

**ANALYSIS OF MARKETING OF ABSORBENT COTTON  
PRODUCTS IN KADUNA METROPOLIS**

**BY**

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## **DECLARATION**

I declare that the work in this thesis entitled “Analysis of Marketing of Absorbent Cotton Products in Kaduna Metropolis” has been performed by me in the Department of Agricultural Economics and Rural Sociology under the supervision of Prof. J. O. Olukosi and Dr. S. A. Sanni. The information derived from the literature has been duly acknowledged in the text and a list of references provided. No part of this Thesis was previously presented for another Degree or Diploma at any University.

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**Sanusi, Abiodun Mas’ud**

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**Date**

## CERTIFICATION

This thesis entitled “Analysis of Marketing of Absorbent Cotton Products in Kaduna Metropolis” by Sanusi, Abiodun Mas’ud meets the regulations governing the award of the Degree of Master of Science (Agricultural Economics) of Ahmadu Bello University, Zaria and is approved for its contribution to scientific knowledge and literary presentation.

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## **DEDICATION**

With gratitude to ALMIGHTY GOD, this thesis is dedicated to the blessed memory of my late wife Hajara Mas'ud Sanusi. May her soul continue to rest in peace.

## **ACKNOWLEDGEMENTS**

Glory is to Almighty Allah, the most beneficent and the merciful. My profound gratitude and heartfelt thanks go to my major supervisor, Professor J.O Olukosi. His constructive and invaluable contributions in terms of advice, comments and corrections of various versions of the production of this thesis made me remain focused. No word in English Language can adequately express the depth of my appreciation to him.

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I cannot take for granted, the patience, support and understanding exhibited by my wife and son (Chinomso and Bolaji). Thank you for your co-operation.

To my parents (Alhaji and Alhaja G. O Sanusi), I say thank you for your understanding and co-operation throughout the period of my post-graduate programme.

Almighty God, I give thanks to you, for making this possible. You give me good health, strength and strong determination; I will forever appreciate and be grateful to you. All glory and praises belong to Allah.

## **ABSTRACT**

This thesis titled “Analysis of Marketing of Absorbent Cotton Products in Kaduna Metropolis” reports a survey conducted to identify various absorbent cotton products available in Kaduna metropolis, the marketing participants involved and the channels of distribution of the products. Other objectives of this study were to determine the marketing margin of the products, the dependence of product availability on consumer location and the efficiency of the distribution system.

Exploitation of cotton farmers by the organized textile mills has been identified as one of the limiting factors affecting the development of cotton industry in Nigeria. Thus, certain groups in the industry clamored for government to adopt measures to encourage export of raw cotton-lint from Nigeria as a way of preventing such exploitation. However, exportation of raw cottonlint seems counter productive and detrimental to the development of the industry as the country is yet to attain the requirement for domestic utilization of cotton-lint.

The Federal government has made several efforts to increase cotton production with the mindset of developing and sustaining textile industries. Less emphasis has been placed on the other uses of cotton lint such as for manufacture of cotton products that are commonly used for personal hygiene and in hospitals for dressing. It is common knowledge that not all consumers have equal access to the products, this could be due to their locations and spread hence, the way and manner by which these products reach the final consumer is of outmost importance.

The survey was conducted to provide basic knowledge that will lead to appreciation of other uses of cotton lint with a view to add to information on marketing of cotton which will promote cotton production in Nigeria.

Data used for this study were gathered through the administration of a set of questionnaires to three distributors, thirteen wholesalers, thirty-three retailers and 126 consumers of the products identified. Furthermore, data generated were analyzed using descriptive statistics to identify the absorbent cotton products, the marketing participants and the channel of distribution of the products. Chi-square test was used to determine the dependence of product availability on consumer locations. In addition,

index number was used to determine the marketing margin and the efficiency of the distribution systems.

The study revealed that there are five different types of absorbent cotton products existing in the study area namely, cotton bud, absorbent cotton wool, sanitary pad, diaper and cotton ball. It also revealed that there are various brands of these products in the market.

The participants involved in the marketing of these products are the producers, distributors, wholesalers, importers, dealers, retailers and consumers.

The study also revealed that absorbent cotton wool and sanitary pad producers get the highest share of consumers' expenditure. Various distribution channels employed in moving each of the products to the consumers were identified and described.

Market structure analysis revealed that absorbent cotton products have differentiated oligopolistic structure. Distribution system efficiency analysis indicated that Sanitary pad has the most efficient distribution system.

The study also revealed that the availability of the products to the consumers in their various locations is dependent on the distribution system employed.

Four major problems confronting the marketing of absorbent cotton products were identified. These are; delay in getting products, increase in prices, insufficient working capital and lack of credit. Based on the marketing problems identified the study made recommendations that could enhance the marketing system of absorbent cotton products.

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## CHAPTER ONE

### INTRODUCTION

#### 1.0 Background of the Study

Cotton is grown all over the world in sub-tropical and tropical climates. Kelvin and Jung-iu (2002) estimated that around one billion people in developing countries are directly or indirectly involved in cotton production and marketing. Cotton production in Nigeria has a relatively long history, starting as far back as the pre-colonial era. This was associated with village spinning and weaving (Idem, 1999).

However, cotton industry includes all the activities and organizations involved in the cotton business, which covers the cultivation, marketing, processing and utilization of cotton as well as research and extension activities (Idem, 1999). Nonetheless, cotton touches the daily lives of people across the globe in apparel, household textiles, animal feeds, specialty paper, insulation and packaging, medical and personal hygiene products.

Cotton is a vital raw material not only for textile mills but also for hospital dressing and personal hygiene producers, oil mills, specialty paper mills, insulation and packaging companies, and feed mills among others. The wettability and absorbent qualities of cotton make it amenable for the manufacturing of cotton products that are commonly used for hospital dressing and personal hygiene. Furthermore, the introduction of “absorbent” cotton products into Nigerian markets is generally believed to have been borne out of the perceived needs of the consumers. Prior to the advent of these products in the market, feathers were used to clean the inner parts of the ears, while cloths were folded as sanitary material for women and babies. In the same vein, leaves were used in dressing wounds.

