

THE CHALLENGES OF VEHICLE MAINTENANCE BY NIGERIAN GOVERNMENT: A CASE STUDY OF LOCAL GOVERNMENT IN OYO STATE

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ABSTRACT: *Vehicle as a means of transportation plays a strategic and catalytic role in economic development in many countries in which Nigeria is inclusive. It is very important that regular maintenance is carried out on this vehicle else it becomes problematic. This paper examines the challenges of vehicle maintenance by Nigerian government taken the local government in Oyo state as a case study in the face of threatening current financial crisis and economic downturn in Nigeria. A questionnaire was designed and used to obtain information on the challenges of vehicle maintenance being faced by each of the thirty-three (33) local government in Oyo state. From the analysis of the data collected, financial management practices of the local government in Oyo state do not enhance efficient vehicle maintenance as it often leads to capital flight and leakages and enthroned ill-mannered posture of drivers to ruin vehicles. Suggestions were made to overcome this challenges which includes establishment of automobile workshop within the premises of the local government secretariat, employment of experienced mechanic and drivers with sound knowledge of automobile mechanics among others*

Keywords: *Auto-mechanics, capital flight, catalytic, maintenance*

1.0. INTRODUCTION

Today automobile vehicles play an unimaginable role in the social, economic and industrial growth of any country. In the nineteenth century according to (1) the links between the national economy and transport were point of interest in theoretical research. Also (2) said the introduction of motor vehicles in the course of the twentieth century, radically transformed the economics of Africa. The increased mobility of people, products, and raw materials – from labour to iron-ore, information, goods and services led to the development of new economies.

As important as these vehicles are in the development of any nation, they become problematic when not properly maintained. Vehicles maintenance poses a serious challenge to the owners, whether individual or corporate organisation even government establishment are not left out. (3) said that modern vehicle is not different from the human body in which correct fuel and lubricant must be used to ensure that the engine and other components function to their maximum capacity and reducing the risk of damage or mal-function. (4) write that vehicle maintenance costs are usually expressed in terms of parts consumption and maintenance.

Therefore vehicle maintenance is an integral part of the operation for the well-being of any organisation in order to have benefit like reduced operational costs and reduced accident from vehicle. In Germany, (5) presented a paper which is concerned with passenger car maintenance companies and their competitiveness.

Despite the important role played by the vehicle in the transportation of goods and passengers, it is sadden to see that many of the vehicles belonging to government of Nigeria (local State or federal) are not on the road as a result of poor maintenance culture which is tantamount to wastage of resources. Therefore, this paper is set to

- (i) Find out challenges of vehicle maintenance by Nigerian government.
- (ii) Find out causes of vehicle maintenance challenges by Nigerian government.
- (iii) Proffer solution to vehicle maintenance challenges by Nigerian government

2.0. MATERIALS AND METHODOLOGY

2.1 AUTOMOBILE VEHICLE MAINTENANCE

An automobile vehicle is a complex machine which has its own power unit to give the necessary propelling force (6)

Automobile vehicles can be classified into several types based on several criteria such as:

Purpose: Passenger vehicles, good vehicles.

Capacity: Heavy motor vehicle, light motor vehicle, medium vehicle.

Fuel Used: Petrol engine, diesel engine, Gas vehicles, solar vehicles, hydrogen vehicles, electric vehicles, hybrid vehicle.

Transmission Type: Automatic transmission, conventional transmission, semi-automatic transmission.

Number of Wheels: Two wheelers, three wheelers, four wheelers, six wheeler.

Side of drive: Left hand drive and right hand drive.

Given the above description, it calls for regular maintenance of it so as to serve its intended purpose(s). Maintenance is the work done in order to prolong the service life of equipment which can be scheduled for unscheduled maintenance.

This can be predictive or preventive. In this type of maintenance there is planned components repair or replacement such as pre-trip inspection, post trip inspection, regular oil changes grease job etc.

Preventive maintenance is a proactive replacement of parts combined with regular adjustment and lubrication of moving structures that will reduce premature component wear and failure.

