

Influence of Resource Capability on the National Transport Policy Implementation in Nigeria

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Abstract

The objective of this study is to examine the extent to which available resources in Nigeria's Transport Industry are adequate and appropriate for the implementation of National Transport Policy (NTP). The study was carried out in selected transport firms in Nigeria and survey research method was employed. The instrument for data gathering was structured questionnaire and a random sample of 127 (or 68.28%) transport firms were selected for the study out of a population 168 registered luxury bus and shipping firms in Nigeria. From the sample all available managers in the firms were studied giving a total of 1,270 managers in the 127 firms. For completeness 400 non transport workers were included in the study. Therefore a total number of 1,670 copies of questionnaire were administered to the respondents out of which 1,452 completed copies were returned giving a response rate of 86.95%. Data collected were analyzed using means procedure and hypothesis was tested with the aid of one sample Z-test at 0.05 level of significance. The findings revealed that the extent to which the available resources in Nigeria's transport industry were adequate and appropriate for implementation of National Transport policy (NTP) was significantly above average. Based on the findings, it was logically concluded that the available resources in the Nigerian transport industry were adequate as well as appropriate for the implementation of the National Transport Policy (NTP). To this effect it was recommended that the NTP be modified to increase the salience of the policy goals, for the transport organizations if further strides towards sustainable transportation are to be made in Nigeria.

Keywords: Nigeria Transport Policy, resource, capability, sustainable transportation, implementation.

Introduction

Transport System provides mobility, access and other benefits such as facilitating the productivity of the other sectors of the economy. At the same time, transport contributes to several major environmental pressures including atmospheric pollution, traffic accidents and congestion, resources depletion, waste accumulation and disruption of nature and cities. In a similar vein, population growth, increased economic activity and growing income combine to generate higher demand for transport service, which has some negative implications for development. These impacts are economic, social and environmental issues, which pose constraints to sustainable transport system. Following the growth in transport demand and consequent negative effects, sustainable transport policy has been adopted in many parts of the world, in order to deal effectively with the threats and simultaneously provide optimal mobility and access (Ugboaja, 2007). Along the same lines, the Federal Government of Nigeria (FGN) in 1993 introduced National Transport Policy (NTP), aimed at achieving sustainability in the transport system. Although the NTP ought to guide decision making in transport industry, it is observed that the policy has little influence. Despite the policy, Nigeria's transport infrastructural facilities are deteriorating at a rate of N800 billion naira or 5.41 percent per annum and quality of service is falling (Adeniji, 2000; World Bank, 1996). By the analysis, it is apparent that, inspite of the Federal Government of Nigeria (FGN), huge expenditure in the transport sub-sector of the economy and the introduction of elaborate National transport Policy coupled with the formulation of strategies for implementing the policy in 1993 and 2002 respectively aimed at promoting viable sustainable transportation, the system appears sluggish and unsustainable. The NTP stipulated objectives are to achieve sustainability in the following three pillars of sustainable transport:

- (1) Economic and financial sustainability
- (2) Social sustainability and
- (3) Environmental sustainability (FMT, 1993; Maduekwe, 2002)

Obviously, in the light of the foregoing, there is need to assess the extent to which the available resources in Nigeria's transport industry are adequate and appropriate for the implementation of national transport policy (NTP).

There is need to assess the adequacy and appropriateness of available resources in the transport industry for NTP implementation

Objective of the Study

The research objective is to examine the extent to which available resources in Nigeria's transport industry are adequate and appropriate for the implementation of National Transport Policy (NTP).

Research Question

For guidance to our conduct of the study, we sought answer to the general research question stated below.

To what extent are available resources in the Nigeria's transport industry adequate and appropriate for the implementation of the National Transport Policy (NTP)?

Research Hypothesis

The research hypothesis is stated as follows:

The extent to which the available resources in the transport industry are adequate and appropriate for the implementation of the NTP is significantly above average.

Research Methodology

A sample of 127 transport firms in Nigeria were randomly selected for the study, and all available managers were involved. For completeness and reliability, non transport workers were also included in the study. On the whole, there were 1,270 transport managers in the 127 firms and 400 non transport workers, who were involved in the study. Therefore, a total of 1,670 copies of the designed instrument ,questionnaire were administered to the respondents out of which 1,452 copies were completed, returned and found analyzable, given a response rate of 86.95%. Data collected were analyzed with the aid of means procedure and one sample Z-test was employed to test the hypothesis.