However, the acceptance of these products by the consumers has shown that the importance and uses of cotton cannot be over emphasized, hence the need to study the marketing of these products.

## 1.1 **PROBLEM STATEMENT**

Despite the fact that Nigeria has good climatic and soil conditions for cotton production, the production of cotton in the country is much below domestic requirement (Idem, 1999). Ironically, certain groups in cotton industry clamored for government to adopt measures to encourage export of cotton from Nigeria as the “second window” for cotton sales in order to prevent exploitation of cotton farmers by organized textile mills.

Nonetheless, the efforts being made to increase cotton production have been basically focused on the development and survival of textile industries with less emphasis on other use of cotton. However, considering the size and population of the country estimated at about 120 million (FOS, 2003), and the fact that the use of absorbent cotton products has no age, religious, cultural, and occupational barriers, absorbent cotton products have high market potential. Hence there is the need for a holistic approach to solving the problem of cotton production and utilization.

In any market economy, consumers’ satisfaction are said to be of ultimate importance to producers. The first yardstick of ensuring consumers’ satisfaction is making available what they are willing to pay for in the market place (Olukosi and Isitor, 1990). Absorbent cotton products like other products (either industrial or agricultural) must satisfy the needs of consumers to earn its position in the market place.

However, various strategies are employed to influence and satisfy the consumers’ needs. These include producing quality products, reasonable and attractive prices, adequate product awareness through advertisement, sales

promotion and most importantly providing the products to the consumers where, when and how they want it.

It is common knowledge that not all consumers have equal access to the products, probably due to their locations and spread. Therefore covering such consumers has been a major challenge in the distribution of the products, which sometimes manifest in other associated problems such as over pricing of the products.

In view of the above, this study attempted to examine the marketing of absorbent cotton products in the study area. The following questions were addressed:

- what absorbent cotton products are available in the study area?
- who are the market participants involved in the marketing of the products?
- what are the marketing channels in the distribution of the products?
- how product availability at consumer location depend on the distribution systems?
- how efficient are the distribution systems?
- what are the constraints to the marketing systems?

## 1.2 **Objective of the Study**

The broad objective of the study is analyzing the distribution system of absorbent cotton products in Kaduna metropolis.

The specific objectives are to:

- i. identify the absorbent cotton products in the study area;
- ii. identify the marketing participants involved in the marketing system;
- iii. describe the channels of distribution of the products;
- iv. estimate the marketing margin of the products;
- v. determine the dependence of product availability on consumer locations ;
- vi. evaluate the efficiency of the distribution system;
- vii. identify the constraints of the marketing system.

### 1.3 **Justification**

Many studies have been carried out on cotton. The focus of most of these studies centered around production and marketing. More so, cotton is often regarded as foreign exchange earner and a vital raw material for textile and oil mills.

Besides, many have clamored for the government to adopt measures to encourage export of cotton from Nigeria as the “second window” for sales of cotton.

Surprisingly, very few studies have been conducted on value addition of cotton products other than textiles with a view to enhance foreign exchange earning capacity, diversify the country’s export base and creating more employment opportunities.

Bearing this in mind, it is expected that this study will provide basic knowledge that will lead to appreciation of other uses of cotton lint. It will add to information on marketing of cotton which will promote cotton production in Nigeria.



## CHAPTER TWO

### LITERATURE REVIEW

#### 2.1 Cotton Production

Production of cotton in Nigeria was traditionally aimed at overseas market, which required lint of relatively short staple that is about one inch in length (Foster, 1966). According to Foster (1966), Jones (1968) and Idem (1999), commercial production of cotton in Nigeria was pioneered by the British Cotton Growing Association (BCGA) about 1903 but presently known as Cotton and Agricultural Processor Limited. However, the first recorded commercial production was in 1939/40 when 47,270 bales were produced and exported. The year 1969/70 saw Nigeria reaching most significant efforts made in cotton production (ACE, 2003; Bello, 2004)

Foster (1966), identified Bauchi as most promising area in the Eastern cotton zone where longer staple cotton could be achieved at full capacity even without irrigation system. He stressed further that strict supervision would be essential if 10,000 acres expected to satisfy the needs of the industry were to be cultivated. He added that longer staple cotton could also be grown in south-west of Lake-Chad (i.e. Yobe and Ekezi Rivers) and North-west of Sokoto province under irrigation system.

According to Idem (1999), cotton production started from the South West zone of Nigeria but commercial cotton production in the last fifty years is carried out in two major zones in the Northern states of Nigeria; Northern cotton zone which is made up of the present North West zone comprising Kaduna, Kebbi, Sokoto, Zamfara, Katsina and Kano states. The North West zone produces about 60 percent of total cotton production, while about 35 percent of the total production comes from the Eastern cotton zone which is the North East zone of Nigeria comprising Borno, Adamawa, Gombe, Yobe, Bauchi and Jigawa states. The remaining 5 percent comes from the Southern cotton zone which is designated

as central zone comprising Niger, Kwara, Kogi, Nasarawa, Taraba, Plateau and Benue states.

Both the Northern and Eastern cotton zones produce short to medium staple length cotton while the central zone produce long and extra-long staple cotton because of the longer duration of rainfall.

Jones (1968), as a follow-up to Foster's study posited that a viable cotton estate in Nigeria is not a practical possibility as its profitability would be doubtful. This position was in consonance with the assessment of A.D Little Incorporation in 1967.

Contient Francheur Diffussion Technique (CFDT 1982) essentially aimed its study at the cotton farmers and how they could improve the production. It's report revealed that improved technologies did not penetrate into the country side while the existing improved practices recommended constituted only half measure. The report further stated that research staff should be increased and the activities of the farmers should be subordinated to well-packaged extension services.

