

ELECTRICITY INFRASTRUCTURE FAILURE AND THE DEVELOPMENT OF MICRO SIZED ENTERPRISES IN NIGERIA: EVIDENCE FROM BENIN CITY

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ABSTRACT

Using a sample frame of seven hundred micro enterprises in some selected part of Benin City, the study considered electricity infrastructure failure and the development of micro sized enterprises in Benin City, Edo State, Nigeria. More than fifty nine percent of the owners of business agree that they usually experience light outages for more than five hours per day which usually peak in the afternoon; the boom of business period. This leads to financial and customer losses on the operators of micro enterprises. Further more, it sometimes leads to equipment damage. As regards infrastructure needs, electricity was rated first by the respondents followed by water and roads. Though, corruption by electricity supply officials and equipment failures were rated by enterprise owners as the major reason for poor power supply, they suggested that competition for electricity supply should be encouraged while electricity tariff be increased.

KEY WORDS: Electricity, Infrastructure and microenterprises.

1. INTRODUCTION

Despite the importance and potential of micro-enterprises in the Nigerian economy, there are several factors that discourage their establishment, growth, decline and closure. One of the factors which may contribute to these problems is poor electricity supply. Without available and reliable electricity services, there is no possibility of using modern electrical appliances, welding machines and machinery which may pave the way to other small industries. Even in places where there are restaurants, drinking spots and retail stores, inadequate electricity supply also acts as a problem to smooth business transactions. This may lead to reduction of patronages by customers and prospective customers. For example, some people may prefer spots where there are regular cold drinks and even sachet water as well as good musical system. All these cannot function well without adequate electricity supply.

Poor supply of electricity by the authority in Nigeria has caused some micro enterprises to adopt alternative sources of electricity supply; particularly the use of generators. Power supply is very vital in modern day business no matter how small it is perceived to be. Whenever it is not forthcoming, customers and business owners would naturally grumble. Worse still, power failures are experienced without prior knowledge from the authorities. This leads to frustration, financial losses and in some cases equipment damage. Central to the issue of growth is the development of the micro enterprises. Without the creation of opportunities for self employed jobs and businesses, there is no real chance for Nigerians to raise their standard of living.

Electricity system in Nigeria centers on Power Holding Company of Nigeria. This is because, it accounts for about 98% of total electricity generation (Central Bank of Nigeria, 2000). According to Adenikenju (2005), there are essentially five ways by which firms may respond to unreliable supply of electricity. These are

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location choice, factor substitution, private provision, choice of business and output reduction. However, according to him, the most common approach has been through private provision. This could be in the form of using petrol or diesel propelled generators which also add to cost of doing business and even at macro level imposes exorbitant cost to the economy. For example, according to him, in 1990 the World Bank estimated the economic loss to the country from power supply authority's inefficiency to be about N1 billion.

While Uchendu (1993) study focused on the industrial and commercial firms in Lagos state, Adenikenju (2005) focused on the manufacturing sector for Nigeria. There appears to be a very little understanding of the linkages between uses and impact of electricity services and micro enterprises establishment, survival, expansion, growth, decline and closure in developing countries in general. In addition, to the best of my knowledge, studies which specifically assess the impact of poor electricity supply on micro enterprises development in Benin City are scarce. The study therefore considers electricity infrastructure failure and micro sized enterprises in Benin City, Edo State of Nigeria. Section two reviewed relevant literatures while section three explained microenterprises in Nigeria. Section four considered electricity (power) sector in Nigeria; section five provides the methodological framework. Section six concludes.

2. Review of Relevant Literatures

Steel and Webster (1991) in a survey of small enterprises in Ghana found that electricity failure, transportation costs and other infrastructure problems were among the top four problems of operations of micro and small firms. However, electricity was ranked as the major constraints among the small firms. Lee and Anas (1992) studied 179 manufacturing establishments in Nigeria. They found that the impact of deficiency of all types of infrastructure was consistently higher for small firms. According to them, private infrastructure provision for boreholes, vehicles for personnel and freight transport as well as radio communication equipment constituted 15% of total machinery and equipment cost for large firms with over fifty employees and 25% for small firms.

