the availability of many opportunities for life like employment, trade and commerce, seat of government that attract large population into the area. These features create high demand for industrial products in the area such that industries go there in order to sale their products.

Table 2: Industrial location factors in Enugu urban area

S/N	Location factor	Response	Percent.	Rank
1	Transport facilities	40	14.3%	4 th
2	Market facilities	90	32.1%	1 st
3	Availability of labour	34	12.1%	5 th
4	Energy resources	3	1.1%	7 th
5	Resources of space	42	15.0%	3 rd
6	Agglomeration economies	54	19.3%	2 nd
7	Access to raw material	17	6.1%	6 th
	Total	280	100%	

Source: Fieldwork, 2019

It is agglomeration economies with score of 54, an equivalent of 19.3% that took the 2nd position. It is a co-location of firms, and whether in global or local structure of production and exchange, agglomerations are places where external economies tend to issue out of their multifaceted production systems and local labour markets. Industries are attracted to such areas as they are associated with such facilities as labour force, market, low wages, non-unionized labour, numerous factories, relatively cheap land, and well-developed facilities of many kinds (Muro, 2002 and Wong, 2007). This is true as these facilities are magnets to other production activities and explains for the continued pull of industries into the study area where facilities of repair and maintenance services, labour resources, transport services, high and steady market, etc gravitate. Thus, many industries chose to establish in the area to enjoy from the resources already created by the existing industries in the area.

The 3rd position is taken by space resources with 42 responses or 15.0% of the total responses of 280. The study area has a location advantage of large land extensions in all directions which result to availability of cheap land for both expansion and establishment of new industrial activities. A good case at hand is Verg Nig. Ltd at Emene with its raw material, market,

labour, and even the owner are all rooted in Aba, Abia state, but established a branch at Enugu because of the available land space.

The least position of 7th with only 3 responses (1.1%) is taken by availabilities of energy resources. By this, it is the least among all the 7 factors that pull industrial activities into the study area and indicates that it is of little importance and contributes minimally in the location of industries in the area. In African context taking example of Nigeria, energy especially electrical energy is very essential in the location of industries, both local and foreign firms. However, the electrical sources in use in the area comes from oil and water which are not easily obtained because of high costs involved due to distance and installation technology therein. This is the reason for many industries to indicate that the available energy in the area is not enough to pull them into the area. Others factors and their scores are as indicated on Table 2.

Problems of Industry in Enugu Urban Area

There are 9 identified problems that are associated with the industrial activities in the study area. They vary in the extent of their severity on the sampled plants (Table 3). Among these problems, intermittent power supply is the most difficult problem of industrial activities in the area. It obtained the highest response score of 90 and percentage equivalent of 32.2% to be in the 1st position. In the study area, energy used to drive machines or to move materials and products, heat objects such as oven for baking, and for chemical and electrolytic processes for the industrial plants are mainly electricity from Power Holding Company of Nigeria (PHCN) via Enugu Electricity Distribution Company (EEDC), firewood, and generating plants installed by the studied industrial plants in their factory yards.

Table 3: Problems of industry in Enugu urban area

S/N	Problem	No. of responses	Percent.	Rank
1	Inadequate space	20	7.1%	6 th
2	Poor market facilities	30	10.7%	3 rd
3	Competition	8	2.9%	8 th
4	Government policies	4	1.4%	9 th
5	inadequate labour supply	10	3.6%	7 th
6	Inadequate materials	23	8.2%	4 th
7	Financial capital	21	7.5%	5 th
8	Intermittent power supply	90	32.2%	1 st
9	Inadequate access road	74	26.4%	2 nd
	Total	280	100%	

Fieldwork, 2019

The industrial plants are all scattered in their locations along the lines of electrical energy, and hooked up with energy source from EEDC as the main source because of the high volume required which cannot be obtained from the other two sources. The main handicaps with these energy sources are

high cost of procurement, epileptic in supply, inability of generators and firewood to meet up with the capacity of energy demand in the area. It is based on these that energy supply for industrial uses is a serious problem in the area.

