

The Imperative of Inter-Modal Transport System in Nigeria: A Case Study of Asaba and Onitsha Transportation System

Daniel Olisa Iweze

Department of History, Bayero University, Kano, P.M.B. 3011, Kano, Nigeria

Abstract: Transport system in Nigeria is predominantly uni-modal as it is estimated that over ninety per cent of goods and passengers are transported by road. The over-reliance on road transport for the transportation of bulk of goods and people has contributed greatly to the deterioration of Nigeria's roads and the attendant increase in road maintenance costs. Researches by scholars have revealed that a single means of transport cannot adequately serve the intra and inter-transport needs of the majority of people living in urban cities. Asaba and Onitsha located at the banks of river Niger have outlets for water-based transport services, which are yet to be fully developed and integrated with the dominant road transport system. Bulky goods that arrived by sea are best transported from the port through the waterways to inland ports. The Onitsha port, which was established in the 1980s has not been functioning and this makes road transport the only option for transportation of goods and people between the two cities. It is against this background, that this paper surveys the transport modes in the two cities and advocates the need for inter-modal transport modes that would ensure seamless movement of people and goods between the two cities and with other parts of the country. The paper submits that for the two cities to derive full benefits of the different transport modes, there is need for efficient inter-modal transport systems linking the two cities and regions in order to minimize the frequent chaotic traffic congestion on the Niger bridge. The optimal utilization of inter-modal transport modes would enable each transport mode to perform its distinctive roles which would lead to faster transportation of passengers and goods as well as ensure reduction in transport costs. The paper also proffers ways of achieving an efficient inter-modal transport system between Asaba and Onitsha and Nigeria at large.

Key words: Transportation system, Nigeria, urban transport.

1. Introduction

This paper examines the defective state of transport system in Nigeria and the need for the integration of various transport modes through inter-modalism. The paper situates its study by looking at Onitsha and Asaba transportation network and espouses the relevance of blending the different transport modes in the area into an inter-modal transport mix. This paper submits that efficient road and water transportation systems in Onitsha-Asaba transport network through inter-modalism would minimize the frequent chaotic traffic congestion on the Niger bridge. This is because the two cities located on the west and east banks of the river

Niger have the potentials for operation of a water-based transport service, but they are yet to be realized despite the establishment of Onitsha port by the Federal government in 1980.

Nigeria is a large country with a landmass of about 923,768.64 km lying at longitude 3⁰E-16⁰E and latitude 4⁰N-14⁰N. It is the most populous country in Africa with a population of over 140 million people. Transportation is a crucial element which connects the various parts of the country [1]. Nigeria has the largest road network in West Africa and the second largest in Africa. It has a total of 193,200 km of roads, made up of 34,123km of Federal roads, 30,500km of State roads and 129,577km of local government roads [2].

The evolution of modern transport system in Nigeria can be broadly categorized into colonial and post-colonial periods. The colonial period marked the origin of modern transport system such as rail, road and water transport networks which were developed for the exportation of cash crops such as groundnuts, cocoa, cotton and palm products and the importation of cheap, mass produced consumption goods from Europe. The pattern of the colonial transport systems clearly revealed the intentions of the British as the transport systems were developed to meet the British imperialistic and economic interests as reflected in the sub-standard road and rail alignments, which proved inadequate to meet the transport needs of the people.

Walter Rodney criticised the colonial administration's trump card of the provision of infrastructural facilities and social services including transport services such as roads, railways, as evidence of their achievements, when contended that the social services "were as foreign at the end of colonial period as they were in the beginning as far as most of rural Africa was concerned and the scanty social services were meant only to facilitate exploitation" [3].

In the post-colonial period, transport became a vital element for the unification of the country and a vehicle for social and economic development as goods and passengers are transported mainly by road, while the railway, inland waterways, airlines only play lesser important roles. Despite these extant transport modes, transportation system in Nigeria has been predominantly uni-modal, dominated by road transport which has proved inadequate to serve both the intra and inter-urban transport needs of the people. Road transport accounts for over 95 per cent of mobility in the country and it is increasingly subjected to stress due to great demand for road transport services.

2. The Present Challenge in the Nigerian Transport Sector

Road network has suffered from lack of maintenance and inadequate investment by the Federal, State and

Local governments. This has imposed high costs on the road users and raises the cost of road rehabilitation [4]. Conservative estimates put the cost of funds voted for road construction and rehabilitation in the last few years at over one trillion Naira, with only little progress made in the sector. A considerable percentage of Nigeria's public sector capital expenditure since attainment of independence in 1960 had been sunk into transportation, but these investments appear to have been "mere drops of water into the ocean as little appreciable improvement was recorded in the area of transportation" [5]. Road infrastructure across the country would not have reached this critical state, if the country had optimally utilized other alternative transport systems such as railway, airways and inland waterways.

The present rail situation in Nigeria is worrisome. Successive Nigerian governments have not been able to develop the rail system beyond what the British had left behind. At present, many countries have improved their rail transport system by using underground train service, but Nigeria is still using the obsolete rail built by the British some decades ago. Some of the coaches in the railway stations across the country are grounded and the rail lines rusty. The once viable means of transportation is today the least patronised as only a few railway stations still provide skeletal services.