There is evidence that access to electricity services in rural areas in the developing world has lead to technological

change in existing micro enterprises. For example, in rural areas of Indonesia, some shoes workshops changed from the use of manually operated machinery to electrical machines with an associated enhancement of productivity (Rogerson, 1997; Maleko, 2005). Further evidence of the impact of electricity from Elandskraal, Northern Province in South Africa pointed out that electricity has a potential input for upgrading the condition of the micro enterprise's economy (Rogerson, 1997).

Wamukonya and David (2001) carried out similar study on the impact of rural electrification on social-economic development in Namibia. They found that electricity services do not seem to have had a significant impact on growth of income generating activities. They also found that the share of households with home-based income generating activities was highest among households that are not electrified. Furthermore, few home based enterprises use electricity for income generating activities. When this is the case, they mainly make use of electricity for lighting. None of the business using electricity started after rural electrification. This implied that electricity service could not have been the driving factor behind the establishment of the new micro-enterprise. Kjellstrom, et al. (1992) supported this argument. According to them, small businesses in rural Tanzania did not depend on grid electricity for operation, but mainly used charcoal, firewood; kerosene and diesel.

Mechanization through electricity usage by micro enterprises can have a negative impact since it displaces traditional labour. This was common among the unskilled and female home based workers with smaller numbers of men (Meadows, et al., 2003). This argument is cited in Rogerson (1997); Maleko (2005). They used qualitative evidence from the carpet weaving sector in the Kashmir valley in India. According to them, the industry attempted to modernize the traditional handloom weaving by introducing new power looms to replace the hand weaving of traditional fabrics. This innovation resulted in redundancy of workers and hence negatively affected employment.

Electricity services may have a negative impact on women's welfare in particular. Extended working hours in home-based micro enterprises made possible by electrical lighting may decrease their welfare by simply increasing their working day (Borchers and Hofmeyr, 1997).

In Nigeria specifically, related studies were Ukpong (1973), Iyanda (1982), Lee and

Anas (1991) Uchendu (1993) and most recent Adenikenju, (2005). Ukpong (1973) used the production function approach to study power failure cost in two years, 1965 and 1966. He used a sample of 38 firms and estimated unsupplied electrical energy to be 130kWh and 172kWh in both years. Lee and Anas (1991) used self assessment survey to measure the adaptive costs to the business sectors in coping with infrastructure deficiency in Nigeria. They found that most firms in Nigeria adapted to the unreliable publicly provided electricity by investing in backups. This huge backup cost added to the cost of the business set up and thus reduced their relative efficiency.

Iyanda (1992) used the self assessment methodology to estimate the impact of power shortages on household sector focusing on high income areas of Lagos state (Lagos Highland, Ikoyi, Victoria Island, Yaba and Surulere) of Nigeria. He estimated an average electricity failure cost to be N1.19 per hour for each household. Uchendu (1993) on his part focused on industrial and commercial firms also in Lagos state. The study estimated the value of unproductive output to N1.3 million, N2.01 million and N1.32 million in 1991, 1992 and mid 1993 respectively. Very recent, Adenikenju (2005) analyzed the cost of infrastructure failures in a developing economy using the electricity sector in Nigeria as a case study. He concluded that small scale operators that could afford to back up their operations have to spend a significant proportion of their investment outlays on such backups.

Generally in Africa, the number of days that power outage occurred each year in the countries surveyed is alarming. According to Ramachandra (2008), the worst cases are the Democratic Republic of Congo, the Gambia, and Guinea (each with over 170 days of outages). Uganda, Rwanda, and Tanzania came next with 120 outages. However, six countries: Guinea-Bissau, Lesotho, Mali, Senegal, Swaziland, and Zambia fare better, reporting outages of between 10 and 50 days. Almost 50 percent of all businesses surveyed cited power as a major or severe constraint; the number rises to 60 percent when middle-income countries are removed from the sample. Comparable data for China show that the burden of power outages is far smaller for businesses in that country. The average length of a power outage in Africa is five hours; outages can sometimes stretch to more than twelve hours.

