A STUDY OF EFFICACY OF ROAD TRAFFIC CRASHES ON MARKETING AND DISTRIBUTION OF AGRICULTURAL PRODUCE IN EKITI STATE, NIGERIA.

(A CASE STUDY OF EKITI STATE)

BY

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BEING A PROJECT SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE AWARD OF MASTER DEGREE IN TRANSPORT MANAGEMENT, DEPARTMENT OF TRANSPORT MANAGEMENT,

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CERTIFICATION

I certify that this project was carried out by MALOMO OLUFEMI JOHN of the Department of Management Science, Faculty of Management Science, Ladoke Akinola University of Technology, Ogbomoso, Oyo State, Nigeria, and it was supervised by me.

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DEDICATION

This project is dedicated to my creator, the All Mighty God. And our Lord Jesus Christ, the Author and Finisher of my faith, all Honors, Adoration goes to Him who gave me opportunity and the good health to complete this course and the project accordingly

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ABSTRACT

The project is focused on the efficacy of road traffic crashes on marketing and distribution of agricultural produce in Ekiti state, Nigeria. The research dwell indepthly into the various means of transporting agricultural produce in the sixteen local governments in the state, the historical perspective relevant to the study. It it equally mentioned that marketing and distribution of agricultural produce in Ekiti state cannot be much difference from what is obtainable in the whole country.

The impact of road traffic rules on traffic crashes were analyzed for efficient transportation as regards marketing and distribution of farm produce.

The researcher findings about the farming activities by the indigenes shows that most of the indigene had no further interest in farming.

However, most of them have diverted into politics where money is perceived to be gotten faster. State and federal government are now encouraging farmers through agricultural aids subsidy and farm extension programmed.

CHAPTER ONE

1.0 INTRODUCTION

1.1 BACKGROUND TO THE STUDY

Road transportation is the dominant of all modes of transportation in Nigeria with over 90% of commuters assigned to it. It is commonly used for movement of people, materials, and agricultural produce from origin of the producer to the destination where such product would be finally consumed.

Road transportation activity involves the conveyance of passengers' en-masse or in transportation of animals, farm produce and merchandise and the rendering of mobile small numbers, the services (clinics, libraries, and banks).

Prior to the 1960's, there were few vehicles on Nigeria roads and thus there were little concern about safety matters. Equally, road traffic crashes were not prominent as marketing and distribution of agricultural produce were done within small communities where animals and head loading were used to move marketable goods to the market where they were to be purchased by the final consumers.

Problem encountered during business trip were that of slave trade, kidnapping, ritual killing, wide animal attack, journey stress

and longer time spent on the road which consequently used to affect their health and equally reduce the expected profit margin.

Since 1970 in Nigeria, the road transport sector has witnessed a boost with the participation of the private sector, local and state government investing into intra-city and inter-state transportation business. Despite enactments and legislation on road traffic by the federal and state government, the establishment of Law Enforcement Agency to control road user's behaviour on the road, upon these efforts, road traffic crashes still occur. As private, commercial and public drivers are involved in fatal, major, and minor motor accidents daily.

The emergence of oil boom which increased the Gross Domestic Product (GDP) of the nation and that of the citizen led to increased number of imported cars, lorries and trucks, that were used in marketing and distribution of kola nuts, from the western Nigeria, groundnut from the northern Nigeria, cocoa, yam, plantains etc were transported into towns and villages where the potential market of the buyer and seller exist.

A significantly improved era on Nigeria citizen importing and buying vehicles became more prominent when monetization policy was introduced by Obasanjo's administration. The capitalization policy that increased bank capital base which in return provides loan

scheme, gave opportunities to Nigeria to purchase vehicles and motorcycles for both commercial and private uses.

The tragedy of all road crash victims is magnified if we consider that irrespective of breakdown vehicles and accident caused by (speed, neglect, bad driving, distance, alcohol, overtaking vehicles, fatigue, sudden stopping, weather, etc) nearly all crashes are due to negligence. These have caused great losses of agricultural produce on transit, as the product and occasionally the vehicles and men crashes along and die with their consignment.

Road traffic injury is a major public crises that affects the nation, social, economic, infrastructural and human losses. Until now, the scattered nature of road crashes has disguised the magnitude of death and injury caused by road accident and its unquantifiable financial losses to the nation. Road deaths are called accident over which we have no control, accepted as part of life and viewed as the price to be paid for development and mobility. Road crashes are not however inevitable or beyond our control. They are both predictable and preventable.

There are two aspects of unitization of physical loads, these are palletisation and containerization which serve to reduce damage to agricultural and food product, whilst these are in transit to increase the efficiency of the distribution system as a whole.

In other to enhance the marketing and distribution of agricultural produce and to equally ensure improve delivery to their expected destination, there is the need for government to be more realistic by having political will and also have improved and implementable transportation policy in place.

1.2 STATEMENT OF THE PROBLEM

The efficacy of road traffic crashes in marketing and distribution of agricultural produce in Ekiti State is not much different from distributing same in any part of the country, Nigeria.

Road traffic crashes as affecting agricultural produce has led to a draw back in the spate of social and economic development in Ekiti state, while farmers (producers) of these products suffer a great deal when their goods get lost to crashes.

Prospective buyers who uses these products as their main source of raw material for their factory also get short-changed as such losses equally make them produce below the expected scheduled production level.

Achieving the economy of scale, optimization of all factors of production becomes unattainable, while efforts to achieving profit maximization have to be done by sourcing for their raw materials at varying costs, time, place and with new suppliers.

Can a day pass in Nigeria without a road accident? Can a day pass without losing valuable agricultural produce meant to be sold to prospective buyer by product marketers who lost same to road crashes?

1.3 HYPOTHESIS OF SUDY

H_1 = Road traffic crashes has effect on marketing and distribution of agricultural produce in Ekiti State.

Or

H_0 = Road traffic crashes has no effect on marketing and distribution of agricultural produce in Ekiti State.

1.4 AIMS AND OBJECTIVES

The aims and objectives of studying the effectiveness of road traffic crashes on marketing and distribution of agricultural produce in Ekiti State is to determine the extent at which road traffic crashes have impaired into the expected social and economic gains of the targeted market in Ekiti where agricultural products are planted.

Also the road network on which the produce are being transported in the

Sixteen (16) Local Government Areas of Ekiti state shall be examined Vis -a -Vis

their locally grown products to determine the cost benefit to the state.

The mode of transportation available to move these products to their various customers, the economic advantage and cost benefit analysis shall be examined. The marketing behaviour of each product and the efficacy of marketing mix on cocoa, palm oil, yam, plantain, and kola nut should equally be examined.

The *impact* of road traffic crashes shall be examined holistically while solutions shall be provided to alleviate the suffering encountered by the farmers, consumers (buyers and sellers) of agricultural produce in Ekiti state and Nigeria in general.

1.5. SCOPE AND LIMITATION OF THE STUDY

The approach adopted is to view road traffic crashes on marketing and distribution of agricultural produce in Ekiti /state.

The study will not be able to examine marketing and distribution of agricultural produce outside Ekiti State. Human behavioral aspect of causes of road traffic crashes shall not be examined in details as more emphases shall be place on how effective

agricultural produce can be marketed to achieve a successful producers and consumers certification in Ekiti State, and how road crashes should be minimized within the context of the study.

The period of research does not fall into the harvest season of some farm produce; this does not give room for full scale study of some of this product. The research would therefore be limited to taking some sample products meant to be sold and produce by marketers who lost same to road crashes?

1.6 SIGNIFICANT OF THE STUDY

The significant of the study centers on provision of measures to reduce road traffic crashes within the distribution chain of marketing agricultural produce in Ekiti State and equally link same with their market segment within the regions where both suppliers and buyer operates.

The relevant of comparative cost and its advantages to the people in the state shall be exposed, while cognitive steps to improve marketing and distribution of same locally and internationally, so as to improve the living standard of Ekiti citizen and Nigeria in general through local and foreign investment and earnings.

1.7 DEFINITION OF TERMS

Some technical words in the context may not be familiar; hence there is the need to outline the meanings and uses of some of the term.

1. Efficacy - effectiveness the ability to produce desired result

The ability of something, especially a drug or a medical

treatment, to produce the results that are wanted.

2. Road - hard track for vehicles: a long surface route broad enough to

drive on it.

A hard surface built for vehicles to travel on: a

Main/major/minor road.

It is a route where goods and people (agricultural produce) are transported.

3. Traffic - Movement of vehicles: the movement of vehicles on a road in

an area; business of transportation: the business of

transporting goods or people.

The vehicles that are on a road at a particular time: heavy/rush hour traffic. Traffic congestion.

4. Crashes - vehicle collision: a collision involving a moving vehicle or air craft.

Loud noise: a loud noise such as made by thunder or something breaking violently into piece.

5. Marketing - selling of products or services: the business activities of

Presenting product or services in such a way as to make them

desirable.

Grocery shopping: the buying of household suppliers, especially food.

The activity of presenting, advertising and selling a company's

products in the best possible way, a marketing campaign.

6. Distribution-giving out: the handing out or delivery of things to a number of

people; the distribution of leaflets.

Sharing: the process of dividing out something shared by a

number of people.

Commerce: selling and delivery, the selling and delivery of goods

to retailers. The way that something is shared or exist over a

particular area or among a particular group of people. The act

of giving or delivering something to a number of people.

7. Produce- makes something: to make or create something. Able to produce a meal from the most unpromising ingredients.

Yield something: to grow, bring forth or bear something.

Make naturally: to grow or make something as part of a natural

process. Things that have been made or grown, especially things

connected with farming; farm produce.

8. GDP- Commerce Gross Domestic product. Gross, being the total amount of something before anything is taken away- gross weight, gross income

(before tax, etc are taken away)

9. Slave Trade- dealing in captured people; the business of capturing people,

buying and selling them as enslaved workers. The buying and

selling of people as slaves, especially in the 17^{th}- 19^{th} centuries.

10. Rituals- established formal behaviour: an established and prescribed

Pattern of observance, e.g. in a religion.

Performance of formal acts: the observance of action or procedures

in a set, ordered and ceremonial way, unchanging pattern, system

of rites; orthodox ritual. Something that is done regularly and

always in the same way.

11. Comparative – compared with others: considered relative to something known, mentioned or expected.

Involving comparison: based on using comparison of different

things in the investigation of something- comparative

advantages connected with studying things to find out how

similar or different they are. Measured or judged by how

similar or different it is to something else.

12. Administration- management of business : the management of affairs of a

business, organization or institution.

Management staff: the staff of a business, organization or

institution, whose task is to manage its affairs.

13. Loan - money lent: amount of money given to somebody on the condition

that it will be paid back later. Money that an organization such

as bank lends and somebody borrows to take out.

Money lend to a person, i.e. a car loan, student loan, etc.

14. Tragedy - very sad event; an event in life that involves feeling of sorrow or

grief.

Disastrous event; a disastrous circumstance or event, e.g. serious

illness, financial ruin, fatality. A very sad event or situation,

especially one that involves death. Tragedy struck the family when

their three year old son was hit by a car and was dead.

15. Negligence - condition of being neglected: a civil wrong tort causing injury

or harm to another person or property as a result of doing some

thing or failing to provide a proper and reasonable level of care.

The failure to give somebody or something enough care or attention. Negligence on the part of the driver.

16. Pallet - platforms for lords: a standardized platform or open-ended

box, usually made wood that allowed mechanical handling of bulk goods during transport and storage. A heavy wooden or metal

base that can be used for moving or storing goods.

Palletisation is the act of loading or making packaging and storage convenient.

17. Container (containerization)- object used in holding something. Object such

as box, jar or bottle that is used to hold something, especially

when it is stored or transported. Containerization involves the

activities of getting goods into the container.

18. Cost-benefit- the relationship between the cost of doing something and the value of the benefit that results from it. Cost benefits analysis.

19. Stress- strain felt by somebody: mental or physical strain caused by anxiety

or over work. It may cause such symptoms as raised blood pressure or depression. Worry caused by the problem in some

body's life. Physical pressure (on something). Pressure put on

something that can damage it or make it loses its shape.

CHAPTER TWO

LITERATURE REVIEW

2.0. The efficacy of road traffic crashes on marketing and distribution of agricultural produce in Ekiti state cannot be too different from what happens on same in Nigeria and the whole world as a whole.

