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**THE AUTOMOTIVE INDUSTRY IN NIGERIA: TRENDS, CHALLENGES AND PROSPECTS IN THE 21<sup>ST</sup> CENTURY**

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**Abstract**

*This paper reviews and examines the historical development of the automotive industry in Nigeria alongside the national automotive council which is a major indicator for the reawakening and growth of the Nigeria auto industry. The activities, achievement, challenges and prospect of the automobile industry were theoretically ex-rayed. The study recommends among others: the review of automotive policy to favor Nigerian auto industry, acquiring modern engineering infrastructure for efficient production, reviewing tariff to discourage importation, encouraging patronage of local automotive products and the review of the Factories Act to make the penalty harsher for defaulters of the national automotive council laws, rules and regulations so as to encourage the growth of the indigenous automobile industry.*

**Keywords:** Automotive Industry, Trends, Challenges, Prospects, 21<sup>st</sup> Century.

**Introduction**

Automobile plays a major role in peoples live whether it is used for daily transportation or used for pleasure. The automobile is an extremely complex and technologically sophisticated unit whose emissions threatens the health of humans, animals and plants globally (Salami, 2007). William and Donald (2007) defined the automobile as any self propelled vehicle which is used for the transportation of people and goods on the ground (land).They also used the term automobile interchangeably to mean the same thing as motor vehicle or automotive vehicle which runs on the road to distinguish it from locomotive vehicles that travels on rails. An engine provides the power to move or propel the motor vehicle. The automobile can be describe as a wheeled vehicle that carries its own engine and is used for transporting or moving people and goods on land and not on rails. It was designed primarily to run on roads. The automobile (also called automotive) was also defined by Khurmi and Gupta (2007) as any self-propelled vehicle which is used for the transportation of passengers and goods on the ground. Khurmi and Gupta (2007) referred to a self-propelled vehicle as any vehicle in which power is produced within itself for its propulsion. They highlighted the various types of self-propelled vehicles among others to include:

scooters, motor cycles, cars, buses, trucks, tractors, locomotives, motor boats, ships, aeroplanes, helicopters and rockets.

Today's automobile is a complex integrated product with more than 3000 parts that all need to work in harmony. The automobile can be divided into two major constituents: the body and the chassis. The body is that part where passengers have their seats or the goods (luggage and cargo) to be carried is placed. The chassis is the main machine portion which have among others constituents like frame, wheels, axles, engine, steering, fuel tank and radiator (Hillier and Rogers, 2007). The automotive industry embraces the manufacturing, sales and services of automobile products such as tractors, motor vehicles, motorcycles, boats, bicycles, among others. The development of the automotive industry in Nigeria has generally been acknowledge as an important stimulus to, and with a multiplier effect, on the growth of other allied industries and supporting industries. According to the National Automotive Council (2001) survey report, local studies and survey exercises have revealed a great deal of Nigerian indigenous capabilities for the design and production of many automobile components and units.

Full operation of the automobile industries in Nigeria has the capacity to engage over ten thousand persons in paid employment. However these capabilities have not been exploited for the maximum benefit of Nigerians due to varieties of problems that bedeviled the automobile industry in Nigeria such as: low involvement of government in the informal automobile sector, introduction of the Structural Adjustment Programme (SAP) in 1985, dearth of supporting local industries, massive uncontrolled importation and of dumping of fairly used vehicles (Tokunbos), inconsistency in tariff and government protection policies, low patronage by government and the general public, absence of low cost, long term loans ,and poor involvement in technology transfer activities; research and development (R & D) activities and staff capacity building to mention few.

The Structural Adjustment Programme (SAP) has serious adverse effects on the Nigerian automobile industries. It resulted to : low product demand due to the high unit cost of vehicles while the purchasing power of Nigerians were poor ; low local content input due to the absence of the pursuit of local development of ancillary industries; and absence of full local support by core support industries like the Ajaokuta steel company, aluminium and plastic industries. The inability of the local supporting

industries led to the scarcity of raw materials like steel ,cast iron, on ferrous metals and plastics. Other factors that inhibited the growth of the automobile industries in Nigeria includes among others : the prohibition of local automobile firms from either distributing or assembling any automobile products other than the products of the licensors (foreign partners),and other strict conditions placed on local automobile industries which discourages transfer of technology and “copying of technology” which have greatly help developing countries to improve their local technological capabilities through imitation, copying and gradually to originality of technological products.

From the foregoing, it is obvious that, despite the comfort and vital role automobiles provide in terms of daily transportation, the development of the automobile industry in Nigeria has been epileptic and discouraging. The unemployment reduction potentials of the automobile industry have not been fully harness. It is therefore necessary to ex-ray the trends, challenges and prospects of the Nigerian automotive industry.