To revamp the railways, President Goodluck Jonathan's administration had procured new locomotive engines and rehabilitated the old ones. Federal government had awarded contract for the construction of a railway line from Itakpe through Ajaokuta-Warri, which was abandoned some years ago as well as considering to construct an East-West railway line. The major problem of the rail system has been lack of sustained investment in the sector by successive governments. The decline of the railway system began during the oil boom of 1975 when government invested massively in road construction. Abdulrahman Abubakar, former Managing Director of Nigeria Railway Corporation stated that the sector had

long been neglected by successive administrations until 2007 when the late President Umaru Musa Yar Adua assumed power and whose effort President Goodluck Jonathan been improved upon [6].

Nigeria`s air transport is supposed to be the most efficient and reliable modern means of transport, but like the railway, it does not fare better either. Nigeria`s aviation industry is reputed to be the second largest in sub-Saharan Africa with three international airports in Lagos, Port-Harcourt and Abuja and other airports that serve domestic airlines. Nigeria Airways which was established after independence in 1960 as a national carrier was viable airline. It had in its fleet, one of the modern aircrafts in the world and competed favourably with British Airways in the Lagos-London route for many years before it collapsed in 2000 [7]. The former President, Olusegun Obasanjo decried the condition of the Nigeria Airways and stated that when he handed over power to Shehu Shagari in 1979, the Nigeria Airways had many aircrafts in its fleet, but when he became a civilian President a decade later in 1999, only one of the aircrafts was in good condition.

In a bid to reposition the ailing Nigeria Airways, it was privatized and acquired by Virgin Atlantic Airlines in 2004 as a core investor and thus became Virgin Nigeria Airways and operated as the country`s national carrier. When Virgin Atlantic later opted out of the deal, it was acquired by a Nigerian entrepreneur, Jimoh Ibrahim with a new name, Air Nigeria. In the first week of September 2012, Jimoh Ibrahim, suspended the operations of Air Nigeria citing "staff disloyalty and weak business environment" as the major reasons. The crisis in the Nigeria`s aviation sector is well known. Recent report from the Nigerian Civil Aviation Authority (NCAA) contained in a *Guardian* Newspaper of September 11, 2012, stated that a total number of eighteen airlines had either collapsed or temporarily suspended from the Nigeria`s aviation sector in the last few years. The airlines are Chanchangi, Bellview, ADC, EAS, Slok, Savanna, Triax, Air Mid West, Oriental, Dasab, Albarka, Fresh Air, Sosoliso

Airlines, Okada, Space World, Harka, Harco and Dana Air [8]. The persistence of air crashes of domestic airlines had led to loss of many lives caused partly by operation of aged aircrafts and non-compliance with international best practices.

Water transportation in Nigeria had declined for over the years. Like other critical transport infrastructure, it has suffered the same neglect by successive governments until 2009 when the late President Umaru Musa Yar`Adua administration gave priority attention to the improvement of Waterways to provide alternative means of transport to air, rail and road transportation [9]. It would be recalled that Shagari government`s efforts to boost water transportation in our area of study had built an Inland port at Onitsha to enable vessels berth there based on the Fourth National Development Plan of 1980-1985. Unfortunately, the port was abandoned since its construction in the 80s.

3. The Dominance of Road Transport

The dominance of road transport as the most decisive sub-sector in the country`s transportation system in terms of increase in the volume of both public and private sector capital investment and its role in the importation of goods, began at the end of the Nigerian Civil War in 1970. The establishment of the four motor assembly plants in the mid-1970s, enhanced making road transport to become a vital element in the manufacturing sector and in sustaining the import-substitution of the sector by raising the total export of the country [10]. Of all the modern means of transport, road transport has proved to be the most dependable in attending to people`s multiplicity of needs. It`s dominant mode and impact is felt in virtually every sphere of our daily lives. Road transport is being utilized for almost over 90% of passenger transportation, trunk transport within both city and inter-city transport.

The origin of the uni-modal transport system is traceable to the Federal government`s policy as set out in its Sessional Paper No.1 of 1965, titled *Statement on*

Transport Policy, which stipulated that various forms of transport would be coordinated with a concentration on the development of those which would carry people and goods at the lowest cost per unit of service. Government actually promoted road transport to take over the under-utilized, railway system. This trend has continued till date, with slight changes, and it is opposed to the rational and efficient development of transport in Nigeria [11]. Bala Usman blamed Nigerian governments for their role in making road transport a dominant transport mode in this way:

...successive regimes, evaded, fudged, and dodged the hard fact that road transport as the basis of the Nigerian transport system was, and is, irrational and inefficient [12].

Despite the problems associated with over-reliance on road transport, it has remain the most common and popular means of transport and serves as an integral part of our transportation system, indispensable to our way of life. It's pervasiveness to economy is because of its inestimable benefits to the society. It has also revolutionalised production, distribution and exchange of goods and services and its scope is so wide that there is almost no phase of our daily activity that is not affected by some aspect of it. We are increasingly dependent on road transport in travelling greater distances to and from place of work, transportation of goods and even for recreational purposes. It enables people to enjoy a greater mobility in every phase of their activities [13]. The mobility afforded by road transport has given impetus to industrial growth and location and broadened the social and economic opportunities of vast number of people [14].

Road transport, for many years has been the dominant form of land transport by being the fastest growing freight carrier. Despite that, the present state of Nigerian roads is horrible. The roads are characterized by potholes, gullies and craters. Nigerian roads rank among the worst in the world as it was reported that only 15 per cent of the Nigerian's road network are in good condition. Road transport is

constrained by lack of effective government co-ordination and under-utilization of other transport modes [15]. Instead of existing as a rivals and engage in an unhealthy competition with one another, the different transport modes should complement to provide inter-modal services [16].