A glaring significant difference would be in the environment of operation, the diverse road structures, road engineering and road layout, the market volume and capital invested or the volume involved in the buying and selling of agricultural produce and business management.

The application of road traffic rules on road traffic crashes and the implantation strategies, legislation on roads, differs from state to state, internally and internationally.

WHO, Evidence, information and Policy (2000); Road traffic injury is a major public health crisis for the whole nation. The global toll of death and injury from distribution of goods (manufactured and agricultural). Road crashes have developed into a major public health crises for the nation of the world.

The death toll however is only the "tip of iceberg" of huge human social and economic cost of road crashes.

The World Health Organization (WHO) estimates that globally and as many as 50 million people are injured or permanently disabled in crashes every year i.e. an average of 137,000 daily. Worldwide, road crashes are responsible for most injured-related death. They are the second leading cause of death for people between the ages of 5 and 29 and the third leading cause of death for people of 30 and 44.

With rapid motorization, this neglected epidemic is forecast to escalate by 83% in some low-middle income countries and to become the third leading cause of death and disability by 2020.

S/N	1998 DISEASE OR INJURY	2020 DISEASE OR INJURY
1	Low respiratory infection	Ischemic heart disease
2	HIV/AIDS	Unipolar major depression
3	Prenatal condition	*Road traffic injuries
4	Diarrhea diseases	Cerebrovascular diseases
5	Unipolar major depression	Chronic obstructive pulmonary disease
6	Ischemic heart disease	Lower respiratory infection
7	Cerebrovascular disease	Tuberculosis
8	Malaria	War
9	*Road traffic injuries	Diarrheal disease
10	Chronic obstructive pulmonary diseases	HIV/AIDS

Kayode Olagunju (PHD) (2011), observed that we only talk of vehicle traffic crashes when there is at least a vehicle (mechanical) to be driven, a driver (human) to drive and a track, lane road or any space (environment) to drive on. It is when there is a deficiency or defect in

the inter-relationship in any of the or all the three factors, that there is crash.

Mr. Jack quest Chivac (04.7.2004), for it is not road that kills, in fact, in every accident, human being cause the death of other human being. Through negligence, through lack of prudence, through a deliberate refusal to obey the rules governing the sharing of public space, the highway through indifference to others.

2.1 **HISTORICAL PERSPECTIVE OF TRANSPORTATION AND ROAD TRAFFIC CRASHES**

Road safety matters are equally undertaken by the Nigeria Police (Traffic Department), the highway patrol unit. This arm of Nigeria of police achieves a lot in the area of reporting accident cases and documenting the number of persons injured or killed in such cases. Nigeria Civil Security Defense Corps (NCSDC),Road Traffic Officers(RTO) as well as Vehicle Inspection Officers(VIO),also serves as checks against violations of traffic laws.

The Boards of internal revenue in all states regulate the administration of vehicles and vehicles particulars including drivers licenses of all classes and groups (A-J) jointly processed through a 'Tripartite Arrangement' with FRSC,VIO and the Board of inland Revenue(BIR) respectively.

Meshach (1999:10) observes that in the 1960s, there were little concern about safety matters in Africa. A little less significance was accorded to road accident prevention strategies and remedies.

The reason was not far- fetched. Economic activities was quite low and transportation was unarguably intertwined inevitably with economy, the incident of road traffic accident was curtailed in relation to the very few vehicle plying the equally scantly routes in the continent.

As soon as oil boom was experienced in Nigeria in the early 70's, vehicular in flow became increased, with the attendant increase in road traffic accident.

Zachariah (1986:3) reveals that the rate of road accident in Nigeria is the highest in the world. Their will hardly be anyone who had not lost a close friend or relation through a road accident. Various bodies have spent huge amount of time and money in attempt to reduce the accident rate. Despite these efforts, accident rate keeps rising.

Consultancy Division of Firm Hold Nigeria Limited (1990:7), states that "Traffic situations are not events sent by fate to annoy your personality". They are events which occur according to the law of chance or the statistics probability. You just happen to be in one of them any particular time, along with many others. Usually there is not much one can do.

Ewhrudjakpor (2002:7), says that Road Safety has become a paramount issues in Nigeria today because the road is the most common form of transportation and therefore, road traffic accident affects the lives of the generality of the populace.

IRIN News (2007:1) says "one of the most dangerous things anyone can do in Nigeria is get into a law". "Remember that every road user is mad" reads a handout from the Nigeria NGO, volunteers from safety alliance. "You are the only same one". With the oil boom in the 1970s the government built many expressways but didn't maintain them. Gapping potholes suddenly appear on modern-looking road ways around the country. Worse yet: Nigerians drive astonishingly fast, and often with little or no training.

As contained in INRI news (2007:1), it is not just that there is more accident in Nigeria; it is that the accidents are more deadly. Serious injuries are even more common out of the 9,114 reported accidents in 2006, 17,390 people wound up in hospital. At the national hospitals in Abuja, Surgeon Oluwale Olaomi told IRIN that out of the 703 patient he treated in a month of August, 114 were road accident victims, most between the age of 20 and 40 years old.

As in Kornak (2003:4) "for attorneys who practiced in an area of the law that was human factor expert s, the tide of human factor is described as "a scientific discipline concerned with interaction of people and device of various kinds". Each part applies the science of

human factors to traffics safety from a different perspective: the driver, the vehicle, the roadway, environment, and accident time, alcohol and drink, roadway design, and visibility under roadway lighting are addressed.

In Nigeria the multi-disciplinary nature of the problem off safety is generally accepted and the need for every able citizen to be concerned is highly required.

In Dewar (2003:4) it is important to understand the limitations of drivers, pedestrians and cyclic, and to incorporate this into the design of vehicles, road traffic control devices and so on. People are generally unaware of their own limitations and the problems faced by those using the highway system. Most people think that driving a motor vehicle is pretty easy, but it is not evidence by the many driver's errors and traffic collisions that is observed. This is a complex task.

As in Olson (2003:4), human are the control elements in every type of transportation system. In this capacity human are remarkably capable and adaptable, yet they do have limit. In the design of any mechanical system, engineers must take into account the characteristics of materials so that the end product will perform as expected. Similarly, if human play a significant role in the performance of that system, it is vital that designer take into account their capabilities and limitations as well.

According to Nantulya (2007:1): "Road traffic injuries are major causes of death and disability globally with a disproportionate number accruing in developing countries. Road traffic injuries are currently ranked ninth globally among the leading causes of disability, and the ranking is projected to rise to third by 2020. In 1988, developing countries accounted for more than 85% of all deaths due to road traffic crashes globally and for 96% of all children killed. Moreover, about 90% of disability adjusted life year lost world – wide due to road traffic injuries occur in developing countries.

Road traffic injuries in developing countries mostly affect pedestrian passengers, and cyclists as opposed to drivers in whom most of the deaths and disabilities in the developed world occur. In the United State, for example more than 60% of road crashes fatalities occur in drivers, whereas driver make up less than 10% of deaths due on road traffic injuries in the least motorized countries. In developing countries, where most injuries occur in urban areas, pedestrians, and cyclist combined account for around 90 of death due to road traffic injuries. Urban pedestrians account for 55 -70% of deaths.

In Knipling (2002:5) " An important missing crash type, from a human factors perspective, is the rear-end crash, for although those result in relatively few fatalities, rear-end crashes are most common major crash type and are increasing in number because of increased traffic congestion. They offer a superb baseline linear model of

collision dynamics and associated driver attention and performance, response to threat, and potential safety intervention. These omissions are minor considering the broad range of topics addressed and the comprehensive coverage found in the many chapters in this book. Human factors and traffic safety is a major contribution, both to the ergonomics literature as a whole and to traffic safety practice.

Road traffic accidents are a major national problem in Nigeria. They constitute serious health problem because of the resultant mobility, disability, injuries, injuries and health care costs. Furthermore, road traffic accident casts represent as a heavy loss to the nation.

Despite the heavy losses, road safety measures in Nigeria are characterized by accidents. From time to time, there is an over whelming outcry about road traffic accident in Nigeria and the government is often brought under pressure to do something about the problem which is seen as a major threat to human.

Several persons perish in a road traffic accident by disregarding traffic regulations such as, no over-loading, no over speeding, no phone calls while driving, no alcoholic, no extra headlamps.

Institute of Economic Affairs (1996:3) observed that the law enforcement officers in respect of road traffic offences become more vigilant though not for long occasional compromise with drivers on some trivial offence/issues until a major accident happens.

Khayesi (1998:5) says that, there appears to have developed certain immunity and procrastination towards road traffic accidents. This procrastination is not only displayed by policy makers and implementers, but also by the rest

of the society in Nigeria.

2.2 MARKETING AND DITRIBUTION OF AGRICULTURAL PRODUCE IN NIGERIA

Nigeria Agriculture and Industry (1960), observed that agriculture; including farming and herding accounts for 23% of Nigeria Gross Domestic account Product (GDP) and engages three percent of the economically active population. Agriculture contributed more than 75% of export earnings before 1970. Since then, however, agriculture has stagnated, partly due to government neglect and poor investment, partly due to ecological factors such as drought, disease and reduction in soil fertility. By the mid 1990's, agriculture's share of the export had declined to less than 5%. Once an exporter of food to nearby countries, Nigeria now must import food to meet domestic demand.

Nigeria major crops include palm nuts (used to produce palm oil), cocoa, rubber and cotton, all of which were once exported but are now mostly sold locally. Also grown are sorghum, millet, maize (corn), yam and cassava, all formally used as food for growers but now widely sold for cash.

The great majority of Nigeria's farm production comes from primitive farmers (small holders) who use hoes and similar basic tools. In less crowded areas, crops are typically planted in rotation that lets soil lie fallow and recharge.

In the last two decades, the government has increased farm output- at great cost – through major irrigation projects, massive investments in rural infrastructures, and introduction of modern seeds varieties and chemicals. In the mid 1980's,in an attempt to stop import of food and raw materials that could be grown locally, the government encouraged large scale, mechanized farming by local entrepreneur and international corporations. Although large scale based farming has increased substantially. It account for only a fraction of total production.

Archive Article Nigeria (1980) In addition to produce, cotton and rubber in commercial quantities. Important factory products were cigarettes, soap, beer, canned foods, plywood, textiles, cement, and shoes, mining decreased in value because of international controls on tin marketing and the decline in US purchases of columbite, 924,000 tons of coal were mine in 1959 and consumed locally.

In 1958 Nigeria imports totaled $467.6 million. Major items were textiles, cars, fuel oil, machinery and building materials export totaled $380.8 million and included one a half –million bib of crude oil. Other leading items were cocoa, palm oil and kernels, peanuts, bananas,

hide, and skins. Sixty percent of all exports and 45 percent of all imports were in trade with Great Britain. Most import was from Japan.

Soilles Agriculture (1938) in the pioneering period of this nation the average farm achieved a good livelihood by hard work free or cheap land was abundant. The market was growing at home and abroad. The crops failures and economic crises caused difficulty from time to time, but the damage was temporary and seemed incidental to the march of progress.

Rural – Urban Relationship

Everyone recognizes today that the farmer's problem is the nation's problem. **Farmers cannot purchase** their quota of the factory output; urban unemployment increases; so – called non – commercial or self – sufficing way of rural life increase through the continual creation of poor farms on poor land; millions of rural poor require relief; the gap widens between farm operation and farm ownership and absences; farm lands deteriorate through the inability of impoverished farmers to practice soil conservation; and agencies have to make increasing expenditure for agricultural relief.

Under these circumstances farmers are compelled to try the application of ordinary business practices. They must decrease the farm output until the surpluses to glut the market.

2.2.1 NIGERIA PERSPECTIVE OF MARKETING AND DISTRIBUTION OF AGRICULTURAL PRODUCE.

In the recent time and from the early 20th century when Nigeria has been divided into 36 States and Abuja as the Federal Capital Territory, all states have different agricultural produce that are peculiarly grown in their stat , while most state have locally grown produce.

It is not surprising therefore to see inter-state marketing and distribution of agricultural produce i.e. from kwara to Kano, to Niger, Lagos, Oyo, Delta states etc. respectively.

