

Logistics and Distribution Problems of Agricultural Commodities from Greater Zaria Area, Nigeria

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Abstract

The location of Greater Zaria area in the guinea savannah provides a good physical environment for both subsistent and commercial agriculture. In Greater Zaria, both rain-fed and dry season farming are practiced by a large number of people and a significant per cent of the produce are marketed and distributed to other parts of the country. This study attempts to analyse the problems of logistics in the distribution of agricultural commodities from Greater Zaria to different parts of Nigeria. Questionnaires were designed and the purposive sampling method was used to select and interview marketers, intermediaries, vehicle drivers, channel loaders and consumers. Percentages, tables and flow line map were used to analyse the data. The results revealed that instability in the price of gasoline, harassment by law enforcement agents, extortions/multiple taxations at checkpoints, numerous stopping points/places of drivers and very poor condition of roads are seriously affecting the efficiency of freight distribution. What more, existence of numerous middlemen, channel loaders and lack of storage facilities in the source markets or collection points affects the ordering process and inventory management in Greater Zaria. All these activities not only cause delays, but also lead to loss of weight in animals as well as perishing of commodities in the logistics distribution and add to the cost price of agricultural commodities to consumers. It was therefore, recommended, among others, that government should try to ensure stability in the pricing and supply of gasoline to all nooks and crannies of the country. State governments should come up with an agreed pattern of taxation on our high ways to check extortions and multiple taxation; while our law enforcement agents should be well-trained, adequately remunerated and re-oriented to carry out their duties effectively. Only by so doing could we enhance efficiency in the logistics distribution of agricultural commodities not only from Greater Zaria, but also to and from all other parts of Nigeria.

Keywords: Problems, Logistics Distribution, Agricultural, Commodities and Zaria.

Introduction

Transport logistics and distribution is a topic of global significance and interest. It is the summary of complicated activities and relationships that take place in the logistics systems (production and manufacturing, assembly and distribution centres, warehouse, transportation and transshipment and retail outlets), Ghiani, *et al.* (2004). The logistics activities performed (ordering process, inventory management and freight transportation), have their problems. Because the goods or commodities transported are by nature heavy, bulky or highly perishable and as such, need to be transferred with adequate efficiency from areas of production to areas of consumption with the least delay, cost and safety (Bayles, 2000)

Transportation logistics services are important activities which assist in national and global distribution (Stainer, 1997 and Kee-Hung *et al.*, 2004). It enables materials and goods to be moved from a location where they are in excess or surplus to a location where there is demand or shortage or non-existent (Ballou, 1998). It also provide services which link manufacturers to markets and enable individuals to access employment, goods, services and social opportunities. Different modes of transport are used in the transfer of passenger, agricultural commodities and manufactured goods from places of supply or production to areas of scarcity or consumption which are found in different regions in Nigeria (Bamaiyi, 2011 and Musa, 2008).

Greater Zaria area has good physical conditions for agricultural production. This provides opportunity for seventy eight per cent of its population to be involved in farming activities, for subsistence and commercials (Yusuf, 2011). Also, their major agric-economic activities are tied to agricultural marketing, which involves physical distribution and logistics; buying, assembling, storing, transporting and distribution of agricultural commodities to different parts of Nigeria.

Studies have been carried out on different aspects of supply chain and logistics distribution of agricultural commodities and industrial goods problems (Idachaba, 1980; Soonhong, 2000; Kee-Hung, 2004 and Mangan *et al.* and Musa, 2008). Their findings revealed that inventory management is among the logistics activities that represents the most serious constraints to distribution of agricultural commodities. While Ackerman (1999) and Autry, *et al.* (2003) reported that, very poor condition and operation employees of warehouse are imposing difficult constraints on the ordering process and inventory management. The thrust of this study is to analyse the problems encountered during the logistics distribution of agricultural commodities transported on road from greater Zaria, a major area of production to different areas of consumption in Nigeria.