3. Micro enterprises in Nigeria

Micro enterprises are part of the informal sector often referred to as the underground economy, shadow economy or petty producers is defined as a large volume of self employed in developing countries who are engaged in small-scale intensive work. It is common in professions such as tailoring, food preparation, trading, shoe repairing, photocopying, ice making, battery charging etc. These people are often regarded as unemployed or underemployed as they cannot be included in the national employment statistics. They are often highly productive and make a significant contribution to national income. Their work in general is characterized by low capital-output ratio, that is, the ratio of the level of equipment or capital relative to output is low (Pearce, 1992; Stearns, 1988; Wickware, 1998). The characteristics of the informal sector include among others: ease of entry, predominant use of local resources, family ownership of the enterprises, small scale of operation, and acquisition of skills mainly outside the formal system of education and training and operation in an unregulated competitive market (ILO, 1972).

Almost all micro scale enterprises have a very flat organization, with an owner who is also the managing director. Operations are characterized by a lack of delegation. Communication between companies chiefly takes place on an owner-level. Most micro enterprises in Nigeria are located at home and are characterized by low productivity and self employed. As a result of their low financial background and ignorance to regulations, most of them do not go through business registration as well as pay taxes. There are micro-enterprises which are seasonal in the sense that its lifetime depends on situation in other sectors such as agriculture. Most of them with the exception of few are not for long term plan for growth rather they are established for survival purposes. Majority of them have low purchasing power and suffer from income shock as a result of low savings. This form of business is common among cobblers, cars and radio repairers. Some of them engage in restaurant businesses including barbing saloons and other form of hair treatment businesses, tailors, welders, pepper/grain milling, photo studios, among others.

In spite of these characteristics, microenterprises still contribute to economic growth. For example, according to Kankwanda et al (2000), a study conducted in 1992 by the Economic Commission for Africa indicates that

the informal sector's contribution to GDP in the African countries is estimated at about 20% and its contribution to the GDP of the non-agricultural sector stood at 34%. For instance, its contribution to GDP was 38% in Guinea, 10.3% in Tanzania, 30% in Burkina Faso, 24.5% in Nigeria and 20% in Niger.

4. Electricity (Power Sector) in Nigeria

The Electricity Corporation of Nigeria (ECN) was formed in 1950 and became the statutory body responsible for generation, transmission, distribution and sale of electricity to all consumers in Nigeria. As at Nigeria's independence in 1960, the country inherited a rudimentary and localized electric power generation and distributive systems. There was neither a national grid nor a single large power station. In 1962, the Niger Dam Authority (NDA) was established for the development of Kanji Hydro-Electric project and the associated 330 kilovolts (Kv) transmission lines and substations which were completed in 1969. By Decree 24 of 1972, Electricity Corporation of Nigeria and the Niger Dam Authority were merged to form the National Electric Power Authority (NEPA) now known as Power Holding Company of Nigeria (PHCN). Electricity generation in Nigeria is almost the exclusion preserve of Power Holding Company of Nigeria, a public corporation generating well over 95% of total electricity generated in Nigeria (Central Bank of Nigeria, 2000).