2.2.2 THE LAW OF COMPARATIVE COST COMPARATIVE ADVANTAGE IN MARKETING AND DISTRIBUTION OF AGRICULTURAL PRODUCE.

Because of differences in land and its suitability to yield better output in one produce in a state than the other, most states have produce best yield than the other.

i. Cocoa, kola nuts, beans, palm trees, rice etc, are grown in the South Western Nigeria, e.g. Oyo, Ondo, Ogun, Osun, and Ekiti states.
ii. Cotton, Grand nut, beans, rice, onion, etc are grown in the Northern Nigeria e.g. Kano, Kaduna, Niger, Sokoto states etc.

iii. Rubber, coffee, palm trees, are grown in the Southern part of Nigeria e.g. Deltal, Edo, Ondo states.

Common produce that is grown and marketed in most part of these states are:-

- Yam
- Rice
- Cassava
- Tomatoes
- Pepper
- Orange
- Mangoes
- Banana
- Plantains
- Vegetables etc.

It is not surprising therefore to see movement of these items being transported inter –state and intra – state by wholesalers, retailers and consumers respectively.

Most of these produce are seasonal while some has been planted regularly as a result of the scientific application of mechanized farming and the irrigation system that does not wait for raining season

before seeds planted are watered for better growth and yield.

2.3 CAUSES OF ROAD TRAFFIC CRASHES IN NIGERIA

Zachariah (1986:5) states that 'fortunately we do not have either fog or ice, two of the most dangerous weather condition in many of the developed countries. Rain is present, but accidents due solely to heavy downpour are extremely rare. Even those that occur could probably have been prevented by bit of caution on the part of the driver.

Asogwa (1999:9) states that it has been generally acknowledged that human factors constitute essential elements in motor accidents. There have been researches aimed at identifying those factors in the driver or passenger, in fact all road users that lead to high accident rates.

Illiteracy: - this inhibits proper knowledge of high way code, road signs to the detriment of either road users.

Driving under the influence of drugs and alcohol. Long distant drivers are fond of looking for stimulants; also drivers that travel at night are in the habit of consuming stimulants to beef up their alertness. Quite often the drivers suffer various degrees of hallucinations, lack good sense of judgment, overtake and maneuver dangerously on the road and cause road traffic accidents.

Poor eyesight on the part of some drivers. Visual improvement of varying degrees, or where one eye person uses sun shade to cover

the blind sight pretending to have the two eyes often result in accidents.

Incompetence and inexperience of some drivers. Conductors often wish to test their proficiency on the steering, some people when using learner's permit, will venture to go on long journey for which he has not gotten the knowledge and capacity. Small obstacle will derail him and eventually lead to accident.

Psychological factors: stress, tiredness and fatigues are common causes of road traffic accident.

Supernatural beliefs and reliance on metaphysical powers: The belief in African medicine for accident prevention, dependent on Road Accident Immunity Delusion Syndrome (RAIDS), which has terminated lives of many people prematurely on the high ways.

Impatience by some drivers and passengers: Anxiety to arrive destination as a result of time limitation, unexpected road blocks and slow traffic flow, the desire of the drivers to make double trip for more pay easily lead to over speeding at any available opportunity to do so .

Poor decision culture; poor drivers do not make safe decision. They take risk related to dangerous driving and over speeding, poor management of time, space and communication with other road users. They do not comply with the standard required for loading, nor weight and types of vehicle usage for loading as a result of the desire to

quickly pay back the cost of vehicle purchased on 'hire purchased', or return on 'cooperative contribution' collected to purchase the vehicle which has become a common features and serious cost of road traffic accident.

Under- aged and over – aged drivers. Economic factors and the need for drivers to meet up with various domestic commitment has led to some parents teaching their under aged children (below 18 years) to drive and also carry out some family assignment. Also, we are witnessing new trends in road traffic with the rich parents buying vehicles for their under-aged children who often, drive carelessly and recklessly creating tension for road traffic in towns. They are usually not qualified to obtain drivers license, hence they drive illegally.

2.4 CAUSES OF ROAD TRAFFIC CRASHES WHEN MARKETING AND DISTRIBUTING AGRICULTURAL PRODUCE

Age: Age is one of the important factors to motor accident. The peak age for the road traffic accident victims in the European region is between 15 to 25 years. A similar age group has been mostly involved in motor accident in US. Research work in Uganda showed 25 to 34 years and Nigeria 18 to 30 years are often the age at greatest risk. From the age of 70 years, there is the tendency that all body metabolisms would start depreciating and the power as at time of the youth would no

longer be there. The youth drivers between (18 – 30 years) have more effective and efficient faculties but they are lost in carelessness.

Wrong parking of vehicles on the highways. Most often, some of the damaged vehicles that are packed overnight on the highways do not have reflective tape, packing light or triangular caution sign for oncoming vehicle to see, many bad cars in the highways do not have reflective tape, packing light or triangular caution sign for oncoming vehicle to see, many cars had in the past entered into a stationary trailer and kill all the passengers.

Disease and physical defects: Many prospective applicants for driving and medical test drivers are in the habit of avoiding both Vehicle Inspection Officer's (VIO) driving test, and medical test before they are licensed. There is the need for medical examination before licenses are issued to drivers. Some drivers would prefer to work round the clock, from Monday to Sunday not having time to rest.

Even when they are sick, they would want to manage since if they do not work there will be no pay. A sick driver on the steering will work under stress and that is very dangerous.

Annual festival, Harvest seasons, Sallah, Christmas and New Year produce sales, there are inter-state movement, and a lot of social activities that attract eating and drinking of alcohol at parties are

many. After haven got drunk and at the end of parties, individuals would have to travel or return home. Drunken people often, become victims of accidents while driving because they are circumstantially not normal.

- Indiscriminate uses of halogen lamps as additional head lamps attached to vehicles usually cause confusion for the oncoming vehicle which some time leads to head-on collision. This is common with trucks and tankers that often prefer night journey.
- Conveyance of petrol in jerry cans by some drivers especially those going on very long journeys. At a very hot temperature the fuel can catch fire and destroy life and vehicle. It should be noted that selling fuel in gallons is common in the north than in the southern part of Nigeria.
- Second hand motor spare parts and adulterated petroleum products which adversely affect the performance of vehicles on the highways – the innate desires of poor and illiterate drivers to increase their earnings through dubious means.
- Wrong electrical wiring or connection in vehicles by incompetent hands that will not confess their incompetence but would want to try by guessing to arrive at result.

- Lack of regard by some driver/riders for pedestrian at zebra crossings as some do not even know what it means and why it is designed on the road.
- Street trading by children who often get knocked down by vehicles as a result of undue rivalries to earn more profit from sales or turnover.
- Animals such as donkeys, horses, camels, cattle, dogs, goats and sheep left unrestricted, roaming about on the highway.
- Poor maintenance culture – this is attitudinal. Many vehicle owners in Nigeria are not used to regular vehicle services. Unless the vehicle develop problems. A vehicle that is not regularly maintained is prone to develop problems that can lead to accident any time. This act of non –chalant attitude has led to several losses of lives on the highways.
- Third Party – where a vehicle for transporting good is hired, the owner of the good often do not have knowledge of what is wrong with the vehicle. Where attempt are made to manage a part till when there is enough time, more damage and injury is caused to man, property and vehicle.

MECHANICAL FACTORS

The numbers of mechanically defective vehicles are common on our roads. The reason is because not many people can afford to buy a new

car of millions of Naira, but most of the vehicles on our road are imported second hand, called (Tokunbo). Many of these vehicles could be considered as death traps as they lack minimum, vehicle safety standards and cause accident due to brake failure, burst tyres and ball joint breakdown.

Most commercial vehicles are not regularly maintained as owners always like to minimize cost for more returns on their investment.

TRUCK AND TANKERS

These vehicles carry agricultural produce, gas, fuel etc. long vehicles with some special characteristics, which we need to understand. Its length makes sharing of the road difficult and not safe. The most obvious difference between a truck and tanker causes visibility problem and obstructions. The trucks size makes maneuvering more difficult, requires a wide turning space, usually overloaded with goods which means low acceleration and less in speed on our uphill road. This causes accidents on our road in the country.

FUEL TANKERS MISUSE

In addition to carrying fuel, some tanker drivers add agricultural produce like tomatoes, yams, beans on top of the truck to sell and for personal consumptions. This leads to over capacity and utilization of road structure and causes of accident.

ENVIROMENTAL FACTORS

The topography of the Nigerian terrain constitutes a remarkable obstruction in the road construction. Mountains, valleys and rivers constitutes, sharp bends, steep hill sides and sharp slopes which are dangerous features for road users are causes of road traffic accidents.

2.5 EFFECT OF RAOD CRASHES

The effect of road crashes as it involves Truck /Tanker Transportations and the consequences there after cannot be over emphasized.

When there is road traffic crash, minor, major or fatal crash; man, vehicle and road are involved. The produce would not get to its expected destination; man hour and time are lost.

When the crash is minor, it must, have caused some damages to the vehicle or road structure. Major crash involves injury to vehicle and person but no life is lost. It becomes fatal when people die in the accident. At time some people involved in crashes do not die, but will never leave a good life again for their legs, hands or ever half of their body parts paralyzed as a result of spinal injury. As a result, they become a burden to themselves, family and the society in general.

2.6 **DEATH IMPLICATION**

The death of a person in an accident has the following effect:-

A (i) The wife becomes a widow, the husband becomes a widower

(ii) The children become orphans,

(iii) The major source of income for family up keep stops, while biological mother ceased.

(iv) The family standard of living will automatically drop as children education, feeding, clothing, transport etc has to step – down for reduced financial resources or even stop children

education for alternative apprentice and craft training.

B Effect to the Nation

The dead can no longer contribute to the economic development of the nation.

- No more tax either as VAT or pay as you earn.
- No societal or social contribution in the environment where he lives.
- Religion affiliation is cut –off.
- Dependants have to look elsewhere for alternative support.

C When not dead but incapacitated.

At times it is better for the victim to die than to be half dead.

- When there is spinal cord injury, the patient becomes a vegetable, total care and concentration is needed by him from the family member. While his food consumption increases, his physical energy decreases and there is daily demand for someone that is physically strong to carry the patience when he needs to eat, ease himself, or even take bath. He becomes an unprofitable employer as the person taking care of him cannot be fully engaged. Some turn out to become nuisance to the public, while others beg around for their daily living.

D. **EFFECT OF INCAPACITATED PEOPLE TO THE NATIONAL ECONOMY**

Most of the Nigerian Orthopedic Hospital have abandoned patients that are having terrible injuries and who had been seen as having no further usefulness to the family but rather drain the insufficient resources. They are considered to be better dead than alive. Such people have their relation(s) run away from medical bills and their precious time wasted for caring for the injured relation. The government has no alternative than to cater for their needs. By making extra provision in the medical budget to cater for this group in the federal and state hospitals.

The present government of Goodluck Ebele Jonathan (GCFR) has equally made transportation a crucial point in his agenda.

In an effort to improve the transportation system by this administration, the railway and rail tracks are being reconstructed and repairs made, while new coaches are purchased to effect the desired improved railway transportation in Nigeria. It should be noted that the volume/quantity of agricultural produce railway will carry quite more than the quantity trucks will carry per time.

2.7. BUDGET PROVISION FOR ROAD TRANSPORTATION

During the time of formal president; Umaru Musa Y'aradua, in his seven (7) point agenda in the year 2007, he made transportation number one point for which the federal government is highly interested to develop and equally to ensure it meets-up with the Millennium Development Goals (MDGs).

The law enforcement budget (the police, FRSC, etc) have gotten the approval of the National Assembly on the current and capital expenditure for the year 2010/2011. They had equally been allowed to increase their staff strength and establishment proportionally and in accordance with the approved budget for the current year.

2.8. ANNUAL/REGULLAR CAMPAIGN & TRAINING /SEMMINAR WORKSHOP BY FRSC

- The federal Road Safety Corps regularly train the regular marshals, special marshals, drivers, motorcyclist, members of the National Road Transport Workers Association, private and public organizations on highway code and it uses, driving techniques, vehicle fault diagnosis, operational procedures etc.
- During 'Ember months' (September to December) radio jingles, publicities and television advertisements are done to sensitize the Nigeria public to be conscious and move carefully while driving on the highways. Special patrol operations are organized twenty four hours by FRSC to ensure that road carnage is reduced to the nearest minimum. The police, Federal Road Safety Corps officers and marshals, Nigerian Security and Civil Defense corps, and other State Traffic Management Agencies influence drivers' behaviour through enforcement of traffic regulations.