Inter-modal transport system is lacking in Nigeria. Poor and unco-ordinated services provided by other modes of transport, particularly rail and water contributed in making road transport to assume unmatched importance in the country [17]. There is need for a robust intermodal transportation system to interface the three other modes. Efficient linkage of all transport modes and full utilization of their potentials would bring about reduction in transport costs and efficient management of the transport infrastructures [18].

4. Conceptual Clarification

Intermodalism as a concept, is as old as transportation itself. Since inter-modalism occurs wherever two or more modes of transportation meet to interchange cargo, it therefore, naturally originated when ancient civilised states used navigable waterways to transport goods. It was later modernised and transformed when goods were shipped across the oceans [19]. Intermodalism could be defined as "a system that is safe and efficient, productive and flexible in responding to the needs for movement of goods and offer(s) people choices and flexibility in their personal movements" [20]. According to Joseph Szyliowicz , "An intermodal system is one in which the individual modes are linked, governed and managed in a manner that creates a seamless and sustainable transportation system. Such a system should be economically efficient, environmentally sound, safe and secure and ethically based" [21]. The National Centre for Intermodal Transportation in the United States defines Intermodalism as "an approach to planning, building, and operating the transportation system that emphasizes optimal utilization of transportation resources and connections between modes [22]. This

definition places emphasis on the quality, cost, timeliness and safety of the journey. "Inter modalism refers to a holistic view of transportation in which individual modes work together or within their own niches to provide the user with the best choices of service, and in which the consequences on all modes of policies for a single mode are considered" [23]. It is discernable from the above definitions, that Inter-modalism is the combination of two or more modes of transportation, the connective link that enables easier flow of people and goods. It also produces and enhances reliable and efficient movement of goods and people as well as ensures economic vitality, convenient and safe, improved quality of life and decreased environmental impact.

Although, the history of intermodalism is inextricably linked with the history of transportation, it is only in recent time that its significance and potentials have been recognized by the authorities and experts in the transportation industry. The fact that intermodalism has always been an intrinsic part of transportation, its rapid evolution and growth since the 1950s and the recent surge of interest is because many of the barriers to inter-modalism have either been overcome or at least mitigated. The benefits of intermodalism have been articulated by the Federal government and incorporated into the country's National Transport Policy.

Although each transport mode has its own strengths and weaknesses and differ in terms of cost, speed, capacity, and flexibility, intermodalism is premised on a well-integrated transportation system. It portends that the various modes should work together or within their own capacity to provide the commuter with the best choices of service. In some cases and depending on a particular commuter's own unique needs, a combination of modes may serve the transporter better than a single mode. Inter-modalism has emerged as a major new approach to the planning of transportation system in various countries across the globe. Efficient transportation system is vital to sustainable economic development of any country and it plays a crucial role

in the nation's capacity to participate in the global economy.

To ensure the integration of the various transport modes, the administration of the late President Umaru Musa Yar`adua launched a draft National Transport Policy in 2010 aimed at establishing an integrated transport system between the ports, rail, road, inland waterways and air thereby making use of the advantages of different modes to ensure seamless movement of goods and services [24]. The basic concept of National Transport Policy is to ensure the provision of a revitalised, modernised, dynamic and sustainable transport sector in Nigeria through inter-modalism.

5. The Benefits of Intermodal Shift

In view of the fact that intermodal transport is emerging in the Nigerian transportation system, its benefits is yet to be realized. This development is caused by over-reliance on road transport, which is often considered to be more flexible, cost effective, transparent, efficient and provides a higher quality service. The different transport modes (road, rail, maritime, air and waterways) have specific features and advantages. The efficiency and effectiveness of intermodalism depends on the development of the modes of transport and their interfacing/integration. A well integrated transport system should:

- stimulates national development and enhances the quality of life for all;
- allows markets to operate by enabling the seamless movement of goods and people;
- provides vital links between spatially separated facilities and enables social contact and interaction;
- provides access to employment, health, education and services;
- alleviates regional inequality and fosters national integration;
- increases access to markets and links local, regional, national and international markets;
- promotes economic development by increasing

access to labour and physical resources thus facilitating the realisation of a country's, comparative advantages.

- Better utilization of the capacity of the whole transport system.
- Relief from road freight transport on motorways and highways. Intermodal transport measures, will significantly reduced road transport and environmental and social costs.
- Reduction of environmental burdens such as pollution and noise (Example, best practice from intermodal solutions can result in a significant reduction of Carbon-dioxide emission [25].

Nigeria has a great potential for Intermodal transport system to thrive, but the poor state of transport infrastructure has been a major hindrance to the realization of an efficient transport system in the country. The dysfunctional railway system, the dilapidated road network, the embarrassing and obsolete facilities at the airports, the congested seaports are clear pointers of the underdeveloped nature of transportation system in Nigeria. It is on this premise, that intermodal shift is necessary to resuscitate and revamp the dysfunctional transport sector. Intermodalism would ensure adequate, safe, environmentally sound, efficient and affordable integrated transport system within the framework of a progressive and competitive market economy. Nigeria is a large country which needs a well-developed integrated multimodal transport network that would ensure expedited movement from one mode of transport to the other. Like in the developed world, such transport system would take care of air, land, rail and water transportation within an integrated framework [26].