By 2005, the transmission network consisted of 5000 km of 330 kV lines and 6000 km of 132 kV lines. The 330 kV lines fed 23

substations of 330/132 kV rating with a combined capacity of 6,000 MVA at utilizing factor of 80%. In turn, the 132 kV lines fed 91 sub - stations of 132/133 kV rating with a combined capacity of 7,800 MVA or 5,800 MVA at utilization factor of 75%. The distribution grid consisted of 23,753 km of 33 kV lines and 19,226 km of 11 kV lines. These in turn fed 679 sub – stations of 33/11 kV rating and 20,543 sub stations of 33/0.415 kV ratings. Also, there were 1,790 distribution transformers and 680 injection transformers. Per capita consumption of electricity is approximately 100 kWh against 4,500 kWh, 1,934 kWh and 1,379 kWh in South Africa, Brazil and China respectively. The chronic shortage of available generating capacity has negatively affected the manufacturing, industrial and agricultural sectors in Nigeria (Federal Republic of Nigeria, 2006). According to Adenikenju (2005), the unreliable power supply has led to a boom in generator market and the increase in the importation of generators (Honda, Suzuki and Yamaha) from Japan. However, in recent time, there has been local assembly of generators e.g. Holt Engineering Limited assembles Yamaha generators. Furthermore, many small scale industrialists prefer locally fabricated generators which are relatively cheaper than the imported ones.

The Nigerian Electricity Regulatory Commission (NERC) has so far granted eight operational licenses in power generation and distribution to private investors as shown in table 1 below; The licenses were issued in two different sets: in August and in December 2006 respectively.

Table 1: Operational Licences in Power Generation and Distribution to Private Investors in Nigeria

S/N	Licences	Location	Capacity (MW)	Date Issued
1	Ethiophe Energy Limited	Ogorode, Delta State	2,800	August, 2006
2	Farm Electricity Supply Limited	Otta, Ogun State	150	August, 2006
3	JCS Power Limited	Alaoji, Abia State	624	August, 2006
4	Supertek Nigeria Limited	Akwete, Abia State	1,000	August, 2006
5	Ewekoro Power Limited	Ewekoro, Ogun State	12.5	December, 2006
6	Ikorodu Industrial Power Limited	Ikorodu, Lagos State	39	December, 2006
7	Geometric Power Limited	Aba, Abia State	140	December, 2006
8	Mabon Power Limited	Dadin Kowa, Gombe State-	39	December, 2006
9	Aba Power Limited	Aba, Abia State	-	December, 2006
Total			4,804.5	

Source: Binniyat (2007).

In terms of consumption of electricity, this is classified into three groups; industrial and residential consumption as well as consumption for street light purposes. Comparing per capita

power generation to that of other countries, Nigeria appears to be the lowest among the countries in table 2 below while USA has the highest per capita electricity generation.

Table 2: Per Capita Power Generation for some Selected Countries (2007)

Country	Electricity Generated (Mw)	Population (2007 estimate)	(%) Electricity per Capital
Nigeria	5,898.00	135,031,160	0.44
USA	942,178.00	301,139,950	31.29
India	131,431.00	1,129,866,200	1.16
South Africa	40,481.00	43,997,828	9.20
Brazil	86,504.00	190,010,650	4.55
Ghana	1,748.00	22,931,299	0.76
UK	76,187.00	60,776,238	12.54
Mexico	49,533.00	104,908,000	4.72

Source: Randle (2007) in Vanguard Vol. 23

5. The Methodological Framework

The study made use of primary data generated by the authors in five locations (Ikpoba Hill/Oregbeni, Ogida, New Benin, Uselu and Mission road/Ring road) in Benin City the capital of Edo State in Nigeria. About 700 micro enterprises were used in the sampling frame. A stratified random sampling method was used to select the enterprises based on the sizes of the business. These locations were chosen because

they are the major business hub of the capital city. The study targeted houses/stores involved in bar, restaurant, saloon and hair barbing businesses, pepper, tomatoes and cassava millers, laundry business, television/radio repairers as well as cassette/CD sellers .

The Questionnaire used was first subjected to a pre test using twenty respondents and necessary correction and adjustments were made. The questionnaire had the following major

sections namely: the personal characteristics of the respondents (gender, marital status, educational qualification), the second part of the questionnaire contains nature of business enterprise by gender and educational qualification of respondents by business enterprise. The third part contains information on

the relationship between electricity failure and micro sized businesses.

For the purpose of this study, a micro enterprise is that type of business that is owned by individuals and employs a maximum of 4 or 5 employees. A total of 559 micro enterprises were finally included in the survey. The distribution and response rates are shown in table 3 below.