Federal, State and local government, Ministry of Works try to create better roads, while educationist, news media– radio and television, newspapers and journals, are used to enlighten road users on the road, and other road conditions and road signs to avoid crashes. The level of illiteracy within the professional drivers is high hence the impact of education

has not yielded the expected result. Many do not believe in formal training in the driving school as they prefer home training and illegal way of processing driver's license than going to meet the vehicle inspection officer, the Board of Inland Revenue and the Federal Road Safety Corps that produces the driver's license.

The Nigeria police, Nigeria Security and Civil Defense Corps, the National Agency for Food Drug Law Administration Control (NAFDAC), and other State Traffic Control and Management Agencies have risen up to ensuring a reduction in road traffic crashes and better road safety consciousness by the people in Ekiti state and Nigeria in general.

CHAPTER THREE

3.0 RESEARCH METHODOLOGY

3.1 INTRODUCTION

This chapter deals with the methods and procedures used in carrying out the research study. It enhances the specification of procedures employed in putting together the new facts and data processing.

Research methodology is the scientific way of carrying out research investigation. For this research, the methods adopted includes use of oral interview with the agricultural farmers in the state, the produce buyers, sellers – both wholesalers, retailers and the Produce Co-operative societies. Written materials of experts in road traffic crashes on marketing and distribution of agricultural produce relating to the research topic.

This is to provide answer to some research questions asked in chapter one. The survey method focuses on the attitude and behavioral aspect of agricultural farmers, transporters and marketers of agricultural produce in Nigeria with specific reference to Ekiti State the home of the research topic -"Efficacy of road traffic crashes on marketing and distribution of agricultural produce in Ekiti State", Nigeria.

3.2 SOURCE OF DATA COLLECTED

PRIMARY SOURCES

Primary sources of data can be defined as information obtained by experience, research or observation. It is not taken from any book. Data that are collected for a specific purpose to which they are used. Those are data collected by investigators themselves e.g. population census or enumeration exercise.

3.2.1 TECHNIQUES USED IN GATHERING THE PRIMARY DATA

i. QUESTIONAIRES

Questionnaires were given to respondents (e.g. farmers, marketers and transporters). This method is adopted because it allowed the researcher to have direct contact with the respondence through the questionnaire and equally allowed them to express their view through source.

ii. INTERVIEW

Personal interview is considered very important and crucial to this research work. Interviews on human factors causing road traffic crashes and its impact on marketing and distribution of agricultural produce in Ekiti State was conducted. Face to face interview with

the stakeholders in the 16 local government area in Ekiti State were done. The researcher use this instrument to see the road furniture, the level of road damages and the extent at which crashes could affect effective marketing of agricultural produce.

iii. OBSERVATION

This is the act of watching something carefully for a period of time; There are some observable attitude and characters of stakeholders, farmers, produce, buyers, transporters and marketers) that are exhibited during supply chain period and management, while at the market and even after sales attitude of the stakeholders. Different observable behaviours that usually lead to cogs in the flow of marketing the product, as well as what lead to accident were considered. Nachaims (1981:155) enthused that "modern social science is rooted in observation in its directness; it makes possible to study behaviour as it occurs

CHAPTER FOUR

4.0. PRESENTATION, ANALYSIS AND INTERPRETATION OF DATA

4.1. INTRODUCTION

This chapter is intended to critically and systematically analyze some of the data gathered from interviews conducted on the field from the Farmers, Marketers, Transporters of Agricultural Produce in Ekiti State, Law enforcement Agencies as well as questionnaires administered.

All the sixteen (16) Local Government Areas were visited to identify their produce, the market where these produce are sold and bought, and the mode of transporting them to different potential markets were equally studied.

Also included in the study is the type of agricultural produce that each local government plant, the harvest period, the market days and the seasons for which they are commonly found in the market in large quantity.

The causes of road Traffic Crashes were equally examined vis-a-vis the vehicles and drivers behaviors and the seller to get the produce to their respective customer as at when and where the produce are needed for consumption.

4.1.2 **DATA PRESENTATION**

TABLE 4.1.1. PRODUCE MARKET DAYS AND SELLERS TABLE

S/N	LOCAL GOVT. AREAS	LGA'S HQ /TOWNS	PRODUCE	MARKET LOCATION	MARKET DAYS	PRODUCE SELLERS	**REMARKS**
1.	EKITI WEST	ARAMONKO	Cocoa, Yam, Kola nut, Pineapple, Palm oil.	Aramoko	Every 5 days	Farmers, wholesalers, Retailers.	All towns and villages have markets where daily needs are being sold.
2.	EFON ALAIYE	EFON	Cocoa, Yam, Maize, Palm oil.	Efon, Ilasa	Every 5 days	Farmers, Wholesalers, Retailers	"
3.	EKITI EAST	OMUO	Cocoa, Yam, maize, palm oil	Omuo	Every 5 days	Farmers, Wholesalers, Retailers	"
4.	EKITI SOUTH	IJERO	Cocoa, Yam, Coco Yam, Maize, Palm Oil	Ijero	Daily Mkt.	Farmers, wholesalers, Retailers	"
5.	EKITI SOUTH WEST	ILAWE	Cassava, Kola Nuts, Banana, Plantain, Cocoa	Ilawe	Every 5 days	Farmers, Wholesalers, Retailers	"
6.	EMURE	EMURE	Yam, Maize, Cassava	Emure	Every 5 days	Farmers, Wholesalers, Retailers	"
7.	EKITI CENTRAL	ADO-EKITI	Yam, Cocoa, Coco Yam Orange,	Bisi Mkt. New Garage	Every 5 days Daily	Farmers, Wholesalers, Retailers	"

			Plantain, Maize				
8.	GBONYIN	ODE	Yam, Cassava, Maize, Cocoa	Ode	Every 5 days	Farmers, Wholesalers, Retailers	"
9.	IKERE	IKERE	Yam, Cassava, Maize, Cocoa	Odo Oja Oja Oba Oke Ikere Igbira Afao	Daily Every 5 days 2nd day after Oja Oba Daily Daily	Farmers, Wholesalers, Retailers	"
10.	IDO OSI	IDO	Yam, Cassava, Cocoa	Ido	Daily	Farmers, Wholesalers Retailers	"
11.	IKOLE	IKOLE	Yam, Cassava	Ikole	Daily	Farmers, Retailers	"
12.	ILEJE MEJE	IYE	Yam, Cassava, Palm Oil	Iye	Every 5 days	Farmers, Wholesalers Retailers	"
13	ISE	ISE/ORUN	Palm Oil, Cocoa, Kola Nuts, Banana, Plantain	Ise/Orun	Every 5 days	Farmers, Wholesalers, Retailers	"
14.	IREPODUN/ IFELODUN	IGEDE	Cocoa, Kola Nuts, Maize, Cassava, Palm Oil	Oja Oba Ode Igede	Every 5 days Every 5 days	Farmers, Wholesalers, Retailers	"
	OYE	OYE	Palm Oil, Cassava, Yam, Maize, okro	Isan	Every 5 days	Farmers Wholesalers Retailers	"
16.	MOBA	OTUN	Yam, Cassava,	Oja Oba Igogo	Every 5 Days	Farmers Wholesale	

			Tomatoes, Pepper, Okro	Ikun Ikosi Erimope Epe Ora	" " " " " " " " " " " " " " " "	rs Retailers	"

Source: Author's field survey, 2012.

The above table shows the Local Government Areas and their capital towns. Agricultural produce grown in these towns, their market location and days in which these markets are opened for the public to buy and sell.

The three categories of sellers and buyers in these markets are famers, selling their own produce directly to wholesalers or retailers, or to the final consumers. It is equally common to see co-operative societies purchasing in bulk and keep same in stock till there is scarcity.

The Ministry of Agriculture also buys in bulk for the government and stock same to sell at reduce price to people in the state, whenever there is the need for such.

It should be noted that every villages and towns in Ekiti State have local markets that either operates daily or every five (5) days where essential commodities are being sold.

TABLE 4. 1.2. **PRODUCE MARKET DAYS AND BUYERS TABLE**

S/N	STATES	TOWNS	PRODUCE	MKT.DAYS	TRIBES/BUYERS	REMARKS
1.	ABIA	16(LGA'S)	Kola Nuts, palm Oil, Banana, Plantain	Every 5 days	Hausas ,Fulani's	-
2.	ADAMAWA	"	Kola Nuts, Palm Oil, Banana, Plantain	"	Hausas, Fulani's	-
3.	AKWA IBOM	"	Kola Nuts , Orange	"	Calabarish	-
4.	ANAMBRA	"	Kola Nuts, Yams, Palm Oil	"	Ibos	-
5.	BAUCHI	"	Kola Nut, Palm Oil	"	Hausas	-
6.	BAYELSA	"	Kola Nuts, Cocoa	"	Ibos	-
7.	BENUE	"	Kola Nuts, Banana	"	Tivs Idoma	-
8.	BORNO	"	Kola Nuts, Plantain, Banana	"	Baribaris	-
9.	CROSS-RIVER	"	Kola Nuts	"	Effik	-
10.	DELTA	"	Kola Nuts, Yam, Orange	"	Irobo Deltal Ibos etc.	-

11.	EBONYI	"	Kola Nuts	"	Calabarish	-
12.	EDO	"	Palm Oil, Kola Nuts	"	Igara ¤ Ika-Ibo	-
13.	ENUGU	"	Palm Oil	"	Ibos	
14.	EKITI	"	All Produce	"	Yorubas	Intra-state buying and selling
15.	GOMBE	"	Kola Nuts, Palm Oil	"	Tangale Hausa Fulani	-
16.	IMO	"	Kola Nuts	"	Ibos	-
17.	JIGAWA	"	Palm Oil, Kola Nuts	"	Hausa Fulanis	-
18.	KADUNA	"	Kola Nuts, Palm Oil, Yam	"	Kage Hausa	-
19.	KANO	"	Kola Nut s, Banana, Plantain, Palm Oil	,,	Hausa Fulani	-
20.	KATSINA	"	Kola Nuts, Banana, Plantain, Palm Oil	"	Hausa Fulani	-
21.	KEBBI	"	Kola Nuts, Palm Oil	"	Hausa	-
22.	KOGI	"	Kola Nuts Palm Oil	"	Okun, Basa, Igbira, Igala	-
23.	KWARA	"	Banana, Plantain, Yam	"	Yoruba, Nupe, Fulani	-
24.	LAGOS	"	Cocoa, Kola Nuts, Banana, Yam,	"	Yoruba	-
25.	NASARAWA	"	Banana, Plantain, Kola Nuts	"	Hausa, Egon, Mada	-

26.	NIGER	"	Plantain, Banana, Kola Nuts,	"	Nupe, Fulani, Hausa, Guari	-
27.	OGUN	"	-	"	Yoruba	-
28.	ONDO	"	-	"	"	-
29.	OSUN	"	-	"	"	-
30.	OYO	"	-	"	"	-
31.	PLATEAU	"	Kola Nuts	"	Angas, Birum	-
32.	RIVERS	"	-	"	Calabarish	-
33.	SOKOTO	"	Kola Nuts, Banana, Plantain	"	Hausa Fulani	-
34.	TARABA	"	Kola Nuts, Banana	"	Junkuns Mumuye	-
35.	YOBE	"	Kola Nuts, Banana, Plantain	"	Hausa	-
36.	ZAMFARA	"	Kola Nuts, Banana, Plantain	"	Karekare Hausa	-
37.	ABUJA	"	Palm Oil, Banana, Plantain, Kola Nuts	"	Guari, Hausa,Ibos Yoruba Etc.	-

Source: Author's field survey, 2012.

Most of the agricultural produce in Ekiti State are cash crops that are consumed by almost all the tribes in Nigeria.

Kola nuts are highly consumed by the northerners, while the easterners use same for ceremonies and equally attach great importance to it in every occasion.

Kola nut is demanded by all tribes and their agents come into Ekiti State to buy and take to their states for sell.

Thirty six states including Federal Capital Territory come to Ekiti State to purchase agricultural produce of their choice to be marketed in their respective market in their states.