Review of Related Literature

Plenert, at al (2000:78) aver that despite the complexity in service system scheduling, operations personnel must match capacity with customer demand. An efficient transport system means that the transport services are provided in a way that ensures resources are used efficiently and the economic potential of appropriate technology is used to achieve sustainable gains in productivity in order to reduce costs and improve service quality (Stanley and Singhal, 2001:287-306). Makadok (2001) sees resource capabilities as a special type of resource, specifically an organizationally embedded non-transferable firm specific resource, whose purpose is to improve the productivity of the other resources possessed by the firm.

However, an integrated transport system means the effective connectivity between ports, rails, road, waterways and air, thereby making use of the advantages of different modes to ensure seamless movement of goods and people and better utilization of resources (Haksever et al, 2000:108-115). The responsibility for planning, developing and maintaining the nation's transport infrastructure is shared among the three tiers of government. To this end, intra-state roads are the responsibility of state governments, while the local governments are required to cater for intra-urban and rural feeder roads which account for over 60% of the existing road network. The federal government is responsible for the national highways which constitute only 17% of the existing road network (CDM, 2010). The railways are also well suited for long distance movement by large numbers of inter-city passengers and high volumes of containerized cargo or bulk freight such as oil, coal, steel or agricultural produce. Unfortunately, due to past neglect, the Nigerian railway system has not been able to meet this need. It has deteriorated in all areas, and caught up in a vicious circle of declining traffic, endemic deficits, decreasing capacity to serve its customers in further loss of revenue (Buhari, 2000).

Nigerian government is currently rehabilitating the existing rail network and is committed to the development of rail links to the ports and the Inland Container Depots (ICD) when completed. The network is to be expanded and modernized in segments as resources permit, and partnership with the private sector (CBN, 2002). As revealed by Oni and Okanlawon (2006) resources in the transport industry that are mostly available and appropriate for the implementation of the NTP include:

- Activities that promote social and economic development of the passengers,
- Adequate facilities to meet the needs for efficient movement of passengers and goods,
- Safety measures that result in safety of passengers and goods,
- Maintenance services that promote environmental protection and reduction in environmental pollution, and
- Activities that promote Nigeria export of goods and services.

Daramola (2003:37) opines that budgetary allocation for road maintenance and rehabilitation is rarely enough. Therefore. Federal Road Maintenance Agency (FERMA) continues to contribute to the funding of road construction and maintenance, and attract additional funding by promoting private sector investment in the upgrade and maintenance of roads through Public Private Partnerships (PPPs). In this way, performance risk will

be passed to the private sector and there will be strong discipline for efficient delivery of services (World Bank, 2002). Findings reveal that an average of N24 billion will be required each year for subsequent maintenance and N32 billion per year for road rehabilitation (Filani, 2003:54).

Further, neglect of these roads implies a loss of network value of N80 billion per year and an additional operating cost of N53 billion per year (Filani, 2003:86). Except roads and bridges are kept in good conditions they cannot support the desired socio-economic development of the country (Oni, 2004:68).

Adebiyi (2008:182) posits that road user charges which include fuel tax, vehicle registration tax, vehicle import taxes, driver licenses, road tolls and taxes on tyres, lubricants and consumable spare parts are gaining world-wide acceptance as a source of revenue for augmenting government allocation towards the implementation process of national transport policy. He maintains that user taxes when properly designed could lead to a more rational use of resources and even become a technique of capacity rationing through transport implementation process in Nigeria.

A nation- wide survey was conducted by the Central Bank of Nigeria (CBN) on the state of highways in the country in December 2002. The survey revealed that the road network, as at December 2002, was estimated at 194,000 kilometers. It was also shown that most of the roads were in a bad condition, especially those in the South Eastern and North Western parts of the country. The pattern is generally the same for the roads in the other parts of the country. Some of the roads, constructed over 30 years ago, had not been rehabilitated even once, resulting in major cracks (longitudinal and transverse), depressions, broken down bridges and numerous potholes that make road transport slow and unsafe(CEN, 2002).

The survey also shows that the state of Nigerian roads had remained poor for a number of reasons. Such reasons include faulty designs, lack of drainage and very thin coating that are easily washed away; excessive use of the road network, given the underdeveloped nature of waterways and railways which could serve as alternative means of transport; absence of an articulated road programme, and inadequate funding for road maintenance. Studies by Olayinka and Ahmed (2010:231) reveal that innovative approaches to the management and resource capabilities in Nigeria's transport industry are emerging through private sector participants. Chukwu and Adibe (2011:68) posit that governments across the world are now working with the private sector to ensure adherence to formulated transport policy.

Nigerian Statistical Association (NSN) (2000:18) posits that adequate resources will strengthen government policy strategy at improving post-injury management through the creation of first aid centers and use of patrol ambulances along major highways for accident victims. Yusuf (2009:62) argues that adequate and efficient pool of manpower is required to conduct research, plan, construct, maintain and operate the transport infrastructure and services. He argues further that the success of any transport policy depends on the quality and quantity of the human and material resources available to develop and implement the policy.

