RESPONSES OF MANUFACTURING INDUSTRIES TO POOR INFRASTRUCTURE IN GOMBE METROPOLIS, NORTH EAST NIGERIA, 1963-2013

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ABSTRACT
Beginning from the Industrial Revolution of the 18th and 19th centuries, the nexus between infrastructure and growth of manufacturing has been well established in the literature. As such, poor infrastructure has been identified to have negative effect on industrial development as evident in low capacity utilization and collapse of industries. However, response of manufacturers to infrastructure deficiencies is rarely analyzed in most of the literatures. This gives an impression that manufacturers adopt a lets-wait-and see attitude towards poor infrastructure. It is against this backdrop that this paper interrogates the responses of manufacturing firms to infrastructure decadence within the context of Gombe metropolis in North East Nigeria. Gombe remains a city with overwhelming infrastructure decay which affects its industrialization process. Thus, there is compelling need to explore how the manufacturers in Gombe face the challenge of infrastructure deficits. A historical method of inquiry based on the use of primary and secondary sources was adopted. The result showed that manufacturers responded to poor public infrastructure through private provisioning, requested public electricity, water supply, factor substitution, output reduction, relocation, and closure. The paper finally contends that collapse of industries due to poor infrastructure in Gombe metropolis was a long and protracted one not sudden or overnight occurrence as often assumed and popularized.

Introduction

One of the recurring decimal in human history from the sedentarization of man to the unbundling of the power sector in Nigeria in 2013 has been man's ability to respond to challenges posed by his environment. The challenge posed by the annual flooding of the river Nile made ancient Egyptians to build canals and dykes[110], while the periodic invasion of the Mongols partly inspired the construction of the Great Wall of China.[111] Unfortunately, this ingenuity of man to response to challenges is downplayed in most of the literature on infrastructure and industrial development in developing countries. Thus producing the linear argument by many scholars that infrastructure deficit leads to collapse of manufacturing industries. For instance Winch, Luger and Butter provide an overview of the critical relationship between infrastructure and manufacturing in United Kingdom and show how manufacturing depended on infrastructure.[112] On their part Azolibe, and Okonkwo, focus on infrastructure development and industrial sector productivity in Sub-Saharan Africa. Their research findings reveal that infrastructure influences industrial productivity in sub-Saharan Africa. They observed that the low level of industrial sector is largely due to their poor electricity, transport, water supply and sanitation.[113]Nadabo examined the nexus between infrastructure development and manufacturing sector performance in Nigeria. His findings show that poor infrastructure has negative impact on manufacturing sector performance in Nigeria and thus called for improvement of the quality of infrastructure in Nigeria.[114]Thus, despite the fact that infrastructure impact on manufacturing developed as shown by some scholar butit wrongly portrays manufacturers as helpless spectators in the face of dwindling infrastructure and the negative attendant consequence on their investments. This paper demonstrates that owners and managers of manufacturing industries in Gombe metropolis did not adopt a lets-wait and attitudes towards excruciating deficits in public infrastructure. They did so by adopting strategies to mitigate the impact of epileptic electricity supply, poor transport infrastructure, and decay telecommunication system.

Gombe Metropolis is located between latitude '10° to 100 20'Nand longitude 11°01 and 110 19'E.[115]The area comprises of Gombe town (the capital of Gombe State), Gombe Local Government Area, some parts of Akko 2 LGA and Kwami LGA, and cover an area estimated at 45 km[116]. It shares common boundaries with Kwami Local Government to the north and Akko Local Government Area to the south east and south west. The metropolis is a multi-cultural society consisting of different ethnic groups such as the Fulani, Hausa, Tera, Tangale, Bolawa, Waja, Igbo, Yoruba, and Kanuri tribes, with Islam and Christianity as the two dominant religions. The total population of Gombe metropolis was 266,844 in 2006 and increased to almost double (400,000) in 2010.[117] The core part of the metropolis is the most densely populated area with 260 persons per square hectare and coincidentally the most densely part of the metropolis in terms of buildings.