TABLE 4.1.3 **TOWNS OF AGRICULTURAL PRODUCE IN EKITI STATE**

S/n	LGA	Town	Cash Crops									Vegetables		
			Yam	cassava	Cocoa	K/nut	Rice	Maize	Orange	Pineapple	Banana/Plantain	Palm oil	Okro	Green leaves
1	Ekiti west	Aramoko	Yes	yes	yes	-	-	-	-	yes	-	yes	-	-
2	Efon Alaye	Efon	Yes	-	yes	-	-	Yes	-	-	-	yes	-	-
3	Ekiti east	Omuo-Ekiti	Yes	-	yes	-	-	Yes	-	-	-	yes	-	-
4	Ekiti south	Ijero	Yes	yes	yes	yes	-	-	Yes	yes	-	-	yes	-
5	Ekiti s/west	Ilawe	-	-	yes	-	-	-	-	-	yes	yes	-	-
6	Emure	E,mure	Yes	yes	-	-	-	Yes	-	-	-	-	-	-
7	Ekiti Central	Ado-Ekiti	Yes	-	yes	yes	-	Yes	-	-	yes	-	-	-
8	Gboyin	Ode	-	-	-	-	-	-	-	-	-	-	-	-
9	Ikere	Ikere	Yes	yes	yes	-	-	-	-	-	-	-	-	-
10	Ido-Osi	Ido	Yes	yes	-	-	-	-	-	-	-	-	-	-
11	Ikole	Ikole	Yes	-	-	-	-	Yes	Yes	-	-	-	-	-
12	Ileje meje	Iye	Yes	yes	-	-	-	-	-	-	-	yes	-	-
13	Ise	Ise-Orun	-	-	yes	yes	-	-	-	yes	yes	yes	-	-
14	Irepodun/Ifelodun	Igede	-	-	yes	-	Yes	Yes	-	-	-	yes	-	Igbemo Igede
15	Oye	Oye	Yes	-	-	-	-	Yes	-	-	-	yes	yes	-
16	Moba	Otun	Yes	yes	yes	-	-	-	-	-	yes	-	yes	-

Source: Author's field survey, 2012.

The above table shows the LGA and town where cash crops, fruits and vegetables are commonly planted in large quantity. It should be noted

that other towns and villages that are not indicate in this table equally grow some of these produce, but in smaller quantity.

Vegetables, green leaves like (Rorowo, Efo tete, Ilasa, Efinrin, Ewedu, Sokoyokoto, Ewuro, Ugu, Gbure, Ebolo, Amunututu, Etc.), of different varieties mentioned in their respective Yoruba names are produced in large quantity for both local and inter-state transportation to the buyer's market.

TABLE 4.1.4. **SAMPLED TOWNS IN THE STATE FOR PRODUCE, MARKET DAYS, HAVEST TIME AND SEASONS**

s/n	Produce	Sampled towns in the State.						Market days / months	Harvest time / seasons
1	Yam	-	Aramoko	Efon	Ado	Oye	Ilasha	Every 5 days	July – October
2	Cassava	-	Emure	Ijero	Ode	Iye	Igede	Every 5 days	September-December
3	Cocoa	-	Ikole	Aramoko	Igede	Ise-oru	-	Every 5 days	November-January
4	Kola nut	-	Ilawe	Emure	Otun	-	-	Every 5 days	November-March
5	Rice	-	Igewo	Ode	-	-	-	Every 5 days	November-December
6	Maize	-	-	Iye	Ido	Igede	-	Every 5 days	June-July September-Nov
7	Orange	-	Aramoko	Ijero	Ido-osi	Ilawe	-	Every 5 days	April-June September-Jan
8	Pineapple	-	Ilawe	Ijero	Aramoko	-	-	Every 5 days	Febuary-May
9	Banana / plantain	-	Ilawe	Ise	Aramoko	Emure	-	Every 5 days	Throughout the year
10	Palm oil		Ise	Ilawe	Ogotun	Ado	-	Every 5 days	March-June
11	Okro	Epe	Igede	Iyin	Ogotun	Gabo	Iye	Every 5 days	May-July
12	Vegetable	Otun	Erimope	Gago	Aiyetoro	Iloro	-	Every 5 days	Throughout the year

Source: Author's field survey, 2012.

The above table shows the agricultural produce that are grown in a large scale in the state and for which they are recognized locally and internationally.

Most local government has their major markets opened every five (5) days. These days are not the same all over and in the states as market days vary from town to town, and from local government to local government.

It should be noted that cash crops in the past are seasonal crops not until mechanized farming and scientific agriculture were introduced with improved irrigation system that has made some crops to be grown regularly as production is twice or more in a year. Crops like maize, rice, vegetables, are harvested round the clock in the year.

TABLE 4.1.5 TYPES OF VEHICLES USED IN TRANSPORTING AGRICULTURAL PRODUCE IN EKITI STATE

S/N	LGA'S	TOWNS	PRODUCE	TYPE OF VEHICLE IN USE				
				MOTOR BIKE	CARS/PICK-UP	BUSES	TRUCKS	TRAILERS
1.	EKITI WEST	ARAMONKO	COCOA, YAM, KOLA NUTS PALM OIL	◌	□	□	□	
2.	EFON ALAIYE	EFON	COCOA,ORANGE YAM, KOLA NUTS, MAIZE, PALM OIL,			□	□	

3.	EKITI EAST	OMUO	COCOA, YAM, MAIZE PALM OIL,					
4	EKITI SOUTH	IJERO	COCOA, YAM, COCO YAM, MAIZE, PALM OIL, CASSAVA, KOLA NUTS, ORANGE					
5.	EKITI S/WEST	ILAWE	BANANA, PLANTAIN, COCOA					
6.	EMURE	EMURE	YAM, MAIZE, CASSAVA					
7.	EKITI	ADO EKITI	YAM, COCOA, KOLA NUTS, ORANGE, PLANTAIN,BANANA, MAIZE					
8.	GBOYIN	ODE	RICE, YAM					
9.	IKERE	IKERE	YAM, CASSAVA, COCOA					
10.	IDO OSI	IDO	YAM, CASSAVA					
11.	IKOLE	IKOLE	YAM, CASSAVA					
12.	ILEJE MEJE	IYE	YAM, CASSAVA, PALM OIL					
13.	ISE	ISE/ORUN	PALM OIL, COCOA,KOLA NUTS BANANA, PLANTAIN					
14.	IREPODUN, IFELODUN	IGEDE	COCOA, , BANANA,KOLA NUT, MAIZE, OKRO,RICE					
15.	OYE	OYE	PALM OIL, CASSAVA, YAM, MAIZE, OKRO					
16.	MOBA	OTUN	COCOA, YAM, CASSAVA, TOMATOES, PEPPER,OKRO					

Source: Author's field survey, 2012.

The above table shows the type of vehicles in use for transporting agricultural produce in Ekiti State to other States in Nigeria. Among these vehicles are motor bikes, cars, pick – ups, buses, trucks, and trailers of different categories.

The type of vehicle often use are dependent on the quantity of the produce to be transported, the distance to be covered and the weight of the produce involved.

4.2 MARKETING AND DISTRIBUTION OF AGRICULTURAL PRODUCE IN EKITI STATE

Marketing in Capitalist or Free Enterprise

In a market economy, individuals and firm act in their own best interest to answer the WHAT, HOW, and for WHOM questions. In this system a market is an arrangement that allows buyers and sellers to come together in order to exchange goods and services. Many of the largest and most prosperous economies in the world, such as the United State, Canada, Japan, South Korea, Singapore, Germany, France, Great Britain, and other parts of Western Europe practice market economy.

Mean feature of pure market economy system are:-

(a)Private ownership of all productive assets, land, factories, machine and equipments.

(b) There is no government interference and consumers, businesses and resource suppliers exercise freedom of choice

in making economic decisions. This freedom of choice is expressed via:-

i. Customer's sovereignty: Customers purchase what they want subject to the limits of their incomes.

ii. Free Enterprise: Business purchase and utilize resources to produce whatever product they want and sell them in the market of their choice.

iii. Free Mobility of Resources: Suppliers of resources such as labour, land, and financial capital are free to sell them in the factor markets of their choice.

iv. Self Interest: each economic unit tries to do what is best for itself. Customers spent on things that yield maximum utility or satisfaction. Firm, on the other hand, engage in economic activities that yield them maximum profit.

v. Competition: buyers and sellers compete among themselves. No one is able to influence prices by its own action because there are:

- Large number of buyers and sellers.
- Perfect knowledge of price and types of goods and services in the market.
- Free entry and exit of firms into and out of any industry.

vi. Price Mechanism: Production and distribution are governed by price or market mechanism.

Adam Smith refers price system as the "Invisible hand" that governs that market economy. The market economy works through interaction of prices, namely:

- The price of goods and services
- The price of factor of production
- The profit motive of producers.

The decision of the consumers determines the demand for goods and services, the decisions of producers determine the supply of commodity. The interaction of demand and supply determine the prices of goods and factors of production while there is no price control board that determines prices of Agricultural produce in Ekiti State.i.e. Palm oil, cocoa, etc.

The law of demand and supply is always a factor to be reckoned with. There are different market unions of different agricultural produce. Despite their regular meetings and roles played to influence price and customers; this has not yielded meaningful result. The farmers boy-cott the middle men and sell directly to the consumers whenever they have serious financial needs. It is therefore important to note that unionism in marketing and

distribution of agricultural produce has not being very much effective in Ekiti State.

4.2.1 TRANSPORTATION/DISTRIBUTION OF AGRICULTURAL PRODUCE

The primary function of transport is to move passengers, goods, and services from where they are, to where they would prefer to be or to where their relative value is greater.

In the case of people, this may be for variety of reasons; economic or personal in nature and in the case of goods it may be dictated by the needs of further processing or ultimate consumption or use. In the development of industry, transport plays a vital role by linking the markets and it is also essential for people to travel between their homes and places of employment. It has been shown that production is not complete when an article appears in the finished form in the factory because the utility still have to be supplied.

Similarly, crops in the farms have no utility until it get to the homes of the final consumer when they are being eaten or consumed.

4.2.2 VALUE OF GOODS:

Transport and logistics costs are major components of the price consumer of goods pay. Thus, transportation helps in determining the economic value of produce.

4.2.3 PLACE UTILITY:

The reduction in transportation cost between point A and B gives the commodity "place utility". It is only when efficient method of transportation creates utility that the goods have value at the destination.

Therefore crops cost on transit has no utility to the buyer, seller or the transporter until it get into the hand of the final consumers.

4.2.4 TIME UTILITY:

The concept of time utility is closely related to that of place utility. The demand for a particular commodity can only exist during certain periods of time. If a produce/crop is not available at a time when there is demand for it, then it possesses no value.

4.2.5 UTILITY OF GOODS:

Transportation adds value or utility to crops/produce, efficient transportation system and modern modes of transport allow geographical specification of large scale production, increased competition and increased land values.

4.2.6 INCREASED COMPETITION:

Efficient transport provides the consumer with variety of goods meeting the same needs. Without efficient and effective transport

system, local enterprises are capable of producing and imposing their produce on the customers.

4.2.7 LAND VALUE:

Transport system improvement enhances an area's economy by increasing the value of land that is adjacent to area served by the improvement. The land becomes more accessible and more useful.

4.3 FACTORS INFLUENCING TRANSPORT DEMAND

It is generally considered that the quantity demanded (qd) for a commodity n is influenced by its price (p), the prices of other goods ($P1_{,....}\ P_{n\ -\ 1}$), the level of consumer income (Y) and taste of the consumer (T) .

$Q_d = f\ (P_n, P_1\ ,..., P_n - 1, Y, T\ )$

This simple mode holds for transport, as for other agricultural produce and services.

4.4 CONSUMERS BEHAVIOURS TO TRANSPORTATION MARKETING AND DISTRIBUTION OF AGRICULTURAL PRODUCE.

A crucially important concept of demand in the transport sector is that of derived demand. To economists, the demand for transport is a derived one. This means that transport as a service or function is not demanded purely for what it is, but for what it can do.

Transport services is demanded not because it offer direct satisfaction to the consumers, but because it makes possible for people and good to be reallocated in a way to allow direct demand to be satisfied.

The following factors are important determinants of a demand for a transport service provided by a transport or market demand for transport services.