6. The Study Area

Onitsha and Asaba are two cities located on the east and west banks of River Niger and they came into relatively early contact with European explorers during their expeditions on the Niger. The two cities lie in the heart of south-south, south-east zones and are

connected by roads with major cities such as Nnewi, Enugu, Aba, Owerri, Port-Harcourt, Calabar in the east and Agbor, Warri, Benin, Ibadan, Lagos in the west and other cities in the northern part of the country.

7. Onitsha

Onitsha is located at point where river Niger and river Anambra meet. It began as a trading port and missionary centre when the Christian missionary established their mission there in 1850s. It lies within latitude $6^{\circ} 07'N$ and longitude $6^{\circ} 48'$ and it is situated within the core population density of Igboland. It is not more than 700ft above the sea level and lies between the grassland and forest belt. Onitsha's location at the eastern banks of the River Niger and overlooking Asaba shows its importance as a gateway to the east and west of the country [27].

The history of the growth and development of Onitsha in the 20th century is tied to trade and commerce. It is reputed to be the biggest commercial emporium in Nigeria as well as West Africa sub-region. The famous Onitsha main market is located at the western-end near the shores of river Niger. Apart from the famous Onitsha main market, other markets such as *Ose* market, *Ochanja* Relief market and the Bridge-Head market are located there. There are plenty of trading activities in the city which range from distributive trade, (retail and wholesale), transport, manufacturing, communications, banking, insurance to professional services in real estate and personal services [28].

As urbanized commercial city, it has access roads and a comprehensive public transport. But most of the roads are in a dilapidated state amidst chaotic traffic of cars, buses, taxis and cyclists in the city. Road transport is a dominant means of transport and has play a vital role in making Onitsha the greatest commercial and industrial hub east of the Niger. The waterways only provide skeletal services for bulk movement of commodities and passenger by communities on the river Niger and Anambra river to Onitsha.

8. Asaba

Asaba is situated on a hill by the west banks of the river Niger overlooking the point where Anambra river flows into the Niger. Asaba lies about 6⁰ to the north of the equator and about the same distance east of the prime meridian [29]. It shares boundary with Ugbolu, Okpanam, Ibusa in the north and Okwe and Oko in the south. It was the headquarters of the Royal Niger Company and the depot of the company's constabulary which place it as the first administrative capital of Nigeria in 1900. In the post-independence period, Asaba was made the headquarters of Aniocha Division and later Oshimili local government area. In 1991, it became the capital of Delta State and had experienced unprecedented changes in the socio-economic and political spheres. Since 1991 when it was made the capital of Delta State, there has been huge explosion and agglomeration due to migration to Asaba from the state and other parts of the country. This gave rise great demand for infrastructural facilities including transport. Asaba acts as a nodal point and gateway to Agbor, Benin and Lagos the nation's commercial capital. It is believed to be the one of growing urbanised cities in Nigeria.

9. Asaba-Onitsha Water Transport

From the earliest time, River Niger has served as a major water route for the movement of people and goods from Asaba to Onitsha, Idah and Lokoja in the north, as well as Atani, Ossamala, Aboh, Ndoni and Ijaw on the lower Niger. The people carried out their trading and commercial activities using the local dug-out canoes. The navigability of the River Niger all year round enabled the local people to operate dug-out canoes for the movement of goods such as yams, cooking pots, palm oil and other items of trade between fixed points for short and moderate distances. The distance across river Niger from Asaba to Onitsha was about four miles and canoe ferries operated at intervals of two hours at the cost of £6^d for each 60lb of baggage

transported [30]. This made the ferrying of passengers and goods across river Niger to become an important aspect of life of the people for many years. Despite that, the pre-colonial means of transport with the use of local canoes had the limitation of low carrying capacity, less speed, more laborious and high cost.

In the colonial period, the British government in realisation of the defective state of the local transport system decided to introduce modern ferry services on the River Niger in the movement of personnel and troops to ensure effective control and consolidation of their imperial interests in the conquered territories in Southern Nigeria area including Asaba and Onitsha. The British introduced modern motorized ferries and pontoon to convey passengers and vehicles across River Niger. The genesis of the development of modern ferry services across River Niger between Asaba and Onitsha began when the British merchants operated Dayspring Ferry Service in 1857 [31]. In 1927, the British colonial government launched the Shanahan ferry. In 1936, based on the Asaba community petition to the then Lieutenant-Governor of Southern Nigeria, Mr. W. E. Hunt, Resident in Enugu, motorised ferry services were introduced in 1937 to convey people and goods across River Niger between Asaba and Onitsha. The motorized ferry could convey two cars or more lorries at a time, none of which exceeded 50 cwt laden or 80 cwt unladen [32]. In 1950, a new motorised ferry called "Oloma" replaced Shanahan and could carry between three and eight cars or five lorries at a time though, the limits of weight were restricted to 60 cwt. laden and 100 cwt unladen [33]. Between 1957 and 1958, the Federal Inland Waterways Department ferry services transported about 99,094 passengers and 41,383 vehicles on the Onitsha and Asaba water routes [34].

Apart from the British colonial government-owned ferry services, there were other privately owned fleets such as the United African Company (UAC) established by the Niger River Transport Company (NRTC) in 1950 which operated the largest fleet in

Nigeria [35]. Others included Holts Transport Ltd, a subsidiary of John Holts and a State-owned Central Water Transport Company of Onitsha, formed in 1972. It was later taken over by the Federal government in 1976 and ferried all the traffic by modern vessels on the River Niger [36]. From 1950s until the construction of the Niger Bridge in 1965, it was estimated that about 2,500 passengers and 200 vehicles were ferried across River Niger daily [37].