Table 3: Distribution of Questionnaires and Realized Samples

Location	No. of Questionnaires Distributed	No. of Responses	% of Total Responses by Location
Ikpoba Hill/Oregbeni Community	140	125	89.29
Ogida Community	140	130	92.86
New Benin Area	140	137	97.86
Uselu/Ugbowo Road	140	98	70.00
Mission Road/Ring Road	140	69	49.29
Total	700	559 (79.86%)	

Source: Survey Data, July 2009.

Table 3 shows a close relationship between the number of questionnaires distributed and the realized samples. Out of the total of 700 questionnaires distributed to the various locations, 559 questionnaires were realized. On the average, this shows a success rate of about 79.86% on the average. The micro enterprises selected are eventually spread across the various locations in Benin City.

Method of Data Analysis

The data obtained from the survey were analyzed using the simple descriptive approach. Out of the total 559 respondents, 291 of them were male

while 268 of them were females representing 52.06% and 47.94% respectively. This suggests that there is no much gender variation among the respondents in the five locations. Also, as regards the marital status of the respondents, 38.29% of them are single, 51.70% of them are married while 7.16%, 2.86% are divorced and widowed respectively (Not shown in the table). This shows that majority of the respondents are married as the business would cater for some of their family needs, hence alleviating them from income poverty. The gender of the respondents by location is shown in tables 4 below.

Table 4: Gender of Respondents by Location

Location	Male	Female	Total
Ikpoba Hill/Oregbeni Community	71	54	125
Ogida Community	79	51	130
New Benin Area	57	80	137
Uselu/Ugbowo Road	39	59	98
Mission Road/Ring Road	45	24	69
Total	291 (52.06)	268 (47.94)	559 (100)

Source: Survey data, July 2009

In terms of the educational qualification of the respondents, the data showed that there is a considerable variation in the educational qualifications of the respondents. For example, those with primary school certificate varies between 0 and 19, secondary school certificate, between 9 and 69 while first degree and Higher

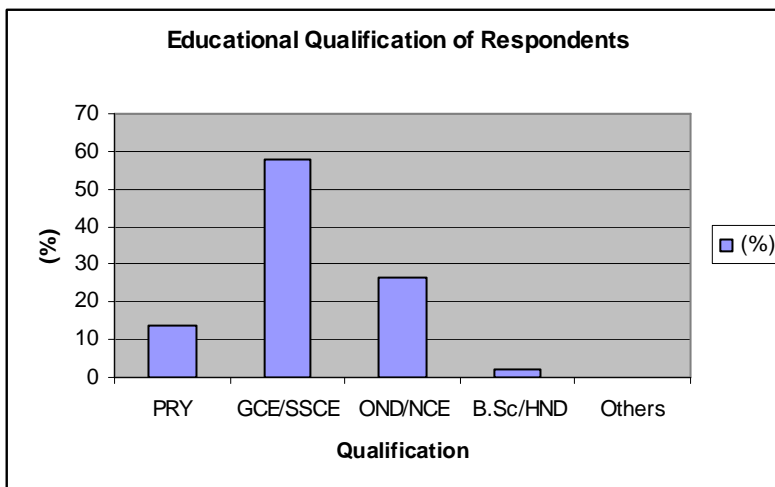
National Diploma range between 0 and 5. Furthermore, the high standard deviation for some of the educational qualification implies a high variation across the micro enterprises in Benin City as shown in table 5 and figure 1 below.