The Gombe State Designation of Urban Areas Order of 2nd August, 1998 as amended by the Order of 11th November 1999 designates the urban centres; with Gombe having radius of 15 kilometres from its geographic centre. This therefore defines the legal planning Area of

[110]G. Mokhtar, (Ed),*Ancient Civilizations of Africa* , Heinemann -California –Unesco,1981,P.153

[111]G. Mokhtar, (Ed),*Ancient Civilizations of Africa, Op.Cit*

[112]Luger N., Butter, A and Winch *Infrastructure and Manufacturing: Their Evolving Relationship* (2019)

[113]Azolibe, C.B. and Okonkwo, J.J. *Infrastructure Development and Industrial Sector Productivity in Sub-Saharan Africa* Journal of Economics Development Vol. 22 no.1 (2020)

[114]Nadabo, Shamsuddeen Yusuf *Nexus Between Infrastructure Development and Manufacturing Sector Performance in Nigeria: The Moderating Role of Institutional Quality* (2020)

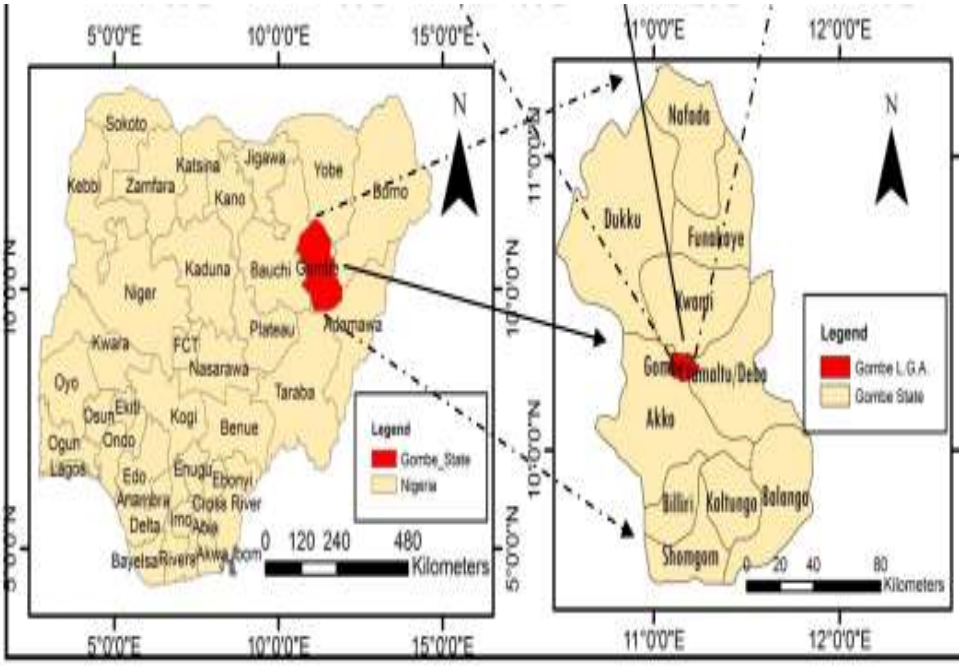
[115] Excerpt from Gombe State Ministry of Land and Survey, 2003

[116]Y. C. Makadi, D. Gideon & L. A. Mbaya, "Application of Geographic Information System (GIS) in Monitoring Gully Erosion in Gombe Metropolis, Gombe State, Nigeria" *International Journal of Advanced Research in Social Sciences, Environmental Studies & Technology* | IJARSSEST ISSN Hard Print: 2536-6505 | ISSN Online: 2536-6513 Volume 3, Number 1, August, 2017

[117] Excerpt from National Population Commission, 2006,p.1

Gombe Metropolis.[118] However, this order was revoked on 13th July, 2020 when Executive Order number 4 came into effect. The new order stipulates that all land within 20 kilometres radius of Gombe Local Government headquarters has become an urban area[119]. The industrial landscape of Gombe metropolis had industries such as Gombe Oil Mill incorporated in 1973; Dukson Soap Factory, 1992, Landa Sack Factory, 1994, Gombe Fertilizer Blending Company, 2000, Niko Plastic Industry in 2001, Gombe Dadaka International Flour Mill, 2011 and DemmoAluminium established 2012 among others.