## **2.2 Cotton Development Programme**

Despite the lack of reliable current data, available evidences point to the fact that Nigerian agricultural sector has performed unsatisfactorily as per its historical role of supplying adequate raw materials to support a growing industrial sector. The consequence of the unsatisfactory performance of the agricultural sector in this respect has not only been the retardation of industrial development in Nigeria but also the loss of the potential boost to agricultural development which a well-linked industrial sector should offer.

The Nigerian cotton sector has suffered major disorganization since the dissolution of the Cotton Marketing Board (CMB) in 1986. The deterioration has not only resulted in significant reduction in output, but has also caused a major fall in quality. The decline in quality has aggravated to the extent that Nigerian

cotton has been declared in 2001/2002 as “contaminated”. This implies that it does not meet any international standard hence it can not be traded in international market.

The world of international trade involves a great deal of money and goods changing hands everyday. The high value of the commodity, coupled with the fact that people may be dealing with parties and goods that are thousands of kilometers apart, magnify the risk inherent in such transactions. The risk can be reduced to a large extent if the commodity is inspected and certified for quality and quantity.

Quality control is the consistent maintenance of specified product characteristics every time it is produced or purchased (Bello, 2004). Where quality control system exists (be it a farm or a company), the system could be coordinated using the Total Quality Control (TQC) approach which includes prevention, planning and monitoring. However, quality control and grading of cottonlint for export is the responsibility of Federal Produce Department of the Federal Ministry of Commerce.

Concerned about the decline in quantity and quality, the Federal Government of Nigeria (FGN) with the collaboration of a number of cotton producing states, and concerned private sector established a Cotton Consultative Committee (CCC) in 1994, and a Cotton Revolving Fund Scheme to rehabilitate the seed production system.

In response to concerns expressed by International Cotton Advisory Council (ICAC), on the quality of Nigerian Cotton, the Federal Ministry of Commerce (FMC), commissioned in 1999, a study to provide recommendations for the improvement in the performance of the cotton sector.

The report of the study was submitted in June 2000 but no progress was made on implementation of the recommendations until March 2002. National Committee on Cotton Improvement (NCCI) was inaugurated and charged with the responsibilities of implementation of measures to rehabilitate the cotton sector. Rehabilitation measures of the cotton sector involve re-establishing an

orderly process for the production, processing, marketing, and trading of cotton to ensure the production of high quality cotton.

Research on cotton is primarily the responsibility of the Institute for Agricultural Research (IAR), Ahmadu Bello University, Samaru-Zaria. Its Cotton and Fibre Crop Development Programme handles development of packages of recommendations for use by cotton farmers. The main components of the packages include improved varieties, time of planting, plant density, fertilizer recommendation and crop protection.

### **2.3 Cotton in the Nigerian Farming System**

Majority of farmers involved in cotton production in Nigeria are small holders. They produce many crops of interest to them. This category of farmers cultivate between 0.3 to 2 hectares of farmland, intercropped with food crops like maize, sorghum, millet and cowpea (Idem, 1999). However, many of the cotton merchants are large scale growers, they grow sole crop cotton and even sponsor some small-scale farmers in cotton production alongside their farms under the out growers or contract grower scheme.

Recent studies, in the North West zone have revealed the increase in number of large-scale cotton farmers. Most of them are cotton merchants. The studies have equally shown that the large scale cotton farmers adopted improved production technologies thus, recorded higher yields per hectare. Most of them obtain average yield of one tonne per hectare as compared to the small holders who use traditional method of cultivation and realize yields between 0.4 to 0.5 tonne per hectare.

The experience with contract growers or out growers schemes has been very discouraging as the farmers do not keep to the terms of agreement. Normally, the sponsor agrees with a contract grower on the inputs and the price of the seedcotton at harvest. Some contract growers get higher prices at the time of harvest and sell the seedcotton out to other buyers thus dishonouring their commitment to the sponsor.

Others make false declaration on the yield, thereby selling part of the yield to other buyers at higher prices. These have been common practices among the contract growers and out growers hence eroding the confidence of the sponsors in the scheme.

#### **2.4 Role of cotton in the development of the Nigerian economy**

The importance of any commodity to the nation depends on its usefulness to the development and growth of the economy. Prior to the discovery of petroleum in large quantities in Nigeria, agriculture contributed over half of the Gross Domestic Product (GDP) (Joshua, 1991). Cotton contributed substantially to the agricultural share of the GDP, (Idem, 1999). Over 70% of Nigerian population is engaged in agriculture. It was also estimated that about 0.8 million farmers grow cotton on a total estimated farmland of between 700,000 and 800,000 hectares (Olukosi and Isitor, 1990, Idem, 1999). As at 1982, textile mills estimated to have in its employment about 100,000 workers, this is apart from other employment opportunities created by industries such as tailoring, hospital dressing producers, oil mills, specialty paper mills, insulation and packaging companies, feed mills etc. which use cotton as primary raw materials.

Today the world uses more cotton than any other fibre. Its importance can be realised from the time we dry our faces using soft cotton towel in the morning through to the time we retire on fresh cotton sheet at night. All parts of cotton plants are useful. The most important is the fibre or lint which is used in making fabrics, absorbent and industrial products. Linters, the short fuzz on the seed provides cellulose for making plastics and explosives. Linters are also incorporated into high quality paper products and equally processed into batting for padding mattresses, furniture and automobile cushions.

Cottonseed is crushed in order to separate its products that are oil, meals and hulls. The oil is used primarily as cooking oil, salad dressing, medicine and fuel

for lamp. The meals and hulls are used either separately or together as livestock feed.

According to Federal Department of Agriculture (FDA,1994) and Idem, (1999) the importance of cotton as a cash crop, based on its utilitarian functions most especially its foreign exchange earning capacity in Nigerian export trade pre – 1970s, cannot be over-emphasized.