Methodology

A reconnaissance survey of the study area was carried to identify major markets and bulking areas, where agricultural produce are loaded in warehouses or parking places. In the primary source, four hundred and twenty questionnaires (as recommended by Krejcie and Morgan, 1970), were administered to producers, channel loaders, traders and transporters, in markets selected and parking places. The direct interview method was also used to augment the questionnaire responses. Information on problems encountered during logistics distribution of commodities were sought at markets in Giwa, Anchau, Dan-Magaji, Saminaka, Kwangila, Tudun Saibu, Pambegua, Soba, Sundu, Makarfi and Kidandan to different towns and cities in Nigeria. Other secondary information were obtained from published and unpublished sources in libraries, newspapers, textbooks, journals, markets, farmers and other relevant sources to develop literature. The data was analysed using percentages and desire line map was used to show freighting pattern to destinations. The results were summarised in tables for discussion.

Discussion of Results

The major markets and bulking points where agricultural commodities are loaded into transport vehicles from Greater Zaria area are: Giwa, Anchau, Dan-Magaji, Saminaka, Kwangila, Tudun Saibu, Pambegua, Soba, Sundu, Makarfi and Kidandan. The commodities are transported and distributed to various destinations, see appendix 1. They are characteristically heavy, bulky and perishable (see Table 1), and are distributed using different modes of transport to close and distant towns and cities in the Northwest, Northeast, Southeast and western parts of Nigeria. The transporters and agricultural merchants come across different transport logistics problems, like poor road condition, old and dilapidated vehicles, harassment by law enforcement agents at different kinds of check points on the road.

Table 1: Main Agricultural Commodities Distributed from Greater Zaria

Name	Type
Grains	Maize ,Beans, Rice, Guinea Corn, Soya Beans, Mustard Seed and Millet.
Vegetables	Potato, Carrot, Cabbage, Tomato and Onion.
Tubers	Yam and Cassava.
Beef Animals	Chicken, Goat, Sheep and Cattle.
Fruits	Guava, Paw-paw, Sugar Cane and Mango.

Source: Field Work, 2011

Table 2: Respondents views of the Problems in Distribution/Marketing of Agricultural Commodities

Problem	Frequency	Percentage (%)
i-Store/warehouse problems	186	13.9
ii-Crude loading system	24	1.8
iii-Instability of gasoline price	214	16.1
iv-Numerous check points	115	8.6
v-Extortions/multiple taxation	202	15.2
vi-Old/poor vehicle	76	5.7
vii-Arm robbery	143	10.7
viii-Bad road	98	7.4
ix-Harassment by law enforcement agents	157	11.8
x-Stop over points	64	4.8
xi-Intermediaries	52	3.9
Total	1331	100

Source: Field Work, 2011.

**NOTE: Total arrived at is more than the number of questionnaires because of multiple response*

Appendix 1 is a desire line showing the freight transport movement pattern of agricultural commodities from bulk or collection points in greater Zaria to different destinations. And Table 2 is a summary of information collected from respondents.

The results, as presented in Table 2, show that instability of gasoline price is one of the major problems affecting the logistics and distribution of agricultural commodities from the study area to other parts of the country, with about 16% of respondents attesting to that. This may not be unconnected with the moves by the government towards deregulation of the oil and gas sectors of the Nigerian economy, coupled with the hoarding and smuggling of the commodity to neighbouring countries. The next major problem is extortion (including multiple taxations) at numerous check points (15.2%) and then actions of law enforcement agents in the form of

harassment and detention of actors in the distribution chain. Such actions had occasionally resulted into strikes, especially by suppliers of such commodities based in the northern parts of Nigeria; which has had deleterious consequences on supply, and by extension, price of the commodities in the destination markets based in southern states.

Again, the delays on-transit occasionally leads to the perishing and destruction of commodities like tomatoes, onions, cabbage and garden egg and loss of weight of beef animals. Poor storage or warehouse problems (about 14%) are also a constraint to ordering process and inventory management. It was found out that the high number of intermediaries and poor channel loading methods constitute problems that affect both the prime cost and supplementary cost of the commodity at the destination. Other problems like mechanical problems, drivers stop-over places, robbery and bad roads affect freighting time and sometimes cause shortage of the commodities during periods of high demand at destinations.