Map of Nigeria showing Gombe State



Source: *Ministry of Lands and Survey, Gombe State, 2014.* ***See also*** *B. R. Hashidu, "Effects of Road Transport Development on Urban Growth and Commerce in Gombe Metropolis": An M.Sc. Research Proposal presented to the Department of Geography, Ahmadu Bello University, Zaria, March,2015,P.6*

Definition of Terms

Manufacturing

Manufacturing is the systematic production, generation or creation of finished articles such as hoes, cutlasses, clothes shoes, cars etc., from raw materials by hand using hand tools or machines. As such manufacturing could be fabricative, analytical or synthetic. This paper considers the simple meaning of manufacturing as "things made by hand".[120] This is because; the modern conception of the word misleadingly brings to mind only factories and machines. This approach

[118] Excerpt from *Gombe Master Plan*, p.4

[119] Excerpt from *Tribune Newspaper*, 20th July, 2020

[120] W. Rodney, *How Europe Underdeveloped Africa*, Panaf Publishing Abuja, 2009. P.47

helped us accommodate the so-called small- scale industries in our discourse.

Infrastructure

The word infrastructure is a combination of the Latin prefix "infra", meaning "below", and "structure". It is an umbrella term for many activities referred to as "social overhead capital" by such Development economists as Paul Rosenstein Rodan, RagnarNurkse, and Albert Hirschman. Neither term is precisely defined, but both encompass activities that share technical features (such as economies of scale) and economic features (such as spillovers from users to non users).

[121] Infrastructure in a simple parlance is the foundation upon which the structure of an economy is anchored. It is the essential systems and facilities that promotes the smooth running of an economy as well as improve the quality of life of the people. Thus infrastructure is defined as a complex of capital goods which are not consumed directly rather they provide services only in combination with labour and other inputs. According to Jochimsen et al, it is the sum of national, institutional and personal facilities and data which are available to the economic agents,[122]and are capable of of providing goods and services essential for enabling , sustaining and improving the societal standard of living. Infrastructure enables geographic concentration of economic resources and provides wider and deeper markets for output and employment. The necessity of infrastructure as a prerequisite for development of the manufacturing sector cannot be overemphasized. Thus the adequacy or inadequacy of infrastructure determines the success or failure of countries in industrialization, diversification, commercial expansionand improvement of environmental condition.[123]The paper focuses on electricity and water supply

Synopsis of Infrastructural Deficiencies in Gombe Metropolis

Electricity was introduced into Gombe in 1961 and since then, many areas were gradually connected with the national grid. As at 2013, Gombe State was benefitting from the 132/33 KV allocated to the North Eastern Region from the National Grid power line originating from Shiroro.[124]

In terms of electricity supply, our interviewees have concurred that the demand was higher than the supply. This led to load shedding, and frequent power outages which crippled many industrial establishments. It should be noted that the initial installed capacity of 200 KVA did not improve even when the population of Gombe town and neighbouring settlements reached more than 60,000 as at 1963.[125]The subsequent installation of a 330 KV transformer at TashanDukku substation on 17th November, 1979 did not meet the requirements of households and industries, including the Gombe Oil Mill which commenced production two to three years earlier.[126]Although more areas such as BCGA, Nasarrawo, Yelanguruza, Commercial Area and Malam In na were connected, load shedding and black out became the rule rather than exception. It should be noted thatblackouts occurred for a variety of reasons. Electricity is sent from power-generating plants to a country's users through an intricate network of wires interconnected by transformers and substations. A fault or failure at any point can mean a loss of power for all downstream users. Sometimes the faults are due to downed wires or short circuits. More commonly in the developing world, utilities intentionally shut power to parts of the grid to protect sensitive.[127]Not only do wires heat up when placed under excess loads, but so too do transformers which can explode spectacularly. Transformers are critical nodes in the power grid, stepping up power to the high voltages necessary for efficient transmission

[121]Excerpt from World Development Report 1994 entitled "Infrastructure for Development", Oxford University University,p.2. It is interesting to note that as late as 1973, the editors of *Urban Studies* eliminated "infrastructure" from a paper R. Prud'homme was contributing to this well-written British journal, and replaced it with "social overhead capital"

[122][122]Jachimsen, R. Gustafsson K. Art Infrastrukur. In :Gorres=Gese;;schaft (Hrsg) Staatslexikon. 10/Bd,6 Aufi, Feiburg/Br, (1970) Sp. 339-348