FDA (1994) further reported the concerted efforts financed by both public and private sector to promote cotton production on commercial basis. Of particular mention includes: the establishment of Regional Commodity Marketing Boards (RCMBs) which metamorphosed into individual crop based commodity boards of which the Nigerian Cotton Board was one; the formation of Cotton Consultative Committee (CCC), and the creation of Cotton Revolving Fund Scheme.

## 2.5 **Cotton marketing**

One of the functions of marketing system is the transmission of price and other information to producers so as to guide them in the proper allocation of scarce farm resources. The price of seed cotton and other factors that affect the marketing of cotton are very important determinant in the supply of cotton. Certainly, any step that improves the marketing system for cotton would undoubtedly lead to increase in production. According to Idem, (1999) Nigerian Cotton Board (NCB) started operation in 1954/55 season. It had the exclusive right to purchase all cotton for export and local uses. The board provided the overall coordination for financing, procurement, processing and shipping of seedcotton, cotton lint and cotton seed. In other words, the structure of the cotton market was a regulated monopsony under NCB before it was abolished in 1986.

Olukosi and Isitor (1990); Amin (1993) and Idem (1999) described cotton marketing as a structure assuming pure competition after the abolition of all the commodity boards in 1986. However private cotton merchants made up of

individuals and corporate bodies successfully took over most of the functions of defunct NCB. In addition, cotton production substantially increased by about 400% in the space of three years as a result of better producers' price (Amin,1993).

Paul (1999) described cotton merchants as a necessary link between the cotton growers and the spinning mills. He added that forecasting cotton price involves taking into account all known factors and adjusting one mental picture everyday for new development advanced as a way of surviving and having competitive hedge in the business.

Audit Control and Expertise (ACE, 2003) further described merchants as a very important party in the cotton industry as their role is particularly recognized and appreciated by the numerous new and upcoming ginneries who still lack an efficient seed cotton procurement system at the farmer's level. The merchants also reduce the operational loan requirement of ginners by way of using their own buying centre storage, engaging in some primary processing such as sorting and packaging of seed cotton, and transportation. The provision of seed cotton purchase credit facilities to the merchants therefore constitutes an important component of the cotton revival program.

## **2.6 Financing Cotton Merchants and Ginners**

Inadequate working capital continue to restrict the ability of most cotton merchants and ginners to purchase seed cotton. The timely availability of finance is vital to enable them purchase seed cotton at favourable prices and also minimize the possible procurement of seed cotton of deteriorated quality. Marketing loan enables buyers to promptly pay producers thereby enhancing their incentives for increased production.

The cotton merchants and ginners need adequate working capital to purchase and gin seed cotton in order to meet sale contract in terms of time, quality and quantity of the lint. Fixed assets such as land, houses, machinery and

equipment usually demanded as security by banks are assumed not suitable for this type of short-term credit. Thus, the report of the study commissioned in 1999 by Federal Ministry of Commerce (FMC) proposed a structured trade financing system, which will permit the use of commodity financed as collateral.

This type of credit facility will control and monitor the transactions from the time seed cotton reaches the ginnery until it is released by the financier for sale. The supervised structured trade credit arrangement with commodity based self – liquidating collateral assumed, will provide comfort to banks in extending commodity linked credit to the ginner and cotton merchants.

## **2.7 Agricultural Industries**

Agro-industries, as described by World Bank (1992), covers processing of agricultural produce such as grain milling, fruit and vegetable canning, oil-seed crushing, meat packing, as well as the function of storage and marketing.

Processing industries involve in changing the physical form of commodities. It adds value to the products and offers a chance of improving the qualities.

When a producer processes agricultural products, the non-consumable parts are removed and the edible parts are retained thus enhancing the convenience and ease with which the product is made available to the consumer.

According to Austin (1992), agro-industries are the enterprises that process materials of plant or animal origin. The nature of processing and the level of transformation can vary tremendously, ranging from cleaning, sorting, grading, to chemical alteration.

These processes form important components of agricultural marketing due to the utility of transformation it adds to the raw agricultural produce, making the products more acceptable to the consumer (Aboki, 2000). Over half of the manufacturing activities in the developing nations of the world consist of agro-industries (Brown et al, 1994).



Olayide and Heady (1982) stated that agro industries play a significant role in the economy of developing countries, as it accounts for between 51 percent and 70 percent of the total industrial development.

Agro-industries play important roles in disseminating agricultural production techniques that increase farmers' productivity, stimulating both consumer demand and backward demand to the farm sector to keep pace with demand for raw material, hence boosting the income of small holder farmers.

According to Erinoshio and Bello-Imam (1991) most of the food processing and marketing companies in developing countries are owned and operated by small individual entrepreneur.

## **2.8 Marketing Channel**

Goods are designed for consumable exchange. This takes place when the goods are physically moved from production premises into the outlets for onward transmission to various consumers. The outlets consist of functional middlemen and agents. Hence, the path through which a product moves from the producers to the final consumers is referred to as the marketing channel (Olukosi and Isitor, 1990).

Marketing channels are important in evaluating marketing system as it indicates how the various market participants are organised to accomplish the movement of a product from the producer to the final consumer. It also facilitates the distribution of products at lower cost per unit than the producer could. Thus the activities of market participants enhance the buying needs of the consumer.

However, the number of exchange involved in the selling of a product is determined by the number of market participants in a particular channel hence the succession of markets through which products pass until they reach the consumer is referred to as marketing chain. This could be long or short. A long marketing chain implies that the commodity changes hands many times before reaching the consumer thus the longer the chain, the higher the price that the

consumer will have to pay. Furthermore, the length of the chain could depend on the nature of the product and how far the consumers are from the producers.