### **Historical Development of the Automotive Industry in Nigeria**

The Automotive Industry in Nigeria dates back to early 1960s when private companies like UAC, Leventis, SCOA, BEWAC and R.T. Briscoe pioneered the establishment of Auto Assembly Plants using Completely Knocked Down (CKD) or Semi-Knocked Down (SKD) parts. Government however, became involved in the industry between 1970-1980 when government had become aware of the importance of the industry as an engine of growth in the economy. Given this strategic importance, government became involved in the sub sector essentially to aid their integrated developments that will stimulate the growth of the indigenous automobile know how. Based on this premises, the third national development plan (1975-1980) concluded agreements with a number of Automobile Plants in Europe to set up 2 cars and 4 truck/light commercial vehicles assembly plants using Completely Knocked Down (CKD) Parts. The 2 car plants are Peugeot Nigeria Ltd. (PAN), Kaduna, and Volkswagen of Nigeria Ltd. (VWON) Lagos. The 4 truck plants are Anambra Motor Manufacturing Company (ANAMMCO), Enugu, Styer Nigeria Ltd., Bauchi, National Truck Manufacturers (NTM), Kano, and Leyland Nigeria Ltd., Ibadan. These car and truck/light commercial vehicle plants were all privatized by the end of 2007.

In 1982, the Federal Government completed agreements with five manufacturers for the establishment of the following five light commercial vehicle assembly plants: Mitsubishi in Ilorin, Nissan in Minna, Peugeot in Gusau, Isuzu in Maiduguri and Mazda in Umuahia. However, they were not established, though GM subsequently entered into partnership with UAC to produce Isuzu by FMI of UAC, which later became GM Nigeria Ltd. The Nigerian automotive Industry has installed capacity to produce 108,000 cars, 56,000 commercial vehicles, 10,000 tractors, 1,000,000 motor cycles and 1,000,000 bicycles annually. Capacity utilization in vehicle manufacture is below 10% and about 40% in motorcycle, bicycle and components parts manufacturing.

According to Salami (2007) the assembly plants performed fairly well in the 1970's as Nigeria economy was relatively good. But due to unfavorable government policies all the automobile plants set up in the 1970's closed down except Peugeot automobile of Nigeria (PAN). The formulation and adoption of the national policy in 1993, and subsequent establishment of the national automotive council (NAC) represented a landmark in the development of automobile industry in Nigeria. At this time, the automotive industry is regarded as an engine of growth whose establishment serves as an important stimulus to other types of manufacturing activities because the industry has capabilities to create many job opportunities and generate acquisition of technology. The current vehicle inflow into the economy is about 50,000 new and 150,000 used ones. This translates into about 100,000 units of new vehicles annually and is set to rise as the economy improves. The ECOWAS countries are current and potential customers for our auto products. It was in the realization of the lapses and crucial need for a more stable and functional automobile industry in Nigeria, that the Federal government established the National Automotive Council (NAC) on 10<sup>th</sup> August, 1993.

### **The National Automotive Council of Nigeria**

The National Automotive Council (NAC) was established on 10<sup>th</sup> August, 1993. The trust of the National Automotive Policy shall be to ensure the survival, growth and development of the Nigerian automotive industry using local human and material resources. This is with a view to enhancing the industry's contribution to the national economy in the areas employment generation, technology

acquisition, effective utilization of local raw materials and resources and in the transportation of people and goods. The policy was approved by the Transitional Council on 10th August 1993, and launched on August 23rd 1993. The National Automotive Policy provided for the establishment of the National Automotive Council as the agency that will carry out its objectives. Act No. 84 of 25th August 1993 was promulgated to back up the establishment of the Council as a Parastatal of the Federal Ministry of Industry.

Its functions include the following: regularly studying and reviewing the automotive parts/components development industry in Nigeria; evolving a local content programme specifying which component parts are to be continuously deleted from the imported CKDs; recommend incentive measures for ensuring compliance with approved local programmes; approve and recommend new models of vehicles envisaged for the Nigeria market to ensure model rationalization; carrying out inspection and other quality assurance activities in factories, ports and roads in pursuance of other objectives specified above; regularly evaluate the pricing structure and quality of the products of the Assembly Plants to ensure international competitiveness.

Other functions includes: forecasting the demand and supply patterns for various types of automotive vehicles produced in Nigeria and the basic raw materials requirements; liaising with relevant organizations charged with the production of raw materials (such as sheet metal alloy and special steel); regularly reviewing the penalties to be imposed for non-compliance with the guidelines and programmes specified by it; and performing such other functions as may be assigned it by Government from time to time (FRN,1993).