[123]World Bank 'infrastructure for Development', World Development Report, New York Oxford University Press 1994

[124]Interview with Alhaji Musa YahayaUmaru, aged 52 , Acting Chairman, Manufacturers Association of Nigeria, and Commodity Board, Gombe State Chapter on 26th September, 2018

[125] Interview with AlhajiYayaHammari on 25th September, 2018

[126] Interview with AlhajiYayaHammari on 25th September, 2018

[127] B. Min, *Power and the Votes*, Op.Cit, p.44-45

across large distances, and stepping down the voltage at service drops to the 220 or 110 volts useful for household use. A blown transformer is expensive and laborious to replace.[128]

Gombe town has been suffering from shortage of water since the precolonial period as noted by Karima Muhammad[129]. Before the completion of Gombe Regional Water Supply Scheme from Dadinkowa Dam, presence of water drums was the feature of many houses in Gombe metropolis as people awaited the arrival of water tankers from Kwadon village. However, settlements such as Bomala, WuroBiriji and WuroShi'eo have greater potentials for borehole drilling due to the availability of groundwater. This is similar tothe Greater Lagos region, where the water supply situation presents a picture much different from that of power generation, because an abundant supply of groundwater at low depths below the surface is ubiquitous in the area.[130] It is important to note that the water discharge from the Dadinkowa Dam did not commensurate with the number of inhabitants of Gombe which grew from 18,500 in 1952, to 47,265(57th in the country) in 1963 and 300,000 in the late 1990s.[131] Within a span of eighty (80) years, Gombe grew from the size of village with about 300 inhabitants to a state capital of approximately 300,000 inhabitants(i. e. average annual growth rate of 5.9%) [132].

In terms of transport infrastructure, Gombe metropolis depends almost exclusively on road transportation for intra-city, inter-city, communal Linkage, community-farm linkage and Freight activities. The railway, which was of tremendous assistance in the 1970s and 1980s, has collapsed. As at 2004, Gombe State has about 572.20 Kilometer of rural and semi-urban road network and 302.82 kilometers of urban road network.[133]Although there was an increase in connectivity in Gombe metropolis from 1.61 in 1996 to 1.70 in 2005 and 1.80 in 2014,[134]deficit in road infrastructure could be observed in the metropolis, especially settlements located at the outskirt of Gombe town. In addition, the closure of Gombe-Biu road due to Boko Haram insurgency also slowed down trade in locally manufactured produce.

Responses to Power Failure

In their seminal study in 1992, Alex and Anas classified the responses of Nigerian firms into four categories according to the source of their power: (i) 'NEPA only" or captive firms which purchase all their electricity from NEPA and thus have no private investments to generate their own power; (ii) "NEPA main" or stand-by firms which rely on NEPA normally but switch to their own generators during periods of breakdown in NEPA's supply; (iii) "Own Generators Main" or firms with the public supply as stand-by which normally use their own generators to insure an adequate power supply, but switch to NEPA during periods when the reliability of NEPA power is considered high; (iv) 'Own Generators Only" or self-sufficient firms which never use NEPA power.[135]

It should be noted that some of the categories of responses mentioned by Alex and Anas were also identified in Gombe metropolis. For instance, Oil and Rice Millers of Nassarawo industrial

[128] B. Min, *Power and the Votes,*Op.Cit, p.44-45

[129] K. M. Abubakar, "A History of Water Resources Development in Gombe Town, 1919-1960", M.A Dissertation, Department of History, GSU, 2018,p.47

[130] K. S. Lee and A. Anas, *Impacts of Infrastructure Deficiencies on Nigerian Manufacturing: Private Alternatives and Policy Options*, Infrastructure and Urban Development Department, Report of the research project, "A Study of the Impacts of Infrastructural Deficiencies on the Nigerian Industrial Sector and Their Policy Implication World Bank, February 1992, p 11-8

[131] E. Oyedele, "Problems and Prospects of Urbanization", *Op.Cit* , P.19

[132] Excerpt from, "The New State Capital Gombe" by HeikoBalzerek , Department of Geography, University of Heldeberg, Germany in HeikoBalzerek Et-al, "Man-Made Flood Disaster in the Savanna Town of Gombe / NE Nigeria The Natural Hazard of Gully Erosion Caused by Urbanization Dynamics and their Peri-Urban Footprints"