As found on Table 3, the next problem is inadequate infrastructure especially access road in the study area. This study found that road transport is the only mode of transport in use by the industrial plants because every plant included it as one of the modes or the only mode of transport available for it. Thus, industrial activities in Enugu urban area rely heavily on road transport for the movement of both input and output materials of any kind. However, it was discovered that the nature of roads in the area is very poor and of substandard too. They were not initially built for haulage, but for passenger transport and as such they are found to be in bad conditions. Many of them are narrow, full of potholes, untarred, and even damaged beyond repair, yet there are no alternative opportunities for movements in the area other than the available dilapidated road networks.

The 3rd position is occupied by poor market facilities in the area with response score of 30 or 10.7%. The issue is that as industries cluster, the local market facilities provided by the available population threshold are not enough for the volume of industrial products in the study area. Thus, regional or international market facilities are required in order to deal with the large volume of products of different industrial activities especially now that many industries are more interested in the volume of sales of industrial products. This is the reason for the concern of the contemporary industrial activities in the potential size of markets (Ogbu, 2014). Also, the area is disadvantaged geographically because it is not serving as a major link to major regional market centers in the south-eastern Nigeria. Therefore, the available market facilities in the area cannot satisfactorily provide the required market for the volume of industrial products in the area.

In the contrary, the government policy is not a serious problem as others (Table 3) because only 4 respondents that represent 1.4% saw it as a problem to industrial activities in Enugu urban. The reason given by the respondents is that the policy carriers are not strict in industrial policy implementation so that industrialists are free to acquire land in any part of the area and establish production activities in as much as they can pay tax due for them, and the resources of land are not problem in the area. The government's influence is only in areas of issuance of Industrial Development Certificate (I.D.C) as part of location policy, establishment of industrial lay-out in which it simply asked industrialists to go, acquire land and set up industries, and provisions of incentives such as energy/power, and roads. The proportions of other problems are found on Table 3 which is further illustrated on Fig. 5 on which intermittent power supply stood out prominently as the commonest problem, while government policies conspicuously the least of all the industrial problems in the area.

V. SUMMARY

In summary, 13 different types of industrial plants are available in the study area. They include; bakery, construction, hotel, automobile, poultry, oil and gas, transport, plastics, textile, furniture, block and concrete, education, and iron and steel industries that are found in different production activities. Using 2 digit number of standard industrial classification, they are classified into secondary and tertiary industrial plants. Those of them in secondary productions are bakery, construction, automobile, plastics, textile, furniture, block and concrete, and iron and steel; while found in tertiary activities are hotel, oil and gas, transport, and education industries. Among the 7 identified factors of industrial locations in the area, availability of market facilities is the most important, and energy resources is found in the rear position. Others are agglomeration economies, resources of space, transport, labour resources, and access to raw materials. It is discovered that as these industries grow, they are faced with one problem and the other such as epileptic nature of electricity supply, limited access road, poor market facilities, inadequate space for some industries, problem of input materials, inadequate financial capital, competition from similar industrial plants in the sale of industrial products, and government policies on industries.

VI. CONCLUSION

As Enugu urban is growing in economic activities, more different industries are coming in to join and enjoy the cluster benefits that are growing in the area. Again, many of the pulling factors of industries into the area are human in nature such as demand variables, resources of industrial cluster, movement of all kinds, features of labour, and physical feature that pertains to space in the area. As these activities progress, there is increase in both human and environmental problems in the area. Such setbacks include infrastructural variables, financial capital formations, state matter, and inadequacies of space for some plants as in manufacturing activities.

VII. RECOMMENDATION

It is on the premises of the findings that we recommend for increase in the effort by both the industrialist and the government in the development of infrastructural resources in the study area. Furthermore, it is important for the entrepreneurs to establish a strong link with the available regional markets for sourcing of input materials, and outlet of products.

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