Table 5: Description of Educational Qualification of Respondents

Qualification	Minimum	Maximum	Sum	Mean	Std. Deviation
PRY	.00	19.00	78.00	7.8000	5.5737
SSCE	9.00	69.00	322.00	32.2000	22.6019
NCE	1.00	34.00	148.00	14.8000	12.8996
BSC	.00	5.00	10.00	1.0000	1.7638
OTHERS	.00	.00	.00	.0000	.0000
Valid N (listwise)					

Source: Survey data, July 2009

Figure 1: Educational Qualification of the Respondents



In summary, about 57.60% of the respondents attended secondary education which constitute majority of the samples while about 26.48% have either ordinary national diploma or national certificate of education. Therefore, all the respondents are educated and literate. It was not difficult for them to respond to the items in the questionnaires

Nature of Business Enterprise by Gender

In the survey data as shown in table 6 below, it was found that some businesses are gender

specific. For example, welding, barbing saloon business, electronic repairing and laundry business are male dominated business while hair dressing saloon businesses are female dominated businesses in Benin City. On the other hand, there is no significant gender variation in tailoring, bar and tomatoes/pepper grinding businesses. The table further shows that tailoring business, followed by hair dressing saloon businesses and bar business constituted a significant part of the Sample.

Table 6: Nature of Business Enterprise by Gender

Nature of Business	Male	Female	Total
Barbing	62	0	62
Hair Dressing	7	99	106
Tailoring	48	60	108
Laundry	12	0	12
Restaurant	18	41	59
Bar	34	50	84
Welding	21	0	21
Tomatoes/Pepper Grinding	18	15	33
Electronic Repairs	43	0	43
Cassette/CD Selling	28	3	31
Total	291	268	559

Source: Survey Data, July 2009

Infrastructure Need by Choice by Business Enterprises

With respect to infrastructure needs by micro enterprises by choice, out of the total number of respondents, 73.52% rate electricity need as priority, 14.31% rated water. Furthermore, 4.11% rated telecommunication (GSM) and for road, 8.08%. The overall response shows that micro enterprises rated electricity need as a major

priority followed by water, roads and telecommunication (GSM) in that order. However, on the average, they rated electricity as a major infrastructure priority. It was found that restaurant owners rated water as a major infrastructure needs. Those in CD/cassettes selling businesses and welding businesses would prefer road business after electricity supply as shown in table 7 below.

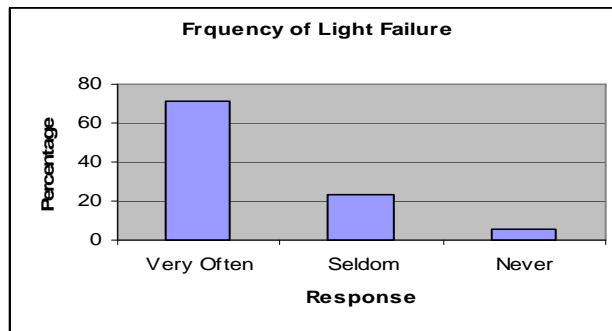
Table 7: Infrastructure Need by Choice by Business Enterprises

Nature of Business	Electricity	Water	Telecommunication (GSM)	Roads	Total
Barbing	50	7	3	2	62
Hair Dressing	81	20	4	1	106
Tailoring	101	0	6	1	108
Laundry	9	0	1	2	12
Restaurant	19	29	3	8	59
Bar	66	16	0	2	84
Welding	10	1	1	9	21
Tomatoes/Pepper Grinding	22	3	1	7	33
Electronic Repairs	38	1	1	3	43
Cassette/CD Selling	15	3	3	10	31
Total	411 (73.45%)	80 (14.31%)	23 (4.11%)	45 (8.05%)	559 (100%)

Source: Field Work, July 2009

Light failure, frequency, and periods of light failure

Figure 2: Frequency of Light Failure



The figure shows that light failure is very frequent in the surveyed locations. Out of the total 559 respondents, 400 (71.56%) respondents agree that light failure is very frequent, 129 (23.07%)

respondents agree that it is seldom while only 30 (5.37%) of the respondents agree that they don't experience light failure.