Conclusion and Recommendation

In this study attempt was made to assess the problems of transport and logistics distribution in freighting of agricultural commodities from Greater Zaria area. Both primary and secondary data were used and it was found out that different modes of transport are used. The result revealed that the logistics activities are affected by problems like; instability of gasoline price, delay and harassment by law enforcement as factors causing inefficiency in the distribution of agricultural commodities. Others that cause damage, perishing and loss of weight include poor transport infrastructures, numerous driver stop over places and mechanical problems that are mostly because of old age of vehicles.

Based on the foregoing, it is recommended that government should make effort towards stabilising the price and supply of gasoline. This should be by way of ensuring efficiency and available in all nooks and crannies of the country. While those found sabotaging governments' effort, in that regard, should be made to face the full wrath of the law. The issue of extortion through multiple taxes at all kinds of check point should be addressed by the concerted efforts of various state governments. In other words, state governments should come up with an agreed pattern of collecting revenues from itinerant transporters in such a way that multiple taxations and or extortions could be curtailed. Our law enforcement agents should be well trained, remunerated and re-oriented to carry out their duties effectively.

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Appendix 1

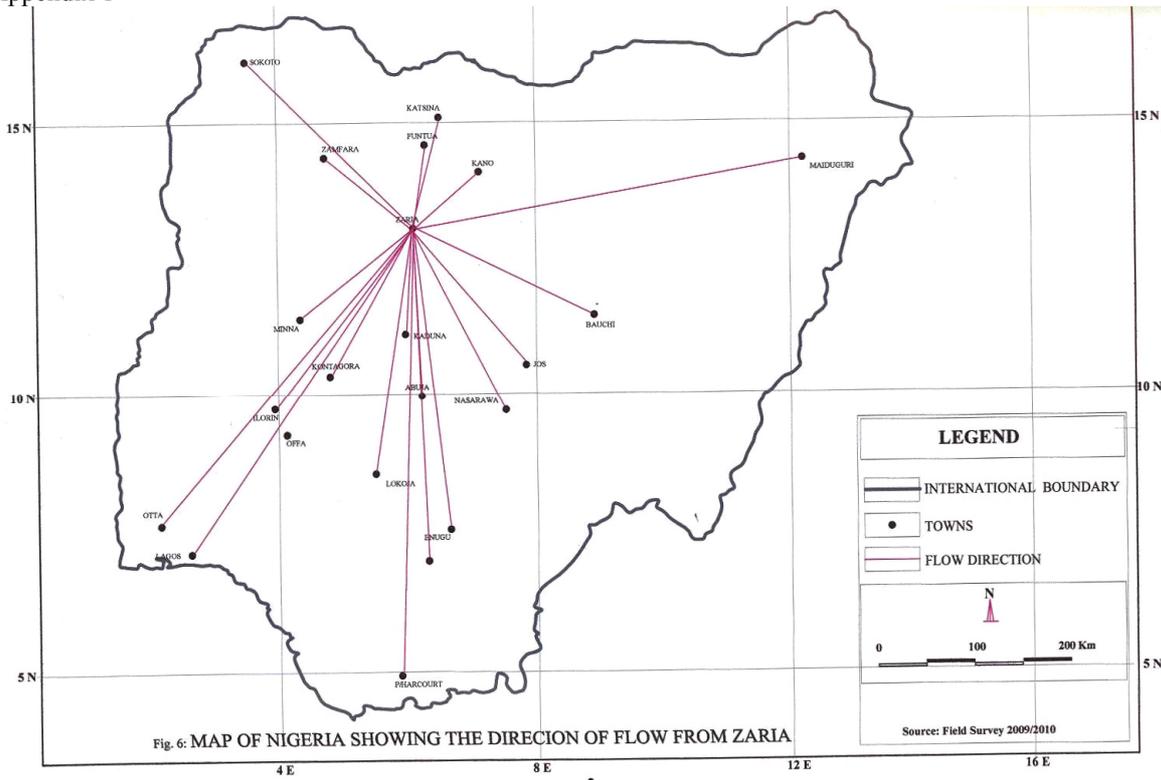


Fig. 6: MAP OF NIGERIA SHOWING THE DIRECION OF FLOW FROM ZARIA

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