With independence in 1960, the Nigerian government inherited a dysfunctional transport system and enunciated various development plans to transform the economic sectors of the country by tackling the defects in the colonial modes of transport. To solve the problem of crossing the river Niger between Onitsha and Asaba and ensured quicker movement of goods and passengers by linking the Western and Eastern regions, the Nigerian government under the Late Prime Minister, Tafawa Belawa built the Niger Bridge which was commissioned in 1966. With the opening of the bridge to traffic, it stimulated economic activities of the two cities, neighbouring communities and other parts of the country. However, the construction of the bridge had lowered briskness of activities in the crossing of the Niger by the use of both local and motorized ferries. Attention was paid to motor transport because it was faster, moved higher volume of goods and passengers, cheaper than the creaking ferries and removed all the hassles associated with the crossing of the River Niger.

10. The Present Challenge of Onitsha-Asaba Highway

In developed countries, cities located on the rivers are linked with other cities using various modes of transport, but in our area of study, the reverse is the case. Since the building of the Niger Bridge in 1966, there has been increased vehicular traffic between the two cities as road transport has been the dominant means of transport of crossing the Niger. Motorized outboard ferry boats and local canoes have been used in providing ferry services by the communities such as

Anam, Ibaji, Aguleri and Umuleri, Oko, Abala, Aboh, Ijaw, Oguta and Ossamala.

The geographical location of Onitsha and Asaba, to some extent, is a determinant factor to peculiar problems of traffic within and between the two cities. Lack of land space, location of work place, businesses, markets and residential areas have given rise to the endless traffic jams in Onitsha. Traffic congestion in Onitsha in particular, is partly caused by the presence of concentration of industrial estate at the Onitsha end of the bridge, the location of Bridge Head Relief market, numerous motor termini, clutters of trading firms/business enterprises, and relatively high density residential enclave in Awada, Fagge and Upper Iwaka along the Onitsha-Enugu highway. The heavily traffic on Onitsha roads which links it with other cities such as Owerri, Awka, Nnewi, Atani and other communities in Ogbaru district is partly responsible for the persistent traffic hold-up in the commercial city.

Rapid urbanization of the two cities in the mid-20th century and at turn of the 21st century has led to increase demand for urban transport in the cities. Sadly, the great demand for transport has not been matched by the provision of adequate transport infrastructure. The cost of the delays while commuting from Asaba to Onitsha is unquantifiable and the attendant huge man-hour loss, increase fuel consumption and emission into the atmosphere. Onitsha-Asaba's strategic location as gateways/nodal points on the Nigerian transport network connecting the South-east, South-south, South west and North-east and North-west geographical zones and linking major Nigerian cities such as Enugu, Owerri, Aba, Port-Harcourt and Calabar, Agbor, Benin, Ibadan, Lagos and Lokoja, Abuja, Kaduna, Jos, Kano makes traffic congestion inevitable since all traffic must pass through the Niger Bridge.

Traffic congestion on the Niger bridge derives from the huge internal and external traffic in the cities. Frequent traffic congestion on the Niger Bridge especially during Christmas celebrations and other festivities is legendary. It is a common feature to see

big vehicles- trailers, trucks and other haulage vehicles with heavy loads on them packed on the bridge for endless hours. This makes a journey that supposed to take a few minutes to stretch to endless hours which constituted untold pains to the motorists and passengers.

Niger bridge that was built in 1965, is the busiest and most congested bridge in Nigeria. Virtually every region and zones in the country depend on the Niger Bridge for sustenance of their commerce and movement of their industrial products. The bridge is over-stressed by the huge average traffic that ply it on daily basis and presently, on the verge of imminent collapse [38]. There is need for building the Second Niger Bridge to reduce the traffic congestion on the old bridge and ensure ease flow of traffic on the crossing of the Niger.

The issue of building of the Second Niger bridge has lingered despite numerous promises made by the successive governments, yet it has not come to fruition due largely to politics.

The present administration of President Goodluck Jonathan has made the building of Second Niger bridge as one of the priority projects to be executed by his administration and the financial outlay was captured in the 2012 budget. There is high optimism among Nigerians on the expected paradigm shift in Federal government policy in line with the administration transformation agenda. If the building of the Second Niger Bridge becomes a reality, it would be a great relief to the motorists and commuters and enhances seamless flow of traffic across river Niger between the two cities and other parts of the country.

11. The Dredging of the Lower River Niger and the Rehabilitation of Onitsha Port

Water transportation has diminished in Nigeria over the past four decades due largely to physical, investment and operational constraints. They range from high rate of sediment build up along the channel, physical obstruction to poor government investment in infrastructure development, inadequate river port

infrastructure, poor connection to River ports, poor communication and navigational facilities [39].

Nigerian has a vast inland waterways which covers 20 out of the 36 states. The government's first response to improving the Inland Waterways took place in 1980 when Onitsha Inland port was built to convey bulky products and shipments from the major seaports to Onitsha. Since then, the port has been dormant and unutilized. In a report contained in *Thisday* newspaper, Transport Minister, Idris Umar highlighted the relevance of inter modal transport in the country in the following words:

In a 2006 report, the African Union identified the Niger River as one of the main inland waterways in Africa, highlighting that across the continent water transport is the "weakest link" in the transport system. With the bulk of the Niger River located within Nigeria, improved use and accessibility of the river needs to happen here first' [40].