Umerah (2003) sees marketing channels as communicational routes. He posited that information descends the chain from the producer to the middlemen and finally to the consumers and vice versa. He stressed that the longer the chain, and the more middlemen involved, the greater the information distortion. The communicational route concept is the basis on which promotional campaigns, advertisement etc are usually embarked upon in order to generate adequate information about a product or service.

The participants involved in the marketing channel of seedcotton are cotton merchants who employ the services of buying agents to buy seedcotton on their behalf in various cotton producing villages. The seedcotton purchased is delivered to the ginnery. Ginning is the separation of cottonseed from the lint. Both lint and seed are returned to the cotton merchant who sells to both local and foreign oil and textile mills (Olukosi and Isitor, 1990; Amin, (1993); Idem, (1999). In recent times, ginneries are involved in purchase of seedcotton, and sale of cottonseed and lint to textile and oil mills. In other words, ginneries are now involved in the functions of cotton merchants. In the same vein, some farmers are also engaged as buying agents for both cotton merchants and ginneries.

## **2.9 Market Development**

In a competitive economy, the price system influences the flow of resources into production and flow of goods and services into use. In the same vein, prices, allocation of resources, income distribution and capital formation are determined within the marketing system (Olukosi and Isitor, 1990).

According to Johnson (1990), greater marketing efficiency will not only give farmers higher prices, but also give consumers lower prices as well, thus expanding their purchasing power. Therefore marketing constitutes a bridge between production and consumption.

Increase in production of commodities, as well as development of marketing system is very important in economic development, so that marketable surplus reaches consumers efficiently. Agricultural marketing is often seen as a neglected aspect of agricultural development, as more emphasis is usually placed on increasing food production, (Shaib et al; 1997). They posited that if the marketable surplus can not be sold neither the producers nor the country will benefit, especially if the resources used are costly.

Agricultural raw materials are major sources of foreign exchange for many developing countries like Nigeria. Many agricultural products are being developed by the industrial sector. Similarly, the direct consumption of agricultural commodities is being encouraged by industrial packaging of these products. More importantly, advances in the industrial processing of certain agricultural produce, attract high prices compared to the local method of processing. A growing number of developing nations for instance, are now reducing their dependence on imported food stuffs (Jenne, 1991).

The existence of markets makes possible the existence of specialized production, as people can exchange what they can produce with what they cannot produce through the marketing process, they are encourage to gain expertise in a particular field of endeavor.

The development of biotechnology is making it possible for consumable products to be produced in the agricultural sector using industrial processes. According to Jenne (1991), the interchange-ability of different agricultural raw material will have a huge effect on the foreign exchange earnings of the countries which produce raw materials for processors that constantly look out for the cheapest raw materials. Thus producers will increasingly be played off against each other on their earnings through raw material.

### 2.9.1 Review of Approaches to Study of Marketing

Some schools of thoughts have described various approaches to studying and analyzing marketing problems.

Hill (1975), proposed and classified these approaches under three main categories. These are:

- i Problem identification approach
- ii Functional approach
- iii Performance criteria approach

The problem identification approach identifies the major problems confronting the marketing system and determines how the structure and organization of the marketing system relate to those problems and their solutions.

The performance criteria approach makes use of some criteria like efficiency, industrial stability, and ability of the marketing system to reflect consumer preferences with respect to time, form, possession, and place utilities to evaluate and compare marketing system.

However, Kohls and Uhl (1995) classified their approaches under the following categories.

- i. Functional approach
- ii. Institutional approach
- iii. Behavioral system approach

The functional approach emphasizes the various functions performed by the marketing system. These include; the exchange functions of buying and selling which lead to change of ownership. The physical function deals with the physical handling of the produce which involves storage and preservation, transportation, packaging and processing. The facilitating functions include sorting, grading, standardization, financing, risk-bearing and market intelligence. This approach emphasizes more on “what is done”.

The Institutional Approach:- This approach focuses more on “who does what in marketing system”. It is centered on the nature and character of various agencies and business organization which perform the marketing functions.

The Behavioral System Approach:- This approach views marketing as a dynamic system which involves various kinds of decision making.

It emphasizes the multi-disciplinary nature of a meaningful study of the marketing system.

Olukosi and Isitor (1990) added two more approaches to the three major categories proposed by Kohls and Uhl. These are:

- i. Commodity Approach
- ii. Market structure and performance Approach

The commodity approach concentrates on the study of the marketing of all related products such as livestock products which include milk, meat, cheese, butter e.t.c or crops such as cereal (i.e rice, maize, sorghum and millet). Given this nomenclature, one can talk about the food grain marketing system, beef marketing system or cotton marketing in Nigeria.

The market structure and performance approach emphasizes the nature of market competition and attempt to relate the variables of the market performance to the types of market structure and conduct. The structure refer to the number and relative sizes of firms as well as the degree of product differentiation and the extent of vertical integration.

Market conduct refers to the behaviour of firms with regards to pricing practices and other similar matters. However, the choice of any or a combination of the approaches is usually guided by considerations such as the nature of the problem, complexity of the marketing systems and the constraints involved (Alamu, 1996).

### 2.9.2 Market Performance

A large number of agricultural marketing studies rely on the theoretical foundation laid by the perfect competition model. Bain (1968) described market performance as the strategic end results of market adjustments engaged in by market participants. He postulated that the principal dimensions of market performance include the following:

- i The height of price relative to the average cost of production and marketing.
- ii Relative efficiency of production influenced by the size of firms.
- iii The character of product and progressiveness.
- iv Innovativeness of firms in terms of products and production techniques.

Other criteria for evaluating marketing performance, according to Alamu (1996) are minimization of waste and equitable distribution of income. However, some of these criteria are implicitly considered under the requirements of operational and pricing efficiency conditions. Although, it is difficult to measure market performance due to its subjective nature; the measurement of market performance could be modified to suit the nature of the problem, complexity of the marketing systems and the constraints involved. In other words, the criteria for evaluating market performance need to be set out clearly. Performance is believed to be generally applicable because it embraces a wider dimension than efficiency, thereby giving a better picture of the marketing system.