According to (7), auto parts involved in preventive maintenance include the following:

- **Engine Oil** – it is very important that manufacturer recommended oil service interval times be adhere to strictly in order to avoid problems and different oil types should not be mixed in the engine.
- **Fuel Filters** – if the quality of the fuel used is doubtful or the motorist is experiencing engine running problems this item should be checked and changed as required by service recommendation.
- **Oil Filer** – the oil filer collects all the small items of residue that are produced with the normal working operation of the internal combustion engine. It is required to be change in accordance with manufacturers' recommendation service internal.
- **Coolant** – The coolant not only acts as anti-freeze for the winter but also as corrosion inhibitor, so even in hot climates it is important that the correct balance is kept in the cooling systems.

On the other hand, predictive maintenance pursues constantly determine and report the status and operational capacity of the installations by knowing the values of certain variables, which represent such state and operational ability. To apply this maintenance strategy it is necessary to identify physical variables such as temperature, vibration, power consumption etc which variation is indicative of problems that may be appearing on the equipment.

Another type of maintenance is corrective maintenance. It is the work that results from breakdowns unexpected failure often triggering road calls and usually causing expensive down time

of labour crews. The set of tasks is destined to correct the defects found in the different components that have been identified.

Vehicle maintenance has its role as:

- (i) It reduces the risk of serious problem that can lead to spending fortune to rectify.
- (ii) It improves driving quality
- (iii) It reduces accident.

2.2. METHODOLOGY

The study employed primary source of information through a well prepared questionnaire distributed to the works department of all the thirty-three (33) local government secretariats in Oyo State of Nigeria. The questionnaire comprises of three sections. Section A contains background information where name of the local government and information on the respondent are stated. Section B contains vehicle statistics in the local government and section C contains questions relating to vehicle maintenance in each local government.

These questionnaires were sent to the works department of the thirty three local government in Oyo State. The director of works or head of mechanical unit is expected to fill the questionnaire. Out of the thirty-three local government that received the questionnaire only twenty nine (29) returned their questionnaire (i.e.) 87.87%.

3.0 RESULTS AND DISCUSSION

The retrieved copies of the questionnaire were analysed using simple percentage.

From the vehicle analysis in Fig 1, Twenty-four (24) local government i.e. (82.76%) of the Twenty-nine local government that returned questionnaire have more than 40% of their vehicles grounded. For example Atisbo Local Government has thirty (30) of their vehicles grounded out of fifty-nine (59) official vehicles in the local government. Also Lagelu local government has fifteen (15) out of Thirty-two (32) official vehicles grounded. Iwajowa local government has Twenty-eight (28) grounded vehicles out of forty-seven (47). Likewise Ibadan North Local Government has eleven (11) out of out of their Twenty-five vehicles grounded. Futher more it ws also discovered that heavy equipment used in road construction in many of the local government are ground because 15 Local Government (i.e) 51.7% have 50% and above of these vehicle grounded see fig 2 below.

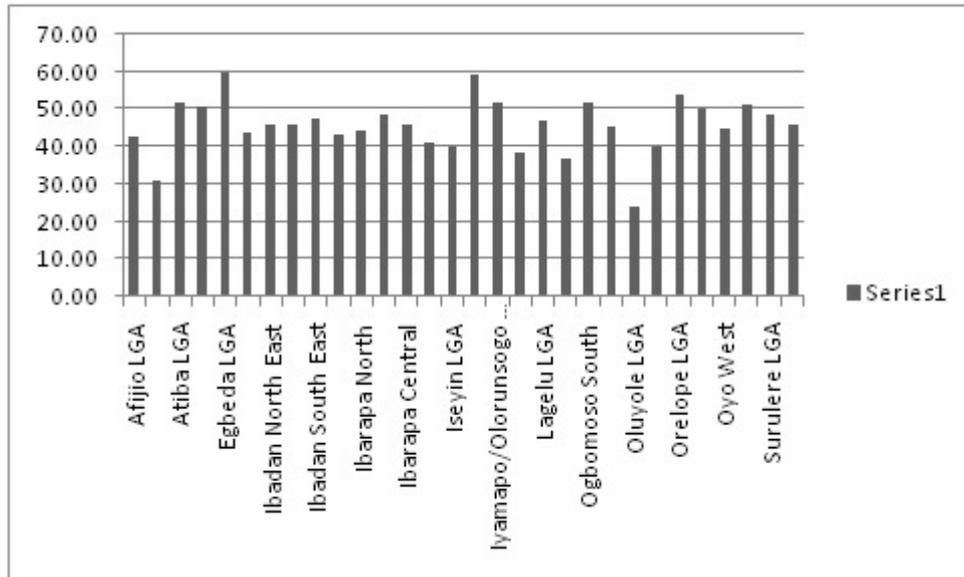


Fig 1: Bar Chart showing the Analysis in percentage for the Grounded Vehicles in each of the LGA of Oyo State, Nigeria