1. PRICE: the lower the price, the higher the quantity of transport services that will be demanded, ceteris paribus. In transport industry, price is not just the money paid out in fare or freight paid charges but must embrace all other cost in obtaining the transport services. All other thing being equal, we expect more trips to be made when fares, and haulage charges and petrol are lower than when they are high.

In freight transport industry, the effects of prices of other transport service on demand for a given transport is not easy to analyze, since haulage charges are negotiated between the haulage company and its clients. However, given the same quality, the hauler with the lowest haulage charge is likely to get the contract.

As regard agricultural produce and its transportation, there is no organized transport operator specializing in the movement of this produce. Often passenger vehicles like buses, or pick-up and even trucks are used to move this produce. Prices paid are determined by

the weight, quantity, and the distance where the produce will be delivered to customers.

2. FARMERS INCOME: if farmers harvest/output increases, it will definitely increase the income of same. Hence there is tendency for them to demand for more transport services all other thing being equal.

3. POPULATION CHANGES: an increase in the population of a community, town or city will lead to increase in demand for transport for movement of people and goods to satisfy their wants. Demand for more agricultural produce for domestic and industrial consumption would increase, thereby leading to high demand and supply of these produce by farmers.

4. PHYSICAL CHARACTERISTICS OF THE PRODUCE TO BE MOVED.

Physical characteristics of the good to be moved will determine the choice of mode to be used. Where perishable crops are involved, seller must be able to use a vehicle that will deliver just in time (JIM).

Where more durable items like rice, dried maize etc are involved, those items that are parked in bags, and could be transported in trucks, buyers and sellers hire big truck jointly on a common route per time for economic and safety reasons.

5. QUALITY OF SERVICE AND OVERALL COST

Customer wants the best service and would be ready to locate the best service provider for their needs. The important quality of service indicator includes the following:

Time: this quality of service influences the demand for passenger and good transport services. Business men will prefer to travel by a means of transport that will enable them meet-up with their business appointment or supply schedule to their prospective customers.

Graham Mullard and Glaister (2008) noted that for freight companies, time in transit incurs an inventory cost which is the cost of the products being transported instead of being sold and the generated revenue being invested. With increased speed, the operator's capital cost per ton reduced with consequent reduction in operating cost and tariff charges to customers. The lower price will encourage greater use by customers and the increased productivity with improved vehicle availability to meet the increased demand without need to purchase additional vehicle (Stuart 1993).

- Standard of Service: service that meets targeted customers need will receive increased patronage.
- Frequency of Service: from the transport operator's view, it may have a trade-off with economies of scale of large vehicle or of better loading. As a general rule, frequency of service will be better for buses, and pick-ups, than trucks and trailers, e.g.

Mercedes benz 911, and also the National Union of Road Transport workers Association who operates fleets haulage for carrying goods and services. It should be noted that most agricultural produce are seasonal produce. Their transportation from the farm to the final consumers is determined by their storage potential, product durability, and market forces (demand and supply).

• Comfort: The customer behaviour in respect of comfort for transporting of these agricultural produce is nothing to write home about. Sellers of these produce often sit on top of their produce and do not care about their personal comfort or health, but are more concerned on how the produce will get to their destination.

It is in rear cases you see traders, having loaded the trucks with yam, cocoa, etc will enter public transport or even move after the vehicle that carry their crops throughout the journey till it get to where the produce will be sold. All other thing being equal, traders demand for comfortable services will be high. Comfort will be a matter of importance depending partly on the length and purpose of journey and partly on the income of the customers. The standards of living of the people must be reflected in term of comfort if a carrier is to attract demand for its services.

- Reliability: Mallard et al (2008) noted that passengers often have scheduled appointment to meet and freight companies are constrained by production deadlines, especially with the

development of Just - In - Time (JIT) production method in supply chain management.

This reliability is an important quality of service for which sellers of agricultural produce consider before hiring a vehicle to move their produce.

• Safety and Security: with recent growth in security threats such as terrorism, hijacking, armed robbery, kidnapping, Boko Haram, etc. many people are concerned about transport modes that are prone to such threats. In the case of transporting yam, cocoa, vegetables (perishable and non-perishables) care is taken at loading and off-loading base to ensure that the produce are safe. Also, preservatives are used to ensure that bacterial, germs that impose threats and damages to the produce are applied before and during transportation.

Pilfering, stealing, diversion of produce is bitter experiences that marketers incur during the movement of their produce from the point of purchase to the point of selling the produce to the final consumers.

• Social-Economic and Land Use Characteristics of Transport: demand for what type of transport to be used to transport produce depends on many underline forces. The simplest forces are typically the need to travel to places of work or education and the need to shop for food or other basic necessities. The demand for transport

is a direct reflection of the location of the farm produce. Not all farms location are motor able, hence head load, and motor bike are used to move the crops to a motor able point for further transportation to where they will be stored, sold or transported.

The second major socio-economic factor affecting demand is the overall level of affluence. In poor areas, most food may be produced locally and most journeys are made by foot, and there is little demand for motorized form of transport. With modern development in agricultural farming, the improved scientific applications to agriculture, and mechanization, travel distance increase and some form of motorized transportation is needed for more and more journeys.

COMPETITIVE BEHAVIOUR IN TRANSPORT INDUSTRY

The competitiveness of market refers to the extent to which individual firms have power to influence market prices or the terms on which their products are sold. The less power and individual transport company in which it operates, the more competitive the market is.

The extreme form of competitive structure occurs when each must accept the price set by the forces of market demand and market supply. The extreme form of competitive structure occurs when each operator has zero market power.. In such a case many

operators provides identical services and each must accept; the price set by the forces of market demand and market supply. The extreme is called a perfectly competitive structure.

The term competitive behaviour refers to the degree to which individual firms actively compete with one another for example two transporters X and Y certainly engage in competitive behaviour if both have some real power over their market. Either firm could raise it prices and still continue to attract customers. However, this is only done in a market that does not have a perfectly competitive market structure.

On the other hand two transport L and M do not engage in competitive behaviour if the only way they can affect their revenue is by changing their outputs (or the prices) of their produce. Thus while transporter B and C is in a perfectly competitive market structure, they do not compete actually with each other whereas firms A and B that compete actively with each other in competitive behaviour do not operate in perfectly competitive markets structure. Thus there is a distinction between market behaviour and market structure.

In transport market, the degree of competition tends to be determined by two factors namely:

- The number of operators in the markets. Perfect competitive and monopolistic competitive market structure is

characterized by large numbers of invariable small farms. This is conductive to competition and efficient allocation of resources. As the number of firms in a market increases, so does the competition and efficient allocation of resources. As the number of firms in a market increase, so does the competition between them. Conversely, operators in a transport market usually have no or very little competition.

4.5 WAREHOUSING INVENTORY AND SUPPLY CHAIN MANAGEMENT OF AGRICULTURAL PRODUCE IN EKITI STATE.

Inventory management and warehousing are two important activities that have an impact on total supply chain optimization. Warehousing as a function is important in the supply chain as it can assist in achieving production economies, maintaining a source of supply, supporting customer service policies, overcoming time and space differentials, and meeting changing market demands (Anon 6, 2001).

The warehousing function does not operate in isolation and inventory is needed to support the warehousing function in achieving the benefits as mentioned above. In the light of this, companies must therefore ensure that the warehousing function with the

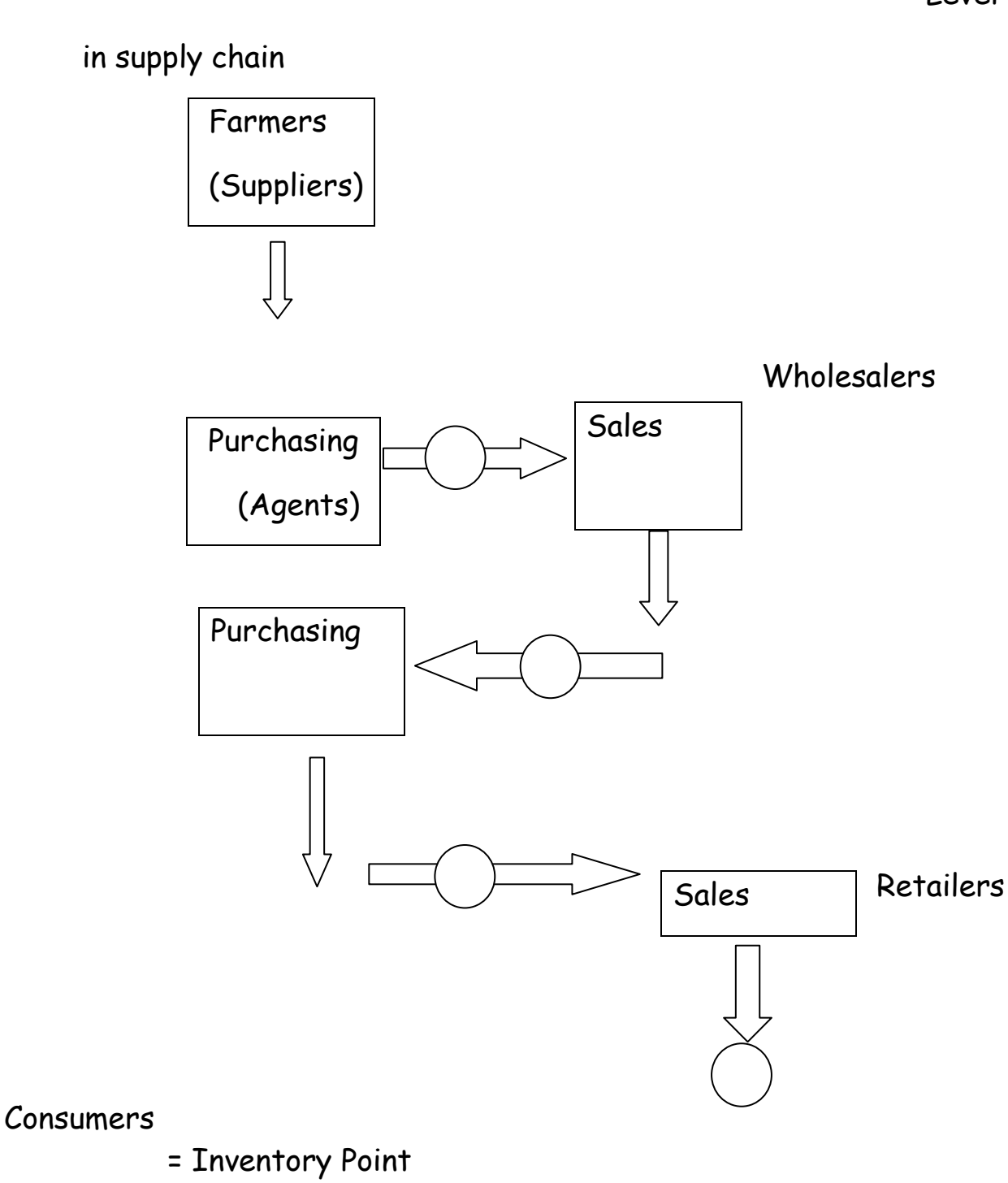
inclusion of inventory is optimized to obtain the least total supply chain costs.

Warehouses store all products, while distribution centers (DCs) predominantly hold minimum inventories and high demand items. Warehouse handle products in two cycles: receive and ship (Anonl, 2001). In the same vein, warehouses focus on minimizing the operating cost to meet the shipping requirements while DCs forces on maximizing the profit impact on meeting customer delivery requirements. (Davie, 1995).

Produce that are majorly stored in warehouse in Ekiti State are cocoa, palm oil, yam rice and maize. Organized warehouse are not common as most produce are under the shop or stores of their seller owners.

Co-operative bulk purchase and selling at open market is also common as all produce/crops have trade associations and unions that influences market supplies and also determine prices. Warehousing leads to potentially dramatic improvement in lead time reduction (both in average and variability can be gained when full knowledge of the location of all assets and their states are known.

Figure 4.2.9 SUPPLY CHAIN AND INVENTORY POINTS OF AGRICULTURAL PRODUCE



Decisions relating to the channels of distribution for a product or service are part of the strategic marketing plan; the target market will have been specified along with target levels of market share, market coverage, customer service and so on. The channels of distribution used by an organization must be capable of assisting in reaching these targets. Moreover, the establishment of a distribution system can take a long time , perhaps several years, and so decisions about the channels of distribution cannot be taken lightly, and have to be taken with a view to be longer since it is not usually that easy to switch between channels.