The Federal government's realization of the immense benefits of the inland waterways and its resolve to address the challenges to enable the country fully exploit and enjoy water transport led to the award of the contract for the dredging of river Niger on February 11, 2008 by Late President Umaru Musa Yar'Adua. The 36billion naira (£140m, \$233m) dredging contract was awarded to five foreign companies and scheduled to be completed in 2009 [41]. The 572km (355 miles) dredging of River Niger from Baro in Niger State to Warri in the Niger Delta was awarded to remove silt from river Niger. At the signing-off and award of contract ceremony at Lokoja, Kogi State capital, President Umaru Yar'Adua stated that the dredging would ensure "all-year round navigability which will provide an attractive, cheaper and safer means of haulage of goods, while engendering linkages and promoting trading activities between adjoining communities" [42].

The Federal government's policy of developing the waterways and building the inland ports was supervised by the Inland Waterways Department of Federal

Ministry of Transport which was established in 1957 charged with the responsibility of development, operation of essential marine services, and clearance of the creeks [43]. The dredging of the lower Niger from Baro in Niger State to Warri in Delta State has been completed and has been put to commercial use [44]. This has reduced traffic pressure on Nigeria's roads as bulky goods can be transported over long distances at cheaper costs as the energy demand of the waterways is low and the effect on the environment is minimal.

On August 30, 2012, President Goodluck Jonathan commissioned the rehabilitated N4.6 billion naira Onitsha port facilities and stated that the port would stimulate and boost economic activities in the maritime sector and make trade and commerce to thrive. The Minister of Transport, Idris Umar maintained that other three ports at Baro in Niger State, Oguta in Imo State and Yamata in Kogi State when completed would enhance efficient water transport in Nigeria [45]. Idris Umar, while speaking at a Workshop organised by the Nigeria Maritime Expo held in Lagos, assured Nigerians and stakeholders in the maritime industry that when Onitsha port becomes fully operational, it would reduce the sufferings of importers and enhance the economic activities in the country. He further described the port as strategic to the revival of ailing industries in the South-eastern part of the country which would make the country a viable investment hub to both foreign and indigenous investors., maintaining that the Federal Government was ready to ensure the port and other infrastructure are kept in optimal function capacity. Umar also expressed Federal government's plan to expanding similar ports in Deep Sea at (Lekki), Badagry, Olokola, and Ibaka in Akwa Ibom State. He urged stakeholders in the maritime industry to galvanize investment potentials inherent in the huge infrastructural development in the Inland Waterways to better the worth of the citizenry'' [46].

Onitsha port would ease transportation stress and reduce the sufferings of importers in the South-east zone of the country. This will enable vessels to convey

goods at the port as well as attract clearing and forwarding firms. It believed that when the port becomes fully operational, the multiplier effect would be felt not only Onitsha economy but the entire South-east and South-South zones. It would also attract shipping companies, haulage, logistics and other allied firms to Onitsha and generate employment opportunities to the unemployed youths in the country [47]. Umar articulated the viability of the rehabilitated Onitsha port and improvement of the Nigeria's maritime sector in this way:

"The completion of the Onitsha River Port in Anambra State and the dredging of the Niger River are welcome developments, considering that the initial plans for an inland port in Onitsha more than 30 years ago. This, hopefully, is just the first step towards the establishment of a number of river ports that will allow for some domestic transport and commerce to move off the roads and out of the air. In a 2006 report, the African Union identified the Niger River as one of the main inland waterways in Africa, highlighting that across the continent water transport is the "weakest link" in the transport system. With the bulk of the Niger River located within Nigeria, improved use and accessibility of the river needs to happen here first" [48].

With the completion of the dredging of the waterways, the Federal government had procured two ferries to provide ferry services on the River Niger. An indigenous firm, Ninon Nigeria Ltd. had transported an estimated 430 tonnes of Iron and Steel products from Ajaokuta to Onitsha using Ajaokuta Jetty. The Federal government had also awarded the contract estimated at N8.3 billion and N4.112 billion for the dredging of Orashi River in Imo State and the building of an inland port at Jamata in Kogi State respectively. When completed, the ports would open up the hinterland to the coastal ports and ease the evacuation of agricultural produce, and other bulky products [49].

An officer of the National Institute of Transport Technology, Zaria reinforced the imperative of inter-modalism when he noted that:

Nigerian roads are constructed to carry 30 tons of goods, but the operators of big vehicles such as trailers and trucks neglect this, at times, they carry 40 tons or even 60 tons of goods. So, there is need for Nigerian government to encourage inter-modalism just like it is being done elsewhere in the world [50].

Recognizing inter-modal transport system as the panacea to the nation's dysfunctional transport system, Bala Usman called for the revival and improvement of the railways and waterways and their integration with road transport to ensure ease movement of goods in the country. He further suggested that the Federal government should repositioned the sea ports to handle modern shipping activities as well as upgrade the railways and airport facilities in order to transform the transport sector to become one of the engines of growth of a productive and integrated economy [51].