### 2.9.3 Measures of Efficiency in Marketing

Efficiency in the agricultural industry is the most frequently used measure of marketing performance. Nonetheless, improved marketing efficiency is a common objective of the market participants. Efficiency, however, is a borrowed term from engineering. It is measured as a ratio of output to input. For example, kilogram of farm yield (output) per man-day (input). Olukosi and Isitor (1990) defined marketing efficiency as maximization of the ratio of output to input in marketing. They described marketing input as resources used in providing

marketing services hence marketing costs are costs of providing marketing services whereas marketing output are the benefits or satisfaction created, or the value added to the commodity as it passes through the marketing system. Alamu (1996) posited that the efficiency of economic system is not as easily and precisely determined; this is largely due to the difficulties associated with measuring the marketing output. However, Olukosi and Isitor (1990) stated that the best measure of marketing output (consumer satisfaction) is the price consumers are willing to pay in the market for products with different levels of marketing utilities.

Any change which reduces the marketing cost without reducing the consumer satisfaction will certainly improve the marketing efficiency, hence, the higher the efficiency ratio, the higher is the marketing efficiency.

There are two types of marketing efficiency namely,

- i Operational efficiency.
- ii Pricing efficiency.

### **2.9.3.1 Operational Efficiency**

Operational or technical efficiency measures the productivity of performing marketing services within the firm. It focuses on the input aspect of the equation, that is, the cost of producing the relevant marketing services. It assures that the essential nature of the output remain unchanged. One often quoted productivity ratio that measures operational efficiency is output per man-hour.

### **2.9.3.2 Pricing Efficiency**

Pricing efficiency is concerned with how effectively prices reflect the marketing cost. In other words, it refers to how well prices across space, time and variety reflect expected price based on the assumptions of competitive conditions (Tomek and Robinson, 1972).

In a perfect competitive economic environment, prices will adequately reflect marketing and production costs plus a normal profit margin. If a market is

dominated by a few firms that conspire or employ strategies to maintain high prices, the situation would lead to pricing inefficiency (Olukosi and Isitor, 1990). Pricing efficiency assumes a constant physical input-output relationship. The law of market area, over space, stipulates that price spread between two markets that trade with one another should not exceed the cost of transfer of the products between the two locations. Where price differential over space is in excess of transfer cost, it represents pricing inefficiency. However, there are problems in determining the levels of transfer cost as they are not a linear function of distance (Isitor, 1992).

## **2.10 Measures of Association Between Qualitative Data**

Chi-square statistic is one of the statistical methods devised for the purpose of comparing average between or among samples of data that might be expected to differ in general level. In other words, it is a statistical method used to measure the existence of statistical association between or among samples of data.

According to Paul and Colin (2001), for nominal data, there are statistics based on the familiar Chi-square statistic, which is used for determining the presence of an association between two qualitative variables.

The rejection or acceptance of the null hypothesis by means of Chi-square, however, only establishes the existence or non-existence of a statistical association. It does not measure its strength, because it is affected by the total frequency. The use of Chi-square statistic requires that each individual studied variable contributes to the count in only one cell in the cross-tabulation. On the other hand, the calculated statistic is approximately distributed as the theoretical Chi-square distribution: the greater the expected frequencies, the better the approximation, hence the rule about minimum expected frequencies.

The expected counts represent the numbers that would be in the cells when the variables are independent of each other. The difference between the observed and the expected counts is the basis of the Chi-square statistic. It evaluates the



likelihood that the differences between the observed and expected values would occur under the null hypothesis that there is no difference between these values.

### 2.10.1 **Correlation Co-efficient**

A correlation co-efficient is a statistic devised for measuring the degree or strength of a supposed linear association between two variables, each of which has been measured on a scale with units. In the case of same object ranked independently by two opinions, ordinal data are paired. The question arises as to the extent to which the two sets of ranks agree.

This is a question about the strength of association between two variables which, although quantitative, are measured at the ordinal level.

The most familiar correlation co-efficient is the Pearson correlation. It is defined in a way that it can take values only within the range of -1 to +1.

One way of measuring the level of agreement between the two opinions is by calculating the Pearson correlation between the two sets of ranks. This correlation is known as the Spearman rank correlation. Although, it looks different from the Pearson correlation, it is actually equivalent provided that no ties are allowed. With small samples, it is difficult to obtain an accurate correlation value, especially when there are tied ranks. When ties are present, they must reduce one's confidence in the critical values given in the table.

### 2.11 **Review of Earlier Studies on Marketing system of Agricultural Commodities**

Bauer's (1963) study was one of the earlier studies on marketing conducted in Africa. He posited that there was high degree of competition in internal trade. Jones (1970) revealed in his study that market for agricultural products do not operate efficiently. He stressed that there was a large spread (margins) between prices paid by consumers and those received by producers over time and space. Gilbert (1970) reported that there were competition among wholesalers and retailers, and between wholesalers and retailers in the market of food grains. He

pointed out that there was no clear relationship between number of traders and the degree of competition. He stated further that marketing margin did not appear excessive.

Lele (1974) in her study of food grain marketing system in India concluded that the market structure was competitive with the market intermediaries receiving low margin. Her study further revealed that inter-market price differentials compared favourably with transfer cost. The study also showed that storage was not always profitable because the off-season price rise did not always cover cost.

Hays (1976) in his study in Northern Nigeria posited that market intermediaries were generally productive. In other words, marketing services were provided at reasonable costs given the technical environment and other constraints under which they operated. He observed that the organization and conduct of the markets were typical of those necessary for competitiveness in the marketing system.

He stressed that excessive price difference among urban markets did not emanate from planned manipulation under monopolistic or monopolistic conditions inherent in the system but rather due to certain characteristics of production and marketing which made response to inter-marketing price differentials difficult.