The allocation to the transport sector under review ranges from 5.38 percent to 7.30 between 1977 and 1983, while the period between 1999 and 2003 received between 4.29 percent and 10.10 percent respectively. This informed the reason for the development of federal roads, railway system, airways and development of inland waterways. Performance measures demonstrate how well the transportation system is doing its job of meeting public goals and expectations of the transportation network. Some methods used to measure performance include tracking average speeds and crash rates. Many states and metropolitan areas monitor how close they are to achieving specific goals, such as accessibility to key regional population, employment, cultural and recreational centers. Measuring performance is a way to grade the impact of the decision-making process on the transportation system. Performance measures aim to answer question on whether transportation investments are correlated or linked to stated goals and outcomes. (Daramola,2003:74)

Table 1: Federal Government Transport Allocation 1990-1999 Rolling Plan Periods

Plan Period	Roads %	Rail %	Water %	Air %	Total Allocation (in millions)
90-92	70.14	14.03	7.24	8.60	2,210.000
91-93	52.42	12.95	19.41	15.22	2,695.428
93-95	59.65	6.23	15.91	18.21	8,379.446
94-95	56.67	1.33	22.92	19.09	6,017.250
96-98	40.23	42.16	15.98	1.62	28,491.420
97-99	32.03	32.93	26.19	8.86	52,310.162
Average	51.86	18.27	17.94	11.93	

Source: Total sum extracted from Rolling Plans 1990-1999

Table2: Federal Government Transport Allocation 2002-2012 Rolling Plan Periods

Plan Period	Roads %	Rail %	Water %	Air %	Total Allocation (in millions)
2002-2004	35.71	7.25	7.23	50.01	20.04
2004-2006	42.6	6.01	5.02	46.37	24.16
2006-2008	49.98	4.28	3.71	42.03	35.65
2008-2010	56.01	4.20	2.64	37.15	45.15
2010-2012	58.36	7.83	2.01	31.80	54.83
Average	48.53	5.91	4.12	41.47	

Source: Rolling plans 2002-2012 on sectoral allocation

Capacity resource allocation in the transport sector within the period 2002-2012, as shown in the table 2, indicates that emphasis is on road networking, followed by the recent repositioning in the aviation sector as being witnessed today with the infrastructural development and upliftment of most domestic airports in the country.

The reactivation of the domestic airports had an appreciable level of resource allocation (41.47) higher than what was obtained in the sectoral allocation of 1990-1999 which gave an average of 11.93%

Data Presentation and Analysis

The research question for this study is:

To what extent are the available resources in the transport industry adequate and appropriate for the implementation of the NTP?

To elicit responses from the (respondents) managers in transport firms on the extent to which available resources in the transport industry are adequate and appropriate for the implementation of the NTP; the respondents were asked seven (7) questions itemized in cohort E section of the questionnaire. The respondents were expected to react to the statements along a 5-point Likert scale. The mean procedure was used for the data analysis and to provide answers to the research question with expected value of 3.00. The mean procedure analysis is presented in table 3.

Table 3: The MEAN Procedure for Research Question

Variable	Mean	Std Dev	Variance	Decision
Item 27	3.5818	1.2170	1.410	Accept
Item 26	3.4364	1.2764	1.6292	Accept
Item 28	3.4364	1.2329	1.5201	Accept
Item 29	3.3838	1.3147	1.7285	Accept
Item 30	3.3455	1.4431	2.0826	Accept
Item 32	3.2545	1.4177	2.0098	Accept
Item 31	3.2000	1.1189	1.2520	Accept
Overall 1	3.3766	0.8214	0.647	Accept

Source: Field Work (Computer result)

Table 3 indicates that seven items were considered in order to determine the extent to which the available resources in the transport industry are adequate and appropriate for the implementation of the NTP. These are:

- Item 27 activities that promote social and economic development of the passengers.
- Item 26— adequate facilities to meet the needs for efficient movement of Passengers and goods.
- Item 28 activities that promote national integration and unity.
- Item 29— activities that promote Nigeria export of goods and services.
- Item 30— maintenance services that promote environmental protection and reduction in environmental pollution;
- Item 32 — transportation services that are affordable to majority of Nigerians. and
- Item 31 — safety measures that result in the safety of passenger's and goods.