Table 8: Electricity Failure per Day

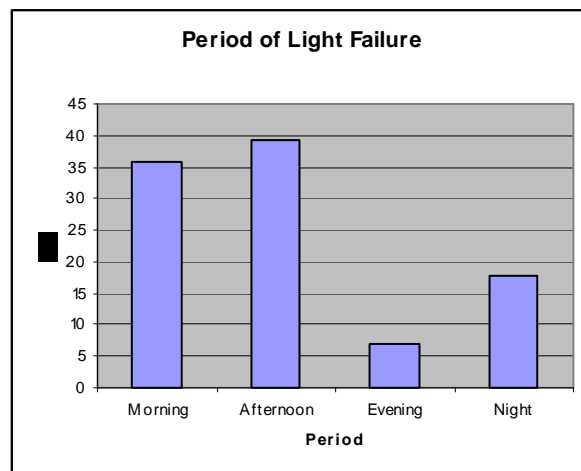
Time	Total	(%)
10 – 20 minutes	24	4.29
30 – 40 minutes	30	5.37
1 – 4 hours	185	33.09
5 hours and above	320	57.26
Total	559	100

Source: Survey Data, July 2009

As shown in table 8, light failure in some of the locations usually occurs for about five hours and above as represented by about 57.26% of the respondents. Also, 33% of the respondents agree that light failure usually occurs on the average of about 1 – 4 hours per day. Furthermore, it was

found that in the areas surveyed, light failure usually occurs in the afternoon and morning which is usually the peak of most business activities in the locations surveyed. This is shown in the figure 3 below.

Figure 3: Period of Light Failure

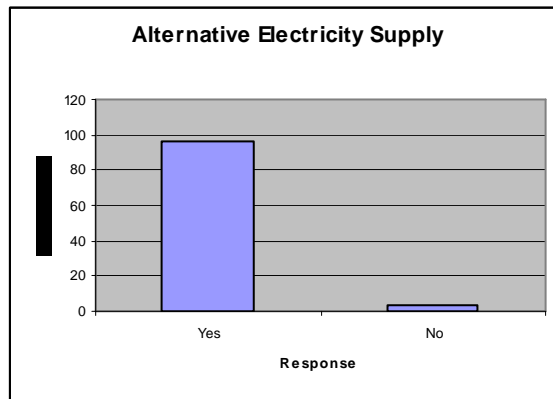


Alternative Sources Electricity Supply

While 540 (96.60%) respondents agreed that they have alternative electricity supply, only 19 (3.40%) do not have alternative power supply as

revealed from figure four below. This implies that without PHCN supply of electricity, most of them continue with business with extra cost.

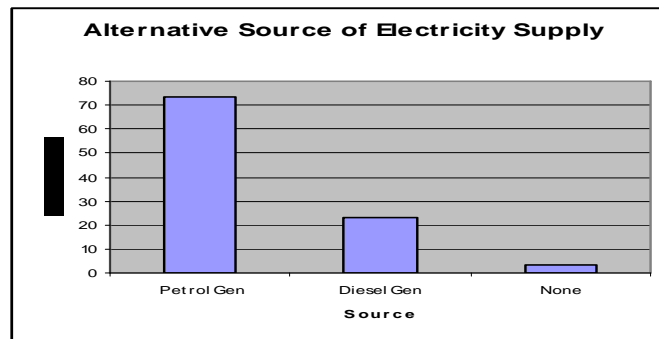
Figure 4: Alternative Sources Electricity Supply



The data generated shows that out of the 559 respondents, 410 (73.35%) have generator using petrol as alternative source of electricity supply while 130 (23.26%) of them have diesel using generator. However, 19 (3.40%) have no

alternative source of electricity supply as shown in figure 5 below. The bias towards petrol using generator may be because of the exorbitant cost of diesel and in some cases relatively scarce to get.