[133]SEEDS Committee's Final Report, Op.Cit, P.115-116

[134] B.R. Hashidu, "Effects of Road Transport Development on Urban Growth and Commercial Activities in Gombe Metropolis, Gombe State Nigeria" M.Sc. Geography Dissertation, Ahmadu Bello University Zaria, January, 2015

[135]K. S. Lee and A. Anas, *Impacts of Infrastructure Deficiencies on Nigerian Manufacturing: Private Alternatives and Policy Options*… ,P.11-13

clusters relied solely on electricity supplied by the Jos Electricity Distribution Company (JED). [136]The fact that the cluster was on a blue line and about 18 hours supply was guaranteed, the manufacturers became 'contented' captive. While more than half of the 78[137]Satchet water industries such as Gombawa Table Water, Demas, Mamsa, DiyamKwadon, andNasab used generators when there was power outage. This implies that private provision of power was another response of small and medium industries in Gombe metropolis to infrastructural deficits. This was in tandem with responses of firms in other parts of Nigeria. According to the figures by the National Electricity Regulatory Commission (NERC), of the N796 billions spent to fuel generators in 2008, members of MAN spent over ₦350 billion. This excludes amount spent on maintenance and repairs and acquisition of new generators.[138] Our interviews have revealed that Niko Plastic Industry and Dadaka International Flour Mill among others relied solely on public supply of electricity as they did not purchase generator. This implies that their machines remained idle in the period of blackout.

Our field work also revealed that some industries were illegally connected to the grid on the claim that they could not afford to pay the exorbitant electricity bill. To further ensure 'secrecy' during production, these industries began production at night strategy. However, additional sources have shown that this illegal connection was done in connivance with JED staff who were bribed.

PowerSupply on "Special Request"

To cushion the effect of unstable electricity supply so as to remain in business, some small and medium scale industries in Gombe Metropolis adopted a strategy of requesting for electricity supply for certain hours. Our interviews revealed that this was done based on negotiation with management of power distribution companies. In some instances, this deal was sealed with some staffs that were not necessarily in the top management cadre. Under this arrangement, power supply was made available for four to six hours depending on the agreement. An interviewee revealed that an undisclosed amount was paid. While in some instances, the cash payment was accompanied with 'gifts', especially the good produced by the negotiating factory. Factories such as Dukson Soap and Detergent Factory, and Niko Plastic industry have admitted adopting this strategy. In fact, in the case of the former, soap and detergents were given to the NEPA (now JED) staff to strengthen the deal.[139]

Output Reduction

According to Alex and Anas 1992, this response to infrastructural deficiencies is perhaps the most common and the only possible response in the very short run. The firm reacts to the infrastructure deficiency (such as a power interruption) by temporarily shutting down its operations and thus producing a lower level of output over a period. For example, if a firm cannot afford to have its own electric power generators, it has no choice but to reduce output during periods of power interruption.[140] In Gombe metropolis, industries such as Dadaka international Flour Mill reduced their output by about 30% to mitigate the impact of fluctuation in power supply. The same applies to Gombe Oil and Landa Sack Factory. As mentioned ealier, this strategy was temporary as firms could not continue to reduce their outputs for long. Because such response was injurious to their profit turn over. Therefore, the measure was to delay the inevitable (i.e the collapse of the factory) or purchase of generator/improvement in public supply of electricity or relocation.

Furthermore, the implication of continuous output reduction by existing firms could be contagious given that births of new firms will be reduced if prospective entrepreneurs expect that they might have to shut down because of infrastructure inadequacies soon after they set up

[136]Interview with Alhaji Abbas Aliyu, Financial Secretary, Gombe Oil Millers Association on 17th October, 2019

[137] Excerpt from Gombe state University Economic Survey Report, 2013,p.54

[138]B. ChimaOnuoha "Factors Militating Against the Global Competitiveness of Manufacturing Firms in Nigeria" in the *American International Journal of Contemporary Research Vol. 3 No. 4; April 2013,P. 58*

[139]Interview with Anonymous on 28th September, 2019

[140]K. S. Lee and A. Anas, *Impacts of Infrastructure Deficiencies on Nigerian Manufacturing: Private Alternatives and Policy Options* p.111-1

plant.[141] This is what is described in this thesis as an "industrial stillborn".