12. Conclusion

Nigeria is arguably an oil rich country and second largest economies in Africa, yet its transportation system is still predominantly un-imodal despite the huge sectoral allocations made to the transport sector by successive governments for their improvement, maintenance and integration/interfacing. Nigeria's dysfunctional transport system characterized by egregious hazards, risks, crashes and largely lack of proper co-ordination and integration. We have seen that road transport to accounts for about (90%) ninety per cent of the internal movement of goods and people in the country. If the railway is not revived, air transport rescued from its sorry state and the inland waterways fully developed and improved, the over-reliance on road transport is likely to rise higher in future. The predominance of the road over the other modes is not only because of its inherent advantages, but partly because successive Nigerian governments had paid greater attention to this mode, thus Nigeria's transport development is tilted in favour of road transport.

The crisis in the Nigeria transport sector is captured in an introductory statement of the National Transport

Policy document of 1993:

At present, the Nigerian transport system functions in a crisis situation, and one of the principal causes, it identified was a major imbalance between the needs of Nigerian society and economy for adequate transport facilities and the ability of the transport sector to meet such demands [52].

The above statement summarises the nature of crisis in the Nigeria's transport system in 1993 and the situation is still prevalent at present. The obvious defects in the Nigerian transportation system calls for proper integration of transport systems that will link the various parts of the country through intermodalism. The comatose rail system, the dilapidated and over utilized road network, the obsolete and dysfunctional facilities at the airports and seaports are clear manifestations of an inefficient and ill-conceived transport policy. It is against this background that the imperative of development of intermodal transportation system in Nigeria arises.

This paper has demonstrated that Inter-modalism is the only key that will ensure efficient movement of passengers, goods and services in Nigeria as practised in developed countries, where bulky goods are transported either by rail, or water, while petroleum products are transported by pipeline. Inter-modal transport system is lacking in Nigeria, as over-reliance on road has proved inadequate to meet the ever-growing transport demand of the people.

The paper has shown that the huge industrialisation and commercial prominence of Onitsha and the rapid urbanisation of Asaba had created new problems and challenges of which road transport has proved inadequate to handle. It has highlighted the peculiarity of Asaba-Onitsha road transport network and the constraints of interconnectivity between the two cities which relies solely on crossing the Niger Bridge. It becomes discernable from the discourse that the hassles experienced in Onitsha and Asaba transport road network, is apparently, a reflection of poor transport situation in Nigeria. Onitsha reputed to be the largest

emporium of trade and commerce in Nigeria and Asaba, a growing urban administrative capital of Delta State are in dire need of efficient and improved transport link between the two cities. Asaba-Onitsha highway handles one of the greatest traffic jams in Nigeria leading to delays in travel time as well as wastes fuel.

End-notes

- [1] *Draft National Transport Policy, 2010*, p.2. Retrieved from Draft-National-Transport-Policy-Fed.Rep.of Nigeria.pdf-Adobe Reader on 15 May, 2012.
- [2] "Federal Road Maintenance Agency: Reforming Road Transportation in Nigeria" in *Daily Trust* Newspaper, May 5, 2011, p.25
- [3] Walter Rodney, *How Europe Underdeveloped Africa*, London: Bogle-L'ouverture Publications, 1972, p.226.
- [4] *Draft National Transport Policy, 2010*,... pp.2-5.
- [5] Moji Fasisi as cited in M. S. Abdulkadir, "An Economic History of Igalaland 1896-1939", Unpublished Ph.D History Thesis, Bayero University, Kano, 1990, p.259
- [6] Anthony Akaeze, "Nigeria at 50 Special Edition: The Aborted Journey" in *NewsWatch* Magazine, 29 September, 2010. Retrieved from <http://www.newswatchngr.com> on 16 December, 2010
- [7] Tunde Decker, "The Fall of Nigeria Airways" A Paper presented at the Annual Congress of Historical Society of Nigeria held at Osun State University, Osogbo on 31st October-2nd November, 2011, p.375.
- [8] Wole Shadare, "Anxiety Rises as Nigeria Records 18 Failed Airlines", *Guardian* Newspaper, 11 September, 2012.
- [9] Anthony Akaeze, "Nigeria at 50 Special Edition..."
- [10] Yusufu Bala Usman, "Transport and Communications" in *Nigeria Since Independence: The First 25 Years, The Economy*, Vol. ii, Kayode & Usman (eds.) Ibadan: Heinemann Educational Books, 1989, p.143
- [11] Yusufu Bala Usman, "The Transport Sector, Corruption and the Nigerian Economic Crisis", in *Corruption in Nigeria: Selected Writings of Yusuf Bala Usman*. Kaduna: M.O. Press published for the Centre for Democratic Development Research and Training, 2008, pp.79-80
- [12] Yusufu Bala Usman, "The Transport Sector, Corruption..." p.83.
- [13] T. Barker, & C. Savage, *An Economic History of Transport in Britain*, London: Hutchinson University, 1974, p.13
- [14] Taff, Charles, *Commercial Motor Transportation*, 5th Edition, Cambridge: Cornell Maritime Press, 1975, pp.1-2
- [15] Daniel Iweze, "Travails on the Nigerian Roads: The Case of the Luxury Bus Transport Services", A paper submitted for the 4th European Conference on African Studies held at Uppsala, Sweden in June 2011,
- [16] M. Chris, "Reviving the Railways", in *Rail news, Quarterly Journal of the Nigerian Railway Corporation*, Vol. 2. No. 3, October-December, 2000, p. 6.
- [17] *National Transport Policy*...., p.10.
- [18] Rotimi "Why We are Promoting Intermodal Transportation" in *Thisday* Newspaper, April, 2012.
- [19] *National Transport Policy*...., p.10
- [20] *National Transport Policy, 2010*, p.10.
- [21] Joseph Szyliowicz, *Intermodalism: The Challenge and the Promise*. Retrieved from [http://www.ie.msstate.edu.ncit/tech-trans/.szyliowicz-intermodalismthe challenge the promise.htm](http://www.ie.msstate.edu.ncit/tech-trans/.szyliowicz-intermodalismthe%20challenge%20the%20promise.htm) on 20 February 2012.
- [22] Joseph Szyliowicz, *Intermodalism: The Challenge and the Promise*...
- [23] David Middendorf, *Intermodal Terminals Database: Concepts, Design, Implementation, and Maintenance*, 1998. Center for Transportation Analysis Energy Division Oak Ridge National Laboratory January 1998. Prepared for Bureau of Transportation Statistics U.S. Department of Transportation.
- [24] Interview with Engr. Omar Suleiman, former Managing Director, Nigerian Ports Authority, in *Vanguard Newspaper*,
- [25] *Draft National Transport Policy*....,p.10.
- [26] *Draft National Transport Policy*....,p.10
- [27] Daniel Iweze, "A History of Transport System Across the River Niger Between Asaba in Delta and Onitsha in Anambra State from 1954 to 1991", M.A. History Dissertation, Bayero University, Kano, 2004, pp.34-35
- [28] Daniel Iweze, "A History of Transport System...", p.33
- [29] Daniel Iweze, "A History of Transport System...", p.6
- [30] Daniel Iweze "The Economic Importance of the Niger Bridge" A Paper presented at the Annual Congress of Historical Society of Nigeria held at Osun State University, Osogbo on 31st October-2nd of November, 2011. See also Gilbert Walker, *Traffic and Transport in Nigeria*, p.261
- [31] A.G. Hopkins, *An Economic History of West Africa*. London; Longman, 1973, 197
- [32] Gilbert Walker, *Traffic and Transport in Nigeria* London: HMSO, 1959, p.261
- [33] Francis Jaekel, *A History of Nigerian Railway: Opening the Nation to the Sea, Air and Water Transportation*. Vol.1. Ibadan; Spectrum Books, p.74
- [34] Francis Jaekel, *The History of Nigeria Railway*..., p.75. See also Patience Onakala, "Trade and Transport" in G.E.O. Ofomata, (ed.) *A Survey of the Igbo Nation*, Onitsha: Africana First Publishers p.554
- [35] R.O. Ekundare, *Economic History of Nigeria, 1860-1960*. New York: Africana Publishing Company, 1973, p.70.
- [36] Francis Jaekel, p.75 & Patience Onakala, "Trade and Transport" ..., p.554