A distribution channel may be defined as "… the set of firms and individuals that take title, or assist in transferring title, to a good or service as it moves from the producer to the final consumer or individual user."

Produce passes from the farmers to the final consumers through the supply channels but are stored at each stage of distribution chain before the produce is handed over to the next channel member.

Poirier (1998) has made a study of more than 300 global firms engaged in supply chain practices. This study has revealed four levels of supply chain progression. The first two levels, where the vast majority of companies are situated, are internally focused. The two higher levels, home of the industry leaders, embrace a decidedly

external focus. The internal orientation of levels one and two can yield significant savings in areas such as inventory, cycle times, purchasing, logistics, transportation, and warehousing.

Bonney (1991) defines the issues even further, writing that inventory is normally taken to be synonymous with stock and that stock is something tangible, something to be mined, converted, created, transported and sold. Some researchers subdivide production inventory system into push and pull system. The original pull system was the re-order level system (ROL) and the re-order system (ROC). ROL and ROC system were found to have many disadvantages, particularly the ordering of unwanted items and items in unbalanced sets. Materials requirements planning (MRP) is a push system attempting to produce items in balanced sets to meet the needs of consumers arid it is clear that there is also a pull element 'just – in – time ' (JIT) production is a philosophy which includes the concept that inventory is waste and aims to shorten lead times and use a demand pull approach. Farm produce in Ekiti State passes through agent, wholesalers, and retailers and to the final consumers.

As much as these crops go through these channels, they are sold in every local government areas, towns and villages through the channels on different market days as earlier shown in the previous tables.

4.6 ANALYSIS AND INTERPRETATION OF DATA.

Seventy (70) questionnaires were sent to respondents out of which sixty (60) were returned, the basis on which the analysis was made.

TABLE 4.6.1 QUESTIONAIRE DISTRIBUTION

	NO	PERCENTAGE
Total number of questionnaire sent out	70	100
Number returned	60	86
Number of questionnaire not returned	10	14
TOTAL	70	100

Source: Author's field survey, 2012.

The total shows that 60 or 86 percent of total questionnaires sent out were

returned, while 10 or 14 percent were not returned.

TABLE 4.6.2 Are you a farmer?

OPTIONS	RESPONSES	PERCENTAGES
Yes	48	69
No	12	17
Nil response	10	14
Total	70	100

Source: Author's field survey, 2012.

The above shows that 69 percent of the respondents are farmers, while 17 percent are not. 14 percent did not return the questionnaire.

TABLE 4.6.3 TYPES OF PRODUCE PLANTED

OPTIONS	RESPONSES	PERCENTAGES
Cocoa	12	17
Palm Oil	6	9
Plantain	10	14
Cassava	13	18
Orange	4	6
Yam	15	21
Nil Response	10	14
Total	70	100

Source: Author's field survey, 2012.

The data above shows that 15 percent of Ekiti farmer's plant cocoa, 8 percent goes into palm tree and palm oil production, 17 percent plant plantain, while orange is 5 percent, yam is 25 percent while 14 percent did not return the forms.

TABLE 4.6.4 FARMS LOCATION IN LOCAL GOVERNMENT AREAS

OPTIONS	**RESPONSES**	**PERCENTAGES**
Aramonko	4	6
Efon	4	6
Omuo	2	3
Ijero	4	6
Ilawe	4	6
Emure	2	3
Ado –Ekiti	6	8
Ode	2	3
Ikere	4	6
Ido	6	8
Iye	2	3
Ise/Orun	2	3
Igede	6	8
Oye	6	8
Otun	2	3

Ikole	4	6
Total	70	100

Source: Author's field survey, 2012.

The above shows the number of responses and the percentages against them.

TABLE 4.6.5 FREQUENCY OF PRODUCE PLANTING

OPTIONS	RESPONSES	PERCENTAGES
Regularly	50	71
Not regular	10	15
Nil Response	10	14
Total	70	100

Source: Author's field survey, 2012.

This shows that 71 percent of agricultural produce are planted regularly, while 14 percent are not regular. 10 percent did not respond.

TABLE 4.6.6 PRODUCE PACKAGING

OPTIONS	RESPONSES	PERCENTAGES
Tin	-	-
Plastic	2	3
Sack	58	83
Pallet	-	-
Nil response	10	14
Total	70	100

Source: Author's field survey, 2012.

The above shows that agricultural produce are packed into different containers at the following percentages: plastic – 3 percent, sack – 83 percent, pallet – nil, while 14 percent did not return the form.

TABLE 4.6. 7 PRODUCE STORAGE

OPTIONS	RESPONSES	PERCENTAGES
Hired warehouse	2	2
Home store	30	43
Direct from farm	28	40
Nil response	10	14
Total	70	100

Source: Author's field survey, 2012.

The above shows the percentage of agricultural produce that are stored in hire warehouse as 3 percent, home store is 33 percent.

TABLE 4.6. 8 MARKET LOCATION

OPTIONS	RESPONSES	PERCENTAGES
Home/local	36	51
Within Nigeria	24	34
Outside Nigeria	-	-
Nil response	10	14
Total	70	100

Source: Author's field survey, 2012.

The above shows that 51 percent of agricultural produce are sold at farmer's home and locally, while 34 percent are sold within Nigeria and 14 percent are sold outside Nigeria.

TABLE 4.6. 9 DO YOU TRANSPORT YOUR PRODUCE TO THE MARKET BY ROAD

OPTIONS	RESPONSES	PERCENTAGES
Yes	60	86
No	-	-
Nil response	10	14
Total	70	100

Source: Author's field survey, 2012.

The means of transportation for distribution of agricultural produce by road shows 60 percent yes, while no is zero percent, and 14 percent did not response.

TABLE 4.6.10 ANY LOSS OF PRODUCE BY ROAD

OPTIONS	RESPONSES	PERCENTAGES
Yes	16	23
No	44	63
Nil response	10	14
Total	70	100

Source: Author's field survey, 2012.

For losses of goods by road have 23 percent while no is 63 percent.

TABLE 4.6.11 DO YOU LOSS YOUR PRODUCE BY ROAD TRAFFIC CRASHES

OPTIONS	RESPONSES	PERCENTAGES
Yes	24	34
No	18	26
Produce damage	18	26
Nil response	10	14
Total	70	100

Source: Author's field survey, 2012.

The above shows that 34 percent lost their good through RTC with Yes, while 26 percent said No, while 26 percent of this produce get damaged.

TABLE 4.6.12 EXPERIENCE OF SELLING BELOW EXPECTED PRICE

OPTIONS	RESPONSES	PERCENTAGES
Increase Harvest	30	43
Rejection for low Quality	10	14
Supply below specification	20	29
Nil response	10	14
Total	70	100

Source: Author's field survey, 2012.

The above table shows that 43percent was sold below expected price at increase harvest 14 percent rejected for low quality while 29 percent was below specification.

TABLE 4.6.13 MEANS OF TRANSPORT THAT IS MOST EFFICIENT FOR THE DISTRIBUTION OF YOUR PRODUCE IN YOUR TOWN OR LOCAL GOVERNMENT

OPTIONS	RESPONSES	PECENTAGES
Bus	30	43
Lorry	20	29
Truck	6	8
Motor bike	4	6
Nil response	10	14
Total	70	100

Source: Author's field survey, 2012.

The above shows that 43 percent of agricultural produce are transported in buses in Ekiti State, 29 percent by lorry, while trucks is 8 percent, motorbike is 6 percent and 14 percent did not return the forms.

TABLE 4.6.14 DO YOU HAVE YOUR OWN VEHICLE FOR TRANPORTING YOUR PRODUCE?

OPTIONS	RESPONSES	PERCENTAGES
Yes	22	31
No	38	54
Nil response	10	14
Total	70	100

Source: Author's field survey, 2012.

The above shows that 31 percent of farmers have vehicles to transport their produce while 54 percent do not have. 14 percent did not respond.

TABLE 4.6.15 DO YOU PRODUCE FOR LOCAL CONSUMPTION ONLY?

OPTIONS	RESPONSES	PERCENTAGES
Yes	26	37
No	34	48
Nil response	10	14
Total	70	100

Source: Author's field survey, 2012.

The above shows that 37 percent of farmers produce for local consumption, self subsistence, 48 percent farm for commercial purposes, while 14 percent did not respond.

TABLE 4.6.16 AMOUNT REALIZE PER ANNUM/YEAR

OPTIONS	RESPOSES	PERCENTAGES
₦10,000 – 20,000	8	11
₦ 21,000 – 50,000	20	28
₦50,000 – and above	34	48
Nil Response	10	14
Total	70	100

Source: Author's field survey, 2012.

Realization from agricultural produce for value between N10,000 – N20,000 is 11 percent,N21,000 – N50,000 is 28 percent, while 48 percent is for N50,000 naira and above. 14 percent did not respond.

TABLE 4.6.17. WHERE DO YOU SELL THESE PRODUCE?

OPTIONS	RESPONSES	PERCENTAGES
Buy from the farm	20	28
Local market in Nigeria	30	42
Secondary mkt. outside Nigeria	8	11
Farmers Associations	4	5
Nil response	10	14
Total	70	100

Source: Author's field survey, 2012.

The above shows that buyers that buy directly from the farms have 28 percent, those that sells at the local markets have 42 percent, 11 percent is for those that sell outside Nigeria. Farmer's association's have 5 percent and 14 percent did not return the forms.

TABLE 4.6.18 MARKETING PROBLEMS/CONSTRAINTS

OPTIONS	RESPONSES	PERCENTAGES
Finance/cash	16	22
Weather/rain	14	20
Transportation	22	31
Sellers/buyers	6	8
Market location	4	5
Nil response	10	14
Total	70	100

Source: Author's field survey, 2012.

Marketing problems and constraints shows that finance has 22 percent, weather, rain has 20 percent, transportation has 31 percent, buyers/sellers and agents have 8 percent, while market location 5percent and 14 percent is for forms not returned.

TABLE 4.6.19 FREQUENCY OF PRODUCE SALES

OPTIONS	RESPONSES	PERCENTAGES
Daily	12	17
Weekly	24	34
Seasonal	24	34
Nil response	10	14
Total	70	100

Source: Author's field survey, 2012.

The frequency of produce sales shows that 17 percent of the produces are marketed daily, 34 percent are marketed weekly, 34 percent are marketed seasonally, while 14 percent did not respond.

4.7 TEST OF HYPOTHESIS

Road Taffic Crashes has effect on marketing and distribution of agricultural produce in Ekiti State.

Or

Road Traffic Crashes has no effect on marketing and distribution of agricultural produce in Ekiti State.

The two hypothesis of the research were statistically analyzed and interpreted using chi-square (x^2) test for testing NULL hypothesis of no association or relationship between one variable and the other variable. These variables are shown in the table below.

$$x^2 = E\left[\frac{(0-E)^2}{E}\right]$$

Where: O = Observed data values

E = Expected data value

df = (r – 1) (c-1)

Where r = Number of rows, c = Number of columns.

Questions -1, 11, 12, 13, 16

1.

Question	**Yes**	**No**	**Nil**
1.	48(34)	12(26)	10(10)
11.	60(34)	0(26)	10(10)
12.	16(34)	44(26)	10(10)
13.	24(34)	36(26)	10(10)
16.	22(34)	38(26)	10(10)
	170	130	50

Source: Author's field survey, 2012.

0	E	0 – E	$(0-E)^2$	$\frac{(0-E)^2}{E}$
48	34	14	196	5.76
60	34	26	676	19.88
16	34	– 18	324	9.53
24	34	- 10	100	2.94
22	34	- 12	144	4.24
12	26	- 14	196	7.54
0	26	- 26	676	26
44	26	- 18	324	12.40
36	26	- 10	100	3.85
38	26	- 12	144	5.54
10	10	- 0	0	0
10	10	- 0	0	0
10	10	- 0	0	0
10	10	- 0	0	0
10	10	- 0	0	0

Source: Author's field survey, 2012.