Figure 5: Type of Alternative Sources of electricity Supply



Value of Alternative Source of Electricity Supply

Inspite of the low income of micro enterprises, they still spend a substantial part of their income to get alternative source of electricity supply. This leads to increase in cost of doing business. While

about 299 (53.49%) spend between N10,000.00 – N15,000.00 to purchase generator set, 199 (35.60%) of the total number spend between N21,000.00 – N25,000.00 on the purchase of a generator set as shown in table 9 below:

Table 9: Value of Alternative Source of Electricity Supply

Value (N)	Total	(%)
10,000 – 15,000	299	53.49
16,000 – 20,000	53	9.48
21,000 – 25,000	199	35.60
26,000 – 30,000	5	0.89
31,000 – 35,000	1	0.18
36,000 and above	2	0.36

Source: Field Work, July 2009

Average Operating Cost of Alternative Source of Power Supply per Month

The data revealed that annual operating cost for alternative source of power supply is significant. Generally, there is maintenance cost for the generator set apart from purchases of engine oil

per month for servicing. On the average, the micro enterprise owners that use fuel for their generators spend about N10, 200.00 per month for fuel purchases while those using diesel spend on the average N15, 000.00 per month.

Table 10: Average Operating Cost of Alternative Source of Power Supply per Month

Items	Average Operating Cost per Month (N)
Fuel	10,200.00
Diesel	15,000.00
Maintenance Cost	3,000.00
Engine Oil	2,800.00

Source: Field Work, July 2009

Impact of Electricity Failure on Micro Enterprises

It was found that electricity failure impact serious financial and customer losses on the operators of micro enterprise. For example, while 50.45% and 22.72% of the respondents suffer from financial

and customer losses respectively, about 19.32% suffer from equipment damage occasioned by frequent power losses. However, about 4.47% and 3.04% suffer from image loss and idleness respectively.

Table 11: Impact of Electricity Failure on Micro Enterprises

Impact	Total	(%)
Customer loss	127	22.72
Financial loss	282	50.45
Image loss	25	4.47
Equipment damage	108	19.32
Idleness	17	3.04
Total	559	100

Source: Field Work, July 2009

Enterprise Perception of Factors Responsible for Poor Electricity Supply

As shown in table 12, most of the respondents agreed that the most vital factors responsible for poor electricity supply is corruption among the officials of Power Holding Company of Nigeria, equipment failure as well as low electricity tariff paid by electricity consumers. For example, while

33.99% of the respondents succumbed to corruption as a major factor, 23.79% responded to equipment failure as a major factor as shown in table 12 below. The issue of equipment failure may be occasioned by obsolescence of most of the equipment and the use of fake materials for servicing and repairs of electricity supply materials

Table 12: Enterprise's Perception of Factors Responsible for Poor Electricity Supply in Nigeria

Problems	Total	(%)
Equipment Failure	133	23.79
Low Electricity Tariff	120	21.47
Inadequate funding	11	1.97
Facility overload	7	1.25
Excess government control	98	17.53
Corruption	190	33.99
Grand total	559	100

Source: Field work, July 2009

Enterprise Perception on how to Improve Electricity Supply in Nigeria

Majority of them suggested that the authority should introduce competition in the supply of electricity in Nigeria as well as increase tariff paid

by the consumer for there to be improved supply of electricity in Nigeria. Furthermore, it was suggested that all the perceived corrupt officials should be sacked. Table 13 below shows the views of the respondents.

Table 13: Enterprise Perception on how to Improve Electricity Supply in Nigeria

Suggestions	Total	(%)
Increase tariff	129	23.08
Increase funding	15	2.68
Sack corrupt officials	101	18.07
Introduce competition	314	56.17
Grand total	559	100

Source: Field work, July 2009

6. CONCLUSION AND POLICY IMPLICATIONS

It was found that in the area surveyed, the frequency of light failure is very often particularly in the afternoon which is supposed to be the peak of business activities. This is particularly for welding, restaurant and hair dressing businesses. Most of the business owners spend more than ten thousand for fuel per month leading to reduction in profit. A major policy implication of the result is that the authority should place emphasis on the provision of efficient supply of electricity followed by water and roads. This will improve the activities of micro enterprises in the area surveyed in Benin City. It will further create more opportunity for self employment which may lead to further overall economic growth of Nigeria.

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