- [37] Patience Onakala, "Trade and Transport", p.553
- [38] *Annual Report of the Federal Department of Inland Waterways, 1957-1958*. Lagos: Government printer, 1959, p.20.
- [39] See Draft National Transport Policy..., pp.17-18
- [40] Nneka Chike-Obi, "Why Nigeria Must Develop a Ferry Transportation System" in *Thisday* Newspaper 8 July, 2012.
- [41] "River Niger Drilling N34.8 Billion Scam Rocks the Transport Ministry" in *Leadership Sunday* Newspaper 12 September, 2011. Retrieved from technews.tmcnet.com/news/2011/09/12/5769850.htm
- [42] "Nigeria Begins Vast River Dredge" *Nigerian Trends*, 10 September, 2009. Retrieved from <http://news.bbc.co.uk/2/hi/Africa/default.stm> on 12 July, 2012.
- [43] Francis Jakael, *The History of Nigerian Railway: Opening the Nation to the Sea, Air and Transportation 1997*, Vol. I. Ibadan: Spectrum Books, p.62
- [44] Aisha Dahiru, *Vanguard* Newspaper 15 February, 2012
- [45] The commissioning of the Rehabilitated Onitsha Port was televised in the Nigeria Television Authority, (NTA) national News broadcast on Thursday 30th August 2012. See also, *Guardian* 31st August, 2012, with the caption: "Jonathan Inaugurates N4.6billion Onitsha Port".
- [46] Peter Ugwu, "Onitsha Port Due for Commissioning" Saturday, 17 March, 2012. Retrieved from [http:// www.nigeriatrends.com/nigeria-fg-to-inaugurate-Onitsha-port](http://www.nigeriatrends.com/nigeria-fg-to-inaugurate-Onitsha-port).
- [47] Philip Egeolu, "Dredging of River Niger: Investment Opportunities for Nigerians." Retrieved from www.shipsandports.org/detaildiscourse.php?id=17 on 20 August, 2012.
- [48] Nneka Chike-Obi, "Why Nigeria Must Develop a Ferry Transportation System".....
- [49] Danbaba Yakubu, "Prospects of Rail and Water Transportation in Nigeria", *Daily Trust* Newspaper 10 June, 2012. Retrieved from www.dailytrust.com.ng/index.php/other-sections/opinion/ on 20 August, 2011.
- [50] "Nigeria: Intermodal Transport System is the Way to Save Country's Roads", *Daily Champion* Newspaper, 11 September 2011.
- [51] Yusuf Bala Usman, "The Transport Sector, Corruption and the Nigerian Economic Crisis" in *Corruption in Nigeria: Selected Writings of Yusuf Bala Usman*, Kaduna: M.O. Press & Publishers, published for Center for Democratic Development Research and Training, 2008, pp.93-94.
- [52] *National Transport Policy, 1993*, p.5