Harriss (1982) pointed out that it is possible for an equilibrium price in a market to be anywhere between a low value, making it just worthwhile to export grains; to a high value making it just worthwhile to import it. On the other hand, most market towns are neither primary exporters nor terminal importers, but located along a continuum between the two. Thus price series correlations can be lower than they ought to be but still reflect an integrated situation.

Isitor (1992) reported that marketing margin was not excessive and the farmer's share of consumer's expenditure was quite reasonable. He also reported that

temporal price analysis showed market seasonality in price movement. Similarly, price spread between the urban retail prices and the estimated parity price in the rural markets were negative.

The report of the study conducted by Abdulsalam (2005) revealed that there is high level of market integration between the supply market and the reference markets. He stated further that foreign exchange is an important variable that has significant positive relationship with prices of the traded commodities between Nigeria and Niger Republic.

## CHAPTER THREE

### METHODOLOGY

#### 3.1 The Study Area

The study was conducted in Kaduna metropolis, which is made up by two adjacent Local Government Areas; these are Kaduna North Local Government and Kaduna South Local Government Areas. The study area covers about 1640 sq km with a population of about 850,000 people (Ministry for Local Governments, Kaduna State, 2004). It lies between latitudes  $09^{\circ}$  and  $11^{\circ} 30'$  North of the equator and longitudes  $06^{\circ} 30'$  East of Greenwich Meridian.

Kaduna metropolis has about thirteen (13) market places. These include both urban regional and urban retail markets. These markets attract participants not only from within Kaduna State but also from outside the state.

#### 3.2 Sampling procedure

Kaduna metropolis was selected for the study due to the fact that it is one of the centers of marketing activities in Kaduna State. In addition, the only urban regional market in the study area is located in Kaduna North Local Government Area. Three out of five distributors of absorbent cotton products in the urban regional market were randomly selected. Similarly, thirteen out of 28 wholesalers of absorbent cotton products in the same market were equally selected randomly. Furthermore, in selecting the retailers and the consumers, fourteen wards were selected randomly out of the twenty-three constituent wards of the study area. Thirty-three retailer respondents were randomly selected out of fifty-two absorbent cotton products retailers in the entire fourteen wards. This gives a sampling percentage of 63. It is interesting to note that the retailers were not evenly distributed across the fourteen wards, thus, the number of retailer respondents selected in each of the wards were not even but, at least one retailer respondent was selected in each of the fourteen wards.

In addition, nine consumer respondents were selected from each of the fourteen wards. This brings the total number to 126 out of an estimated population of about 500,000. However, this sample size would have been made larger but for the limited resources available for the study. In all, a total of 175 respondents were drawn for the study.

### **3.3 Data Collection**

Only primary data were used for this study. The data drawn from the distributors, wholesalers and retailers were collected through observation, and the use of structured questionnaires personally administered by the researcher. In addition, the collection of data from the consumer respondents was done through the use of structured questionnaires administered by four enumerators.

Out of the 126 consumer respondents selected for the study 23 questionnaires were rejected due to exaggeration and incomplete responses.

### **3.4 Analytical Techniques**

Data generated in this study were analyzed using descriptive statistics, chi-square test and index number. Descriptive statistics such as averages, frequencies, and percentages were used to achieve objectives i, ii, iii, and vii while chi-square test for independence was used to achieve objective v. Index numbers were used as basis for achieving objectives iv and vi

Chi-square test was used to determine whether the accessibility and availability of products are independent of the distribution systems identified in objective iii. To achieve this, the locations of consumer respondents were grouped based on their estimated distance from a reference point within the only urban regional market situated in the study area, these locations were cross-tabulated with the identified distribution channels.

Furthermore, the index number used in achieving objective vi, is simply expressed as

$$D_{\text{eff}} = \frac{P_c - P_m}{T_c} \times 100$$

Where	$D_{\text{eff}}$	= Efficiency of the distribution system
	$P_c - P_m$	= Consumer satisfaction
	$P_c$	= consumers' price (Average unit price)
	$P_m$	= Producers' price (Average unit price)
	$T_c$	= Transfer cost

Marketing efficiency is defined as the maximization of the ratio of output to input in marketing, the higher the ratio, the higher is marketing efficiency (Isitor, 1992). The efficiency of economic system, according to Alamu (1996), is not as easily and precisely determined; this is largely due to the difficulties associated with measuring the output of marketing. The output of marketing is consumer satisfaction with products and services. According to Alder Consulting (2006), an average consumer is a satisfied buyer, who is liable to switch products when the need arises. Normally such consumers receive the following benefits:

- i. valuable return on cash spent,
- ii. time saving purchase
- iii. hassle free experience
- iv. customized services that specifically suit needs and want; and
- v. satisfaction

The key to creating a serviceable bond with consumer is accessibility and availability of product. The more accessible a product is, the more satisfied the consumer.

However, the output of the distribution system would be taken as the satisfaction consumers derive or the value added to the product as it moves through the distribution system. Thus, the consumer satisfaction or value added by the

distribution system could be measured as the difference between the price consumers are willing to pay for the product in their various locations and the producers' price.

The transfer cost (Tc) in this circumstance only reflects the average transportation cost of moving a unit of each of the products from the producers to the consuming area. Though, the transfer cost includes other costs such as terminal cost, which is incurred irrespective of distance covered, this is, assumed to be fixed.

Similarly, other important components of marketing cost such as processing cost, sales promotion and advertisement costs are assumed to have been built into the producers' costs whereas this study did not cover the cost of storage of the products.

However, the results obtained are the coefficients of the distribution efficiency.

Objective iv, in the same manner, was achieved using index number but in this case, the marketing margin is specified in a simple form as:

$$M_m = \frac{P_{rw} - P_c}{P_{rw}} \times 100$$

Where:  $M_m$  = Marketing margin

$P_{rw}$  = Average unit selling price of each product.