### **The National Automotive Policy**

- Government recognized the importance and basic role of the automotive industry in the industrial development of Nigeria by resuscitating the standing technical committee on national automotive industry (STC on NAI) in 1990.
- The STC on NAI (now NAC) with inputs from the Nigerian automobile manufacturers association (NAMA), and other organization involved in the industry drafted the automotive policy for Nigeria.

- Presidential approval for the policy was given on December 30, 1992 and later endorsed by the transitional council on August 10 1993.
- The policy document was formally launched on August 23, 1993. The document provided for the establishment of the national automotive council as a parastatal of the federal ministry of industry.
- Act No. 84 of August 25, 1993 backed up the establishment of the council.

The thrust of the national automotive policy shall be to ensure the survival, growth of the Nigerian automotive industry using local, human and material resources. This is with a view to enhancing the industry's contribution to the national economy, especially in the areas of transportation of people and goods.

The elements of this objective include:

- Provision of automotive vehicles for urban and human areas.
- Accelerated technological development of the Nigerian economy.
- Increased employment opportunities for Nigerians.
- Conservation of scarce foreign exchange.
- Establishment of integrated Automotive Industry in Nigeria.
- Standardization and rationalization of the Nigerian automotive industry.
- Increased private sector participation in the establishment of the auto industry.
- Technology acquisition; and
- Creating conducive operational environment through the introduction of appropriate fiscal policy and monetary incentives. (FRN, 1993).

### **National Automotive Council Achievements**

Achievements recorded by the council over the years in spite of budgetary limitation include:

- Pursuit of local content program with government protective support resulting in almost 70% local content in the manufacture of bicycles. A draft local content programme for vehicles and motorcycles has been produced.
- Automotive technician skills upgrade schemes has commenced in Nigeria. Nigerian auto mechanics under the aegis of Nigeria technicians association (NATA) are the target.
- The council in collaboration with the Federal Ministry of Environment, NNPC, etc removed lead from gasoline in Nigeria in 2003

Conduct of industrial environment surveys and sector studies:

- The council in its bold effort to attract foreign direct investment (FDI) into the auto industry had concluded plan to engage consultants to carry out a national survey of consumer preference for different brands of vehicle with a view for brand rationalization and guide prospective investors in the industry. Similarly, arrangement is at advance stage of engaging consultants to produce profile of selected automotive components and parts.
- Capacity building in the repairs and maintenance of automobiles in Nigeria.

The council in its bold effort at capacity building in the repairs and maintenance of new generation vehicles had, in collaboration with other stakeholders carried out the following;

- Developed and launching of a curriculum for teaching automotive mechatronics in the informal sector
- Held critique workshop on the curriculum of automotive mechatronics
- Concluded arrangement for the printing of the curriculum and subsequent launching
- The acquisition of mechatronics diagnostic equipment and tools for training Nigerian auto technicians is on going: and



- Held a meeting with the Hon Minister, Federal Ministry of Labour and productivity on the establishment of specialized centers for teaching of automotive mechatronics.

### **Challenges and Problems of the Automotive Industry in Nigeria**

The Nigerian automotive industry has performed poorly due to the following reasons:

- Low Patronage by government and the general public on local automotive products;
- Very low capacity utilization and high rate of corruption among public officers;
- Poor perception of locally made automobile products;
- High cost operating environment;
- Inconsistency in tariff policy and insufficient government protection policy;
- Absence of low cost, long term funds;
- Weak and deteriorating infrastructure;
- Uncontrolled massive importation foreign vehicles.
- Dearth of supporting local industries resulting to scarcity of raw materials like steel, iron non ferrous metals and plastics.
- Absence of active technology transfer arrangements.
- Non existence of strict laws to enhance development and advancement of indigenous technology in automobiles.
- Corruption and Misappropriation of funds meant for technological advancement in Nigeria automobile industries.

### **Prospects of the Automotive Industry in Nigeria**

With a market size of one million Bicycles, one million motorcycles and 100,000 vehicles annually, provision of right incentives, conducive/enabling environment and the window of opportunities for export, the future for the automotive Industry is bright. These are the likely prospects.

1. **Employment:** The automotive industry will end up as one of the largest industries in Nigeria employing labour and generating an increase in the national income. It will also boost other industries like iron and steel, Aluminium, Plastics, Rubber, Copper, Lead, Glass, insurance and finance. It will create a

lot of jobs and employment opportunities for Nigerian engineers, technologist, technicians and craftsmen. It has the potential of reducing unemployment to a large extent. It will create employment opportunities to other non technical graduates who are usually supporting staffs in administrative positions in industries. It will also create employment avenues for individuals and corporate bodies in terms of dealership, retailing and other sales activities that abound in the automobile industries.