All the seven (7) items were incidentally accepted as major items for which available resources in the transport industry are adequate and appropriate for implementation of the NTP, since they all have mean scores greater than the expected value of 3.00 on a 5-point Likert scale. The item for which resources in the transport industry are mostly available and appropriate for the implementation of the NTP is item 27 (activities that promote social and economic development of the passengers) with means score of 3.58. This is followed by item 26 (adequate facilities to meet the needs for efficient movement of passengers and goods) with mean score of 3.44, while the item that has the least appropriate available resources for the implementation of the NTP is item 31 (safety measures that result in safety of passengers and good's with mean score of 3.20.

The overall mean score of all the seven (7) items is 3.28 which is greater than the expected value of 3.00. It can therefore be concluded that the extent to which the available resources in the transport industry in Nigeria are adequate and appropriate for the implementation of the NTP is above average.

Test of Hypothesis

In order to determine the extent to which the available resources in the transport industry are adequate and appropriate for the implementation of the NTP, the hypothesis was tested at significant level of 0.05 with the aid of one sample Z- Test. The null and alternative hypotheses are;

H_0 ; The extent to which the available resources in the transport industry are adequate and appropriate for the implementation of the NTP is not significantly above average.

H_1 ; The extent to which the available resources in the transport industry are adequate and appropriate for the implementation of the NTP is significantly above average.

Table 4. One sample Z-test for Research Hypothesis

Variable	Overall 1
Mean	3.3766
Known Variance	0.6747
Observations	1100
Hypothesized mean	3.0
Z – Calculated	15.2062
P (Z<Z) one tail	<0.0001
Z – Tabulated (one tail)	1.6449

Source: Fieldwork (Computer result)

From table 4. Z-calculated value of the hypothesis is 15.2062 with significance probability of <0.0001, which is less than 0.05. Thus the testis significant at 5% level of significance. This means that the null hypothesis is rejected ($p < 0.05$) and the alternate hypothesis accepted. It can therefore be concluded that the extent to which the available resources in the transport industry are adequate and appropriate for the implementation of the NTP is significantly above average.

Interpretation of Results

In order to provide answers to the research question of this study means procedure was applied to compute the means. The results showed that overall mean score was 3.38 which was greater than the expected value of 3.00 on a 5-point Likert scale. (See table 3) As a result it was concluded that the extent to which available resources in the industry were adequate and appropriate for the implementation of the NTP was above average.

To draw a valid conclusion from the means analysis, the research hypothesis was tested with the aid of one sample Z-Test at 5% level of significance. The result of the test (see table 4) revealed that z-calculated value of the hypothesis was 15.2062 with significance probability of <0.0001, which was less than 0.05.

Thus, the test was significant at 5% level of significance. This means that the null hypothesis was rejected ($p > 0.05$) and alternate hypothesis accepted. It was therefore concluded that the extent to which the available resources in the transport industry were adequate and appropriate for the implementation of the NTP was significantly above average.

Implications of the Findings

The findings shed some light on the resource based capabilities of the industry that influenced the NTP implementation process. With respect to the availability of resources which were proved to be adequate and appropriate for the implementation of the NTP, this appeared to suggest that the transport firms favored the introduction of the NTP. The study further revealed that none of the seven (7) item policies considered had mean score below expected value of 3.00, with regard to the availability of resources for implementation of the NTP. In this light one may assert that the favorable responses to the introduction of the NTP could be as a result of commitment to the policy goals and consequent sufficient contention that the NTP was feasible within the industry by the leaders of the transport organizations. Consequently, it can be concluded that to the extent that the objective of this study is to examine the extent to which available resources in the industry are adequate and appropriate for the implementations of the NTP; it served this end with regard to resources to implement the following areas of the policy:

- Activities that promote social and economic development of the passengers;
- Adequate facilities to meet the needs for efficient movement of passengers and goods;
- Activities that promote Nigerian export of goods and services;
- Maintenance services that promote environmental protection and reduction in environmental pollution;

- Transportation services that are affordable to majority of Nigerians and safety measures that result in safety of passengers and goods.

Conclusion and Recommendations

The study revealed that the means procedure in table 3 showed that the overall mean score of all the seven(7) items considered in order to determine the extent to which the available resources in the industry were adequate and appropriate for the implementation of the NTP was 3.38, which was greater than the expected value of 3.00. The hypothesis was tested using one sample Z-test, the test was found to be significant at 5% level of significance. Thus) it was concluded that the extent to which the available resources in transport industry were adequate and appropriate for the implementation of the NTP was significantly above average (see table 3). In this light, we concluded that available resources in transport industry were adequate and appropriate for the implementation of the NTP. In view of the findings and consequent conclusions and implications, we recommend that the policy should incorporate a structural frame work aimed at motivating the implementing organizations to fit the policy into their standard operating routines. Obviously, this is because a policy that is congruent with organizational self- interests is more likely to be adopted and implemented with less change.

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