2.

x^2C =97.74

X^2 Tab = 15.50

3.

df = (r -1) (c-1)

= (5 -1) (3 -1)

= (4) (2)

df = 8 at 0. 05 or 5%

X^2 c =- 8 or 15.50

4. HYPOTHESIS

H_1 = Road Traffic Crashes has effect on marketing and distribution of agricultural produce in Ekiti State.

H_0 = Road Traffic Crashes has no effect on marketing and distribution of agricultural produce in Ekiti State.

> Reject H_0 if x^2 Tab < 0 < 0.05

Since X^2 Tab <0 < 0.05

Accept H_1

CHAPTER FIVE

5.0 FINDINGS RECOMMENDATIONS AND CONCLUSION

5.1 FINDINGS

The researcher's findings on efficacy of road traffic crashes on marketing and distribution of agricultural produce shows that majority of farmers in the state make use of local implements for farming. As a result of this, farm yields are generally low as profit realized from it often keep life going but do not give room for excess profit, hence most of them augment farming with transportation business or artisans jobs to earn more money that will be able to cater for their family needs and commitments.

The rate at which Ekiti indigenes get involved in farming is gradually reducing as farm work is being left in the hand of the Igbira, Igala, Igara from Kogi and the Igbomina Cocoa farmers from Kwara States.

Young one are sent to schools and are not ready to inherit or take farming as a profession.

Farm renting and sub –letting for some period of time (yearly or every two years) especially cocoa, palm oil etc., are more pronounced while indigenous Ekiti men and women get into politics, contracts, and marketing of both agricultural and manufactured produce.

The Federal government has wadded into farming by financing farmers through Fadama Agriculture. The unit provides financial aids for yam farmers in the state. Because of the nature of Ekiti state land/ vegetation it is very expensive to mechanize farming as it is been done in the northern part of Nigeria. Big trees, hills and valleys are factors that do not allow large expansion of farm acres for which agricultural produce could be planted.

Plows and caterpillars are very costly to maintain as they get spoiled often because of rocks, valleys, rivers, and hard trees they needed to crush or river before planting.

Roads to farms are generally bad; hence head load and motorbike are used to bring produce to a more motor able area where they could be transported to the market. Despite the fact that yam is being produce in Ekiti State, wholesalers still bring Abuja yam and sell in the state during the year.

Agricultural produce prices fluctuate during and after harvest seasons. The law of demand and supply – market forces is always a determining factor for prices to be paid on any of the produce in the state.

Human behaviours or human factors such as driver's error, overloading, non adherence to road signs and regulations, traffic officials, non or improper use of vehicle light, alcohol and impatience among others, neglect of broken down vehicles on the road that are not

removed causes crashes in daylight and more devastating at night. The road is not safe because of the frequent attack by armed bandits.

Purchases of second hand (Tokunbo) tyres also cause crashes which brings the issue of vehicle control into serious credibility.

Governmental factors, neglect of bad roads and badly executed road projects which are approved by public servant/supervisory Civil Engineer as perfectly done and payment made for the bad and unsatisfactory job. Bad and narrow roads without marks or lanes are also reasons why crashes occur. There are several instances where drivers try to avoid potholes (death traps) only to collide at high speed with oncoming vehicles.

Lack of appropriate training for commercial drivers. In the time past, commercial drivers received lengthy training periods before they could be allowed to drive commercial vehicles. A lot was learnt during that period such as boldness, road signs, minor vehicle repairs and signs of vehicle problems. Today, many commercial drivers are not properly trained.

In Ekiti State, Vehicle Inspection Office and Officers (VIO) under the State Ministry of Works has no testing grand where drivers could be properly tested. Driving test is left in the hand of private driving schools that are business oriented, who could be influenced to certify any one as qualified for driving after payment of the

appropriate fees for the certificate of confirmation that the student is qualified to be issued with drivers license.

Anti social activities i.e. drunkenness, smoking and use of dangerous drugs are very common among the commercial drivers in Ekiti State and Nigeria in general. Most of their negative behaviors are engineered by the effects of the alcohol intake, smoke or drug on them.

In Ekiti State, there is no standard warehouse for agricultural produce like cocoa. Yam and cassava are either left inside the hips or ground till they are harvested, or when they are purchased by buyers who buys them on the ground in the farm and employ laborers to bring them out for further transportation to where it will be sold.

5.2 RECOMMENDATIONS

In the background specified and for the benefit of achieving greater reduction in road traffic crashes during marketing and distribution of agricultural produce in Ekiti State and in Nigeria in general, it would be most appropriate to offer the following suggestions and recommendations for consideration by the policy making body on road safety, and for the implementation and utilization of same to guide Nigerian drivers behavior when on the high ways.

FEDERAL, STATE AND LOCAL GOVERNMENT ROADS

There is the need for the three tiers of government to collaborate by improving and modernize all roads infrastructure; within intra and inter-state roads. There should be an established liaising office working with Federal Road Safety Corps in reporting road condition through the Safety Engineering Department (SED) of FRSC to the three tiers of government and the Nigeria public.

Monthly journals on road conditions be introduced along with Road Maps, which should be made available for public consumption at reasonable price.

Where it is glaring that a section of the road is causing more crashes and affecting all road users, there should be an established road policy and agreement that will compel the negligent arm of

government to urgently make that section of the road a priority by making a supplementary budget or special allocation for immediate repairs.

Effective monitoring and evaluation on the road contracted out by the government needs to be improved upon to ensure that they are done up to the required specification.

Overloading of vehicles with agricultural produce is common and this often leads to tyre bust and loss of produce on transit.

LAW ENFORCEMENT AGENTS

Both the government and Non Governmental Organizations (NGOs) have a goal of cutting/reducing the crash rate so as to enable us meet with Decade of Action for Road Safety 2011-2020 in Nigeria.

With the improvement in the salary structure of all military and paramilitary agents, government should be more serious with bribe takers on the highway as transporters do not see anything wrong by overloading their vehicles; despite several crashes as a result of same - having known that they can always bribe their ways at every check points.

VEHICULAR TRACKING DEVISE

With the advanced Information Communication Technology and Networking, there is need for Federal Government to go into vehicles monitoring through tracking by collaborating with private sectors to

ensure speed control and monitoring, while overloading can equally be checked through same.

ESTABLISHMENT OF PRODUCE MARKET AT LOCAL GOVERNMENT AREAS

There is the need for the establishment of standardized produce market in every local government capital towns were buyers and sellers will meet to trade.

The state government should be interested in this market and make available time tables for each market days for public consumption and follow –up so as to boost the commercial sector in the state.

DRIVERS

The educational level of potential drivers must be raised to West African School Certificate or Senior School Certificate Examination (SSCE) with minimum of four credits including English language. For old drivers, who are not literate enough, adult education program needed to be drawn and should be organized with National Association of Road Transport owners (NARTO), National Union of Petroleum, Energy and Natural Gas (NUPENG), etc., at their union offices, garages and even motor parks regularly.

GOVERNMENTAL POLICY ON ROAD TRANSPORTATION AND ANNUAL BUDGET

The government recognized that investment in transport is crucial in achieving the goal of becoming one of the world's top 20 economies by 2020. She has drastically increased its own investment in transportation business.

In 2008, government embarked on N94.3 billion for transport, over seven times greater than the allocation for 2007. In 2010 budget, emphasizes was equally placed on improved transportation by improving the infrastructures.

However, there is the need to open-up more roads leading to farm centers of agricultural produce in Ekiti State to fasten their movement from the farm to the consumers, and also reduce damages/ losses. This should be back – up with relevant legislations and policies by all tiers of government.

GOVERNMENTAL FINACIAL AIDS TO FARMERS

Government at all levels should assist farmers financially through loans or by providing equipment and tractors to weed and cultivate farms so as to increase output and profit.

Co – operative movement on different produce be introduced, while factories for the production of consumable and beverages should be introduce. Advance methods for preserving agricultural produce be

researched into, to elongate the life span of these produce so as to reduce losses during bumper harvest. Etc.

5.3 CONCLUSION

Efficacy of road traffic crashes on marketing and distribution of agricultural produce in Ekiti State is not much different from other part of Nigeria except for the road network, produce differences and market location.

Effect of road traffic crashes on agricultural produce is equally the same as human factors that affect produce and other marketable products ie. Either semi-manufacture, or manufactured products as this phenomenon has come to stay, since road traffic crashes can never be eradicated but it can be minimized.

It is not also common to have injury free crashes on man, vehicle nor road structure unaffected. Instances of crashes of vehicles transporting agricultural produce has led to serious economic, financial, and road structure damages.

Some of these losses have devastating effect on the state budget and on National Development Plans as a whole. The joint effect of crashes from the farmer to the transporters, buyers and sellers with other stakeholders on the marketing field cannot be over emphasized.

It is obvious that the demand for agricultural produce from Ekiti State comes from all over the 36 State and Abuja the Federal Capital

Territory of Nigeria. The increasing demand of these produce is an indication that the economic base of farmers in the state are improving. The increasing population growth rate as a result of Federal Institutions and Universities established, plus increasing commercial transactions that attracts effective transportation services, desires for quick turnover and returns on investments, the competitive nature of man, needs for improved living standards through economic, social and political development has been noticeable reasons for road traffic crashes that led to losses of marketable agricultural produce in Ekiti State.

The need for road users to be more patient, careful, and quell for quick return on investment should hence not be done at the expense of stakeholder of agricultural produce.

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APPENDICE I

QUESTIONNAIRE

The under listed questions are desired specifically to meet up with a research project focused on agricultural produce in Ekiti state.

You are to please answer every question correctly to the best of your knowledge. Do not write your name nor give any information apart from those required on the questionnaire.

Thanks for your cooperation.

Tick as appropriate please:-

1. Are you a farmer? Yes ☐ No ☐
2. Do you have interest in farming? Yes ☐ No ☐
3. What product do you plant?

Cocoa	Palm oil	Plaintain	Cassava	Orange	Yam
☐	☐	☐	☐	☐	☐

4. Which town and local government is your farm located?

LOCAL GOVERNMENT AREA	TOWN	
1. ☐ Ekiti west aramoko	☐	
2. ☐ Efon alaye	☐	efon
3. ☐ Ekiti east	☐	omuo
4. ☐ Ekiti south	☐	ijero
5. ☐ Ekiti s/ west	☐	ilawe

6. Emure ---------- emure

7. Ekiti central ---------- ado-ekiti

8. Gboyin ---------- ode

9. Ikere ---------- ikere

10. Ido osi ---------- ido

11. Ikole ---------- ikole

12. Ileje meje ---------- iye

13. Ise -------- ---------- ise/orun

14. Irepodun/irepodun ----------igede

15. Oye ---------- oye

16. Moba ---------- otun

5. How often do you plant the product?

a. Regularly b. Not regularly

6. How do you package the product?

Tin plastic sack pallet

7. What other means of packaging do you use apart from the above mentioned? ……..

8. Where do you store the product before it is removed into a vehicle?

a. Hired warehouse b. Home store c. Direct from farm

9. Where is your market located?

a. Home/Local b. within Nigeria c. outside Nigeria

10. How long does it takes for your produce to get to the final consumer?

a. Within a week b. Two weeks and above c. One month and above

11. What means of transport do you use to get your produce to your targeted market/ customer?

a. Road b. Rail c. Air

12. If by road, have you ever lost your product on transit?

Yes No

13. What was the reason for the lost?

a. Motor accident b Theft c product damage

14. Have you ever experience selling below your excepted price as a result of:

A. Increase harvest B. rejection for low quality C. supply below specification

15. What means of transport is most efficient for the distribution of your produce in your town or local government?

a. Bus b. Lorry c. Truck d. Motor bike

16. Do you have your own vehicle for transporting your product?

Yes No

17. Do you produce for local consumption only? Yes No

18. How much do you realize per annum/ year?

₦10000- ₦20000 ₦21000- ₦50000 ₦50000 and above

19. Where do you sell these produce?

Produce	Neighbor traders buy from farm	Local market in Nigeria	Secondary market outside Nigeria	Farmers association	Do not sell
Plantain					
Cocoa					
Cassava					
Yam					
Palm oil					

20. Marketing problems/ constraints

Produce	Problem
Plantain	
Cocoa	
Cassava	
Yam	
Palm oil	

21. How frequent do you take the produce for sale?

Produce	Market location (Town/ LGA)	Daily	Weekly	seasonal
Plantain				
Cocoa				
Cassava				
Yam				
Palm oil				