Factor Substitution

This involves a situation where by a firm substitutes away from the use of the poorly provided service by adjusting its mode of production in favor of those inputs and raw materials which are fewer infrastructures intensive. The use generator in sealing some bags at Dadaka International Flour Mill is one example of this response.[142] However, it is pertinent to note that this approach was rarely adopted by Nigerian firms. On this, Anyanwu laments that:

> *… Industries in Nigeria cannot acquire modern machines that have reduced processes. Most of them, especially textiles, cement, bakery, leather, paper manufacturing and many others are all producing with machinery that were procured in the 1960s and 1970s, giving rise to frequent breakdown and reduction in capacity utilization rates. Low technology is responsible for the inability of local industry to produce capital goods such as raw materials, spare parts and machinery, the bulk of which are imported. Hence there is very low value added and low productivity.*[143]

Responses to Water Supply Problem

Historically, Gombe town has been wrestling with problem of water scarcity; therefore, this challenge was faced by all manufacturing industries from 1963 to 2013. However, the settlements surrounding Gombe town had lesser problem of water because the water bearing quality was better and had low fluoride content. But in all cases, industries supplemented the unstable water supply by drilling private bore holes. Some industries like Gombawa Water factory obtained their water supply from Kwadon, a town about 8 km from Gombe Town. Each tank cost ₦ 3500 as at 2013 as confirmed by Usman Isa Yau. Some rice millers relied on water vendors such as *Engaruwa*, *MasuKus-Kus,MasuTanki* or private boheroles[144].

Relocation

The firm may relocate to a site with better infrastructure services. Such relocation can occur within a city or from one region to another. Many Large and strategic Industrial establishments were forced to close down. Dunlop, Michelin, Many Textile Companies are examples in this case. Within the last five years (1987-1992,) casualties to retrenchment in Nigeria numbered over 1 million. It is estimated that over 800 companies, including multinational, have relocated all or part of their manufacturing facilities outside Nigeria where they can get a more reliable power supply Coca Cola's only concentrate factory in Ogun State to Switzerland in 1998 Nestle & Unilever have made similar arrangements[145]

However, Alex and Anas revealed that Nigerian firms rarely move to new locations from the initial site as 50 percent of the firms had been at their present location since[146] A typical example of relocation could be seen the relocation of Oil mills scattered in different parts of Gombe metropolis to one location- Nassarawo industrial cluster. Apart from this, there was near absence of relocation of industries in Gombe metropolis. This trend is not confined to Gombe as absence of mobility in Nigeria was also observed by Alex and Anas considering that the average annual mobility rate observed in large cities in other developing countries is about 5 percent. The relative immobility of Nigerian firms is tandem with the fact that the capacity, regularity and quality of infrastructure vary from bad to worse within and across Nigerian cities. This tends to limit the gains in infrastructure quality that can be achieved by moving to new locations. Nigerian firms instead undertake their own extensive capital expenditures and incur regular operations and maintenance outlays to provide their own

[141] Interview with AlhajiAbubakarDanburam, Former Manager, Landa Sack Factory Gombe, 27th May, 2018

[142] Interview with AlhajiAbubakar, Procurement Manager, Dadaka International Flour Mills, Gombe on 17th October, 2019

[143]C. M. Anyanwu ,*Productivity in the Nigerian Manufacturing Industry*, Research Department,Central Bank of Nigeria, P.129

[144]Interview with AlhajiAbubakar, Procurement Manager, Dadaka International Flour Mills

[145]K.S. Lee and A. Anas, Impacts of Infrastructure Deficiencies on Nigerian Manufacturing, Private Alternatives and Policy Options, World Bank Discussion Paper, February, 1992,p. 111

[146]K.S. Lee and A. Anas, Impacts of Infrastructure Deficiencies on Nigerian Manufacturing, p.111-3

services. The high setup cost with a large amount of initial capital investment for own service provision would make it difficult for the firms to move.[147]Another problem with relocation is that it often involves trading one infrastructure deficiency for another.[148]

It should be noted that in the history of industrial development in Gombe State and Gombe metropolis in particular, in addition to infrastructural decay, political considerations also influenced the relocation of industries. For instance Gombe Flour Mill project was modified and relocated to Bauchi on political ground. The idea of establishing a flour mill in Gombe was conceived due to availability of raw material (i.e maize). Because World Bank-Assisted Agricultural Development Project in Gombe led to the popularization of maize production in Gombe, an area hitherto dominated by millet production.[149] Following this production switch, a Flour Mills Project was to be established in Gombe to process the quantities of maize being produced but for the relocation.