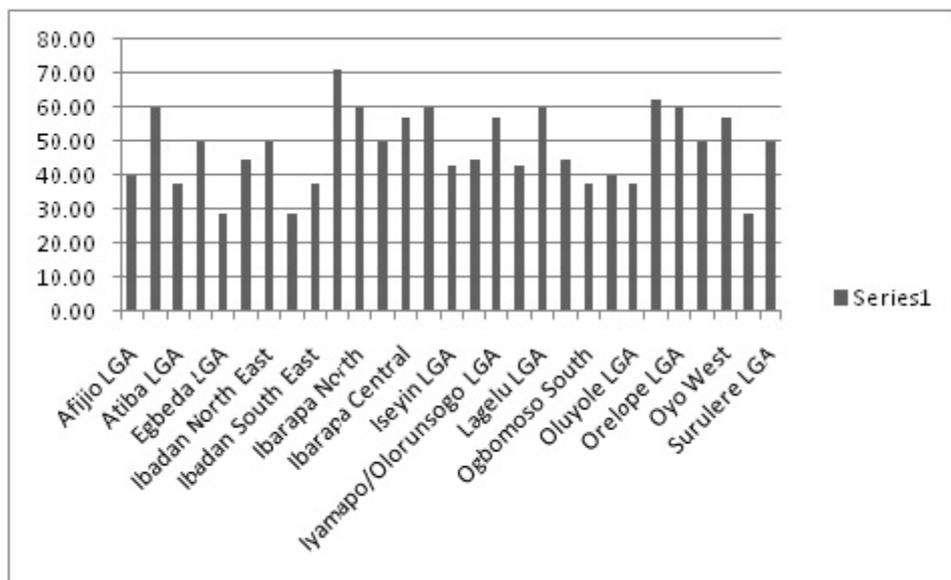


Fig 2: Bar Chart showing the Analysis in percentage for the Grounded Road Construction Vehicles in each of the LGA of Oyo State, Nigeria

Analysis of responses to section C of the research questionnaire revealed that all the Twenty-nine (29) local government agreed that large amount of money is spent on vehicle maintenance. They all believed that financial management practices that do not enhance efficient vehicle maintenance and the drivers attitude contributed to the huge amount spent on vehicle maintenance

Also Twenty (20) local governments i.e. 68.96% testified that:

- (i) Money spent on fuel is too much as a result of inadequate servicing of vehicles.
- (ii) Drivers with auto-mechanic certificate lack adequate practical skill to repair vehicles.

- (iii) Most mechanic lack adequate knowledge to handle modern vehicle.

In addition twenty three (23) 74.31% of the respondents agreed that high cost of spare parts, fake spare parts, drivers and mechanics unfaithfulness are parts of the challenges faced by government on vehicle maintenance practises.

There is dissention regarding remuneration of drivers. 51.40% believes that poor remuneration encourages unwholesome practices among drivers while 48.58% believes it has nothing to do with maintenance challenges.

Lastly 96.55% supported the idea that well equipped workshop should be established within the local government premises and priority should be given to training and retraining of employed mechanics.

4.0. CONCLUSIONS

The study which investigated the challenges of vehicle maintenance by Nigeria government taken Oyo State as a case study revealed that financial management practices of the local government in Oyo State do not enhance efficient vehicle maintenance as its often lead to capital flight and leakage and enthroned ill-mannered posture of drivers to ruin vehicles. Also high cost of spare parts, fake spare parts and inability to employ preventive maintenance strategy contribute to high cost of vehicle maintenance by Nigerian government. Therefore, if preventive maintenance strategy is embraced, unnecessary bureaucratic bottle neck removed, well-equipped auto-workshop is set-up within the local government premises. training and re-training of employed mechanic is done and non- challant attitude of management toward vehicle maintenance is changed, maintaining vehicles will not be difficult.

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