2. **Boost in Non-Oil Export:** With attempts made so far to enter emerging markets in Africa and possibly other parts of the world by way of export, the Industry will help to boost the non-oil export sector of the Nigerian economy. It will help to generate income into the Nigerian economy and increase national income. It will help to reduce over dependent on oil income.

3. **Savings in Foreign Exchange:** Granted that Nigeria was a market that was dominated by imports of Fully Built vehicles. The market size for vehicles translates into an annual turnover of N10 billion, 60 billion and 200 billion for bicycles, motorcycles and vehicles respectively, totalling N270 billion. The spare parts requirements for these vehicles is estimated at about 10% the vehicle costs, giving a total annual turnover of N300 billion. The more vehicles we produce locally, the more this sum of money is saved locally and save Nigeria huge foreign exchange outflow.

4. **Boosting our Industrialization rate:** Manufacture of vehicles is a technology intensive industry and would boost our scientific, engineering and manufacturing capabilities, thereby increasing our industrialization rate. Vehicle manufacturing in Nigeria will help to improve the capacity of the Nigerian workforce technologically. It will create jobs and expose Nigerian engineers, technologist, technicians and craftsmen to industrial activities that will provide challenges that will increase their industrial growth of Nigeria technologically.

5. **Development of the Small Scale Sector:** The automotive industry will help to develop the small scale sector in Nigeria. Vehicle parts and components (about 3,000 in a car) are mainly manufactured by small and medium scale industries for assembly by the main manufacturers. They will also serve the spare parts market estimated at N30 billion annually. The growth of the automobile industry in Nigeria will

boost the development and advancement of the small scale sector which comprises of the local supporting industries that processes raw materials such as steel, cast iron, non ferrous metals and plastics for the auto industry. It will go a long way to better the standard of living in rural areas where these industries are usually located.

6. **Investment Opportunities:** In the past the smooth operation of the auto industry created varieties of business avenues to a lot of people who invested directly to the industry or indirectly through sales of spare parts or automobile units. The revival and full operation of the automobile industry is likely to increase investment opportunities in Nigeria through:

- Manufacture of vehicles, especially low cost utility vehicles to serve the rural dwellers
- Manufacture of auto components and spares
- Manufacture of motorcycles and bicycles especially as government's target of 50% and 100% local content for motorcycle and bicycle respectively is yet to be met.

### **Conclusion**

The Nigerian automobile industry holds tremendous potential in vehicle manufacturing, spare parts and components. It has the capacity to reduce unemployment to an appreciable rate. The National Automotive Council in its bold effort to attract foreign direct investment (FDI) into the auto industry had concluded plan to engage consultants to carry out a national survey of consumer preference for different brands of vehicle with a view for brand rationalization and guide prospective investors in the Nigeria industry. Similarly, arrangement is at advance stage of engaging consultants to produce profile of selected automotive components and parts.

It is obvious that the auto industry in Nigeria has a bright future only if we decide collectively to act and save the industry and in fact Nigeria from industrial collapse. This can only be done when proactive measures are taken by all stakeholders to implement the appropriate recommendations necessary to revamp the industry. This paper offers a comprehensive guide to the activities, trends, challenges and prospects of the automotive industry, plus the vast investment opportunities that this industry offers.

## **Recommendations**

Based on the review of the the activities of the national automotive council, the following recommendations were made:

1. The Federal government of Nigeria in collaboration with National Automotive Council (NAC) should review and maintain a consistent policy that will favour the Nigerian Automobile industry.
2. The NAC should put in place adequate engineering infrastructure in government owned automobile industry for effective production (ie recent technology should be used in production).
3. The Federal government should review the existing tariff system to discourage importation of vehicles (ie control importation of vehicle).
4. NAC in collaboration with federal government should develop modalities to encourage the patronage of local automobile products.
5. The Factories Act should be reviewed to make the penalty harsher for defaulters of the national automotive council laws, rules and regulations.
6. The electrical power supply in Nigeria should be made stable to ensure smooth operation of automobile plants at reduced cost.
7. Financial institutions should make available long term funds at low interest rate to prospective investors in auto industry.
8. The Federal government should set up monitoring team to monitor and supervise the activities of NAC and the automobile industries in Nigeria to serve as a means of checking abnormalities and corruption.
9. Making appropriate opportunities for “technology transfer” and “coping of technology” .

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