More so, Gombe Asbestos Company was also relocated to Bauchi in 1976. The initial motivation for the project was proximity to, and presence of raw materials at Ashaka Cement Company[150]. Finally, large cotton seed production in Gombe, and the neighbouring areas of Biu, Guyuk and Numan, motivated the Northern Nigerian Government to conceive the idea of establishing a textile industry in Gombe.[151] According to Yusuf Ibrahim Gamawa, a feasibility study for the project was carried out by MessrsPolcomex of Warsaw under the former North Eastern State Government (NESG) and Arewa Textile came in as technical partners. However, following a "doubt" expressed by some of the stakeholders on the viability of the project, the then Federal Ministry of Economic Planning Development struck out the project. Although, in subsequent years, the project was reinserted in the fourth national development plan, 1980-1985 and Spinning Mill started, it suffered neglect and thereafter abandoned altogether.[152] However, it is important to note that, relocation of industries was done in collaboration with elites from Gombe. The foregoing discourse has shown that just as in the case of industrial location, political factors greatly influenced the relocation of industries as typified by the examples of the three eclipsed factories[153] given above. This implies that poor infrastructure alone cannot explain why industries relocate.

Closure

According to MAN Survey in 2013, out of the 450 large, medium and small industries that existed in Kano State in the early 1990's, only about 120 were in operation with only 45-50% capacity utilization. In the Kaduna sector of MAN which includes Katsina, Abuja and Niger, out of 105 industries, 72 are operational while 33 have closed shop.In the Jos sector of MAN, which includes Bauchi and Borno, out of 54 industries, 38 are operational. See appendix.[154]

In Gombe Metropolis, more than 90% of the industries established from 1973 to 2013 have closed shops. This development was partly informed by poor infrastructure especially electricity supply. It is important to emphasize that closure of firms did not occur overnight as manufacturers devised many strategies to stay in business. For instance, Gombe Oil Mills has been wrestling with infrastructural challenges since the

[147]K.S. Lee and A. Anas, Impacts of Infrastructure Deficiencies on Nigerian Manufacturing

[148]K.S. Lee and A. Anas, Impacts of Infrastructure Deficiencies on Nigerian Manufacturing p.111-4

[149] Interviews with AlhajiYayaHammari . See also Adesiyan J.O**, "**Regional Development Alternatives: Critical Assessment of Gombe Agricultural Development project",Department of geography, ABU Zaria, 1983,P. 260-265 and UsmanFaruk, The Making of Gombe State: A Historical Panorama, Op.Cit,p. 12

[150]U. Faruk, (Jarman Gombe), *The Making of Gombe state: A Historical Panorama,*Ahmadu Bello University Press Limited Zaria, 2009

[151]U. Faruk, (Jarman Gombe), *The Making of Gombe state…p.11*

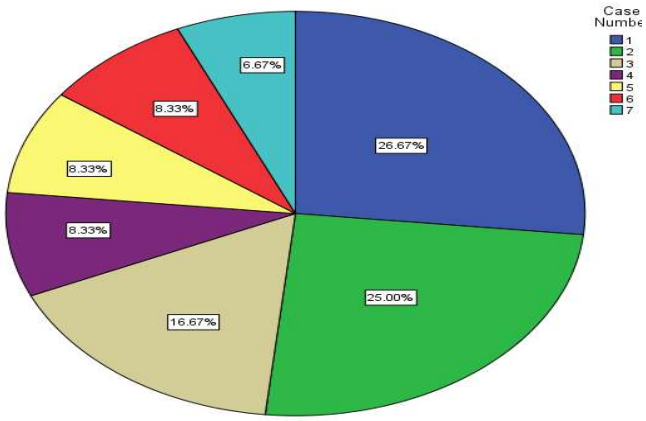
[152]Y.I. Gamawa, "The Impact of State Administration on Bauchi: The Era of Tatari Ali and After, 1979-1999", MA History Thesis, University of Abuja,2007, P.68-69

[153] S. Misbahu, History of Industrial Development in Gombe State, 1974-2011, M.A Dissertation, Department of History, ABU Zaria, p. 127

[154]S. Sagagi, M., et-al (Ed), *Strategic Agenda For Northern Development* (STAND), A Publication of Arewa Research and Development Project (ARDP),Clique Nigeria, 2017,P.98

commencement of production in 1976, but it was closed in 2000s. Other industries such as Landa Sack Factory, Frotline Oil Mill, and Dukson also suffered the same fate. It should be noted that other factors such as corruption and embezzlement of funds, inadequate spare parts, Structural Adjustment Programme (SAP), financial constraints have among other factors contributed to the collapse of many firms in Nigeria and Gombe metropolis in particular. More so, there are evidences to show that closure of industries also induced what could be termed as manufacturing apathy, given that investors became increasingly unwilling to set up new firms due to the closure of existing firms as a result of challenges bordering on infrastructure. The figure below gives a percentage of causes of manufacturing apathy in which lack of capital and epileptic electricity supply have 26.67% and 25.00% respectively.

Figure 1: Pie Chart on the Percentage of Interviewees' views on Causes of Manufacturing Apathy in Gombe State



Key:

[1] = Lack of Capital.

[2] = Epileptic Power Supply.

[3] = Weak Political Will.

[4] = Long gestation period of profit.

[5] = Crisis of Confidence/ Erosion of Trust.

[6] = Disdain for interest attached loans.

[7] = Poor Managerial Skills.

Source: *Authors' Field Work, 2018*

Conclusion

This paper has so far contextualized infrastructural deficit within global and national spheres to show that poor infrastructure is ubiquitous and its attendant consequences hampered the development of firms with varying degrees and magnitude. In line with the findings of Alex and Anas in 1992, the evidences in Gombe metropolis demonstrate that firms responded to infrastructural challenges through private provisioning, illegal connections, and electricity supply on special request. Other responses identified were factor substitution, output reduction, relocation and closure. It has been contended that incidences of relocation were rare, and relocation of industries such as Gombe Flour Mill, Gombe Textile and Gombe Asbestos Factory was informed more by political consideration than by poor infrastructure. While closure of firms such as Gombe Oil Mill, Landa Sack Factory, Frontline Oil Mill and Dukson Soap and Detergent factory did not take place overnight as owners of those firms have been exerting efforts to ensure their enterprises remained functional. However, in most cases, the firms closed shop as a last resort. Finally, the chapter argued that other factors such as weak political will, corruption and embezzlement, financial constraints, lack of spare parts and other challenges brought about by or exacerbated by the Structural Adjustment Programme (SAP) were critical in explaining the collapse of many firms in Gombe Metropolis.

References

Oral Interviews

S/N	Name of the Interviewee	Age	Occupation/Rank	Date of the Interview
1.	AlhajiDahiruBubaBiri	64	Former Commissioner, Ministry of	2nd May, 2018

			Agriculture, Gombe State	
2.	AlhajiAbubakarDanburam	62	Former Manager, Landa Sack Factory Gombe	27th May, 2018
3.	Dr. Garba Muhammad Bajoga, Gombe	64	Former Manager, Bauchi Meat Factory and Retired Permanent Secretary	22nd June, 2018
4.	Professor AbdullahiMahadi,		Former Vice Chancellor, Gombe State University, Gombe	15th June, 2018
5.	Alhaji Mohammed Mohammed,	40	General Manager, Niko Plastic Industry Limited, Gombe on	18thSeptember,2019
6.	AlhajiYayaHammari,	73	WazirinYeriman Gombe)	25th September, 2018
7.	MallamUsman Hassan,	40	secretary, Gombe State Oil Millers Association	10thSeptmeber, 2018
8.	Alhaji Musa YahayaUmaru,	52	Former Chairman, Manufacturers Association of Nigeria,	26th September, 2018
9.	Alhaji Abbas AbubakarAliyu	36	Financial Secretary, Gombe Oil Millers Association	17th October,2019
10.	AlhajiAbubakar	35	Procurement Manager, Dadaka International Flour Mills, Gombe	17th October,2019

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