$P_c$  = Average unit cost or supply price of each product.

## CHAPTER FOUR

### RESULTS AND DISCUSSIONS

#### 4.1 Types of Absorbent Cotton Products

This section identifies the absorbent cotton products that can be found in the study area. The study reveals that five different types of absorbent cotton products exist within the study area. These are (i) cotton bud, (ii) Absorbent cotton wool, (iii) Sanitary pad (iv) Diaper (v) Cotton ball.

**Table 1: Distribution of absorbent cotton products traded by retailers and wholesalers.**

Products	Retailers		Wholesalers	
	No. of time	%	No. of time	%
Cotton bud	10	13.51	3	12.00
Absorbent cotton wool	14	18.92	7	28.00
Sanitary pad	24	32.43	7	28.00
Diaper	20	27.03	7	28.00
Cotton ball	6	8.11	1	4.00
Total	74	100	25	100

The table above shows that Sanitary pad (32.43%) and Diaper (27.03%) are mostly traded by the retailer respondents while the most popular or traded products among the wholesaler respondents are Absorbent cotton wool (28%), Sanitary pad (28%) and Diaper (28%).

The retailers and wholesalers combine these products in different forms. This is largely due to their locations, suppliers and needs of their customers.



**Table 2: Various combinations of products by the retailer respondents**

Product Combinations	No. of respondents	Percentage
C/bud +S/Pad + Diaper	4	12.12
A/Cottonwool + C/ball	3	9.09
S/Pad + Diaper	7	21.21
A/Cottonwool + S/Pad + Diaper	5	15.16
C/Bud + A/Cottonwool + S/Pad +Diaper	1	3.03
S/Bud +A/Cottonwool +S/Pad +Diaper + C/ball	2	6.06
S/pad + Diaper + C/ball	1	3.03
C/bud	3	9.09
A/Cotton wool	3	9.09
S/Pad	4	12.12
<b>Total</b>	<b>33</b>	<b>100</b>

*C/bud = Cotton bud, S/Pad = Sanitary Pad, A/Cottonwool = Absorbent Cotton wool, and C/ball = Cotton ball.*

It is obvious from the above table that the combination of sanitary pad and Diaper (21.21%) is mostly traded by the retailer respondents. This assertion corresponds with what is depicted in Table 1

**Table 3: Various combinations of products by the wholesaler respondents.**

Product combinations	No. of respondents	Percentage
C/bud +S/Pad +Diaper	2	15.39
S/Pad +Diaper	3	23.08
C/bud+ A/Cottonwool +S/Pad +Diaper	1	7.69
A/Cottonwool +S/Pad + Diaper	1	7.69
Cotton ball	1	7.69
A/Cotton wool	5	38.46
<b>Total</b>	<b>13</b>	<b>100</b>

*C/bud = cotton bud, S/Pad = Sanitary Pad, A/Cotton wool = Absorbent cotton wool.*

Absorbent cotton wool (38.46%) is the product mostly traded by the wholesaler respondents, this is however, closely followed by the combination of sanitary pad and Diaper (23.08%) as shown in Table 3. This also agrees with what is depicted in Table 1.

#### **4.2 Participants Involved In Marketing of Absorbent Cotton Products**

Marketing participants could be described as individuals or group of people or firms involved in carrying out marketing services. They are involved in producing or processing and moving the goods and services from the producers to the final consumers.

**Table 4: Participants involved in the marketing system of absorbent cotton products.**

Products	Distributors' response (%)		Wholesalers' response (%)				Retailers' response (%)		Consumers' response (%)	
	Manufacturer	Importer	Importer	Dealer	Distributor	Manufacturer	Distributor	Wholesaler	Wholesaler	Retailer
Cotton bud	n.a	n.a	33.33	33.33	33.34	-	18.18	81.82	0.00	100.00
Absorbent Cotton wool	100.00	-	-	-	75.00	25.00	66.67	33.33	28.57	71.43
Sanitary pad	100.00	-	-	-	77.78	22.22	46.15	53.85	0.00	100.00
Diaper	50.00	50.00	11.11	-	77.78	11.11	55.00	45.00	25.00	75.00
Cotton ball	n.a	-	-	-	-	100.00	50.00	50.00	9.09	90.91

n.a = not available

Table 4 indicates that the wholesaler respondents (33.33%) trading in cotton bud sourced their products from the importers, dealers and distributors in equal proportion. It also depicts that this product is imported as none of the wholesaler respondents sourced from the local manufacturers. However, majority of retailer respondents (81.82%) trading in cotton bud sourced their products from the wholesalers.

Furthermore, the table also indicates that the majority of wholesaler respondents trading in absorbent cotton wool (75%), sanitary pad (77.78%) and Diaper (77.78%), sourced these products from the distributors whereas majority of retailer respondents trading in absorbent cotton wool (66.67%) and Diaper (55%) sourced the products from the distributors while retailer respondents selling sanitary pad (53.85%) sourced their products from the wholesalers. The wholesaler respondents (100%) trading in cottonball sourced the product from the manufacturer, but the retailer respondents selling cotton ball sourced their product from the distributors and the wholesalers in equal proportions (50%) respectively. This implies that distributors are very important participants in the marketing system of absorbent cotton products in the study area.

#### 4.3 **Distribution Channels**

The evolution of marketing channel is an important development in the marketing of commodities. This channel has developed to fill the gap that existed in the supply of raw materials to industries on one hand, and the movement of finished product from the producer to the final consumer on the other hand.

A channel of distribution is simply the path through which a product moves from the producer to the final consumers. It equally shows how various market participants are organized to accomplish the movement of a product from the producer to the final consumer.

These channels can equally be used as communicational routes through which producers get feedbacks about the products from the consumer and vice versa.

The various channels of distribution for absorbent cotton products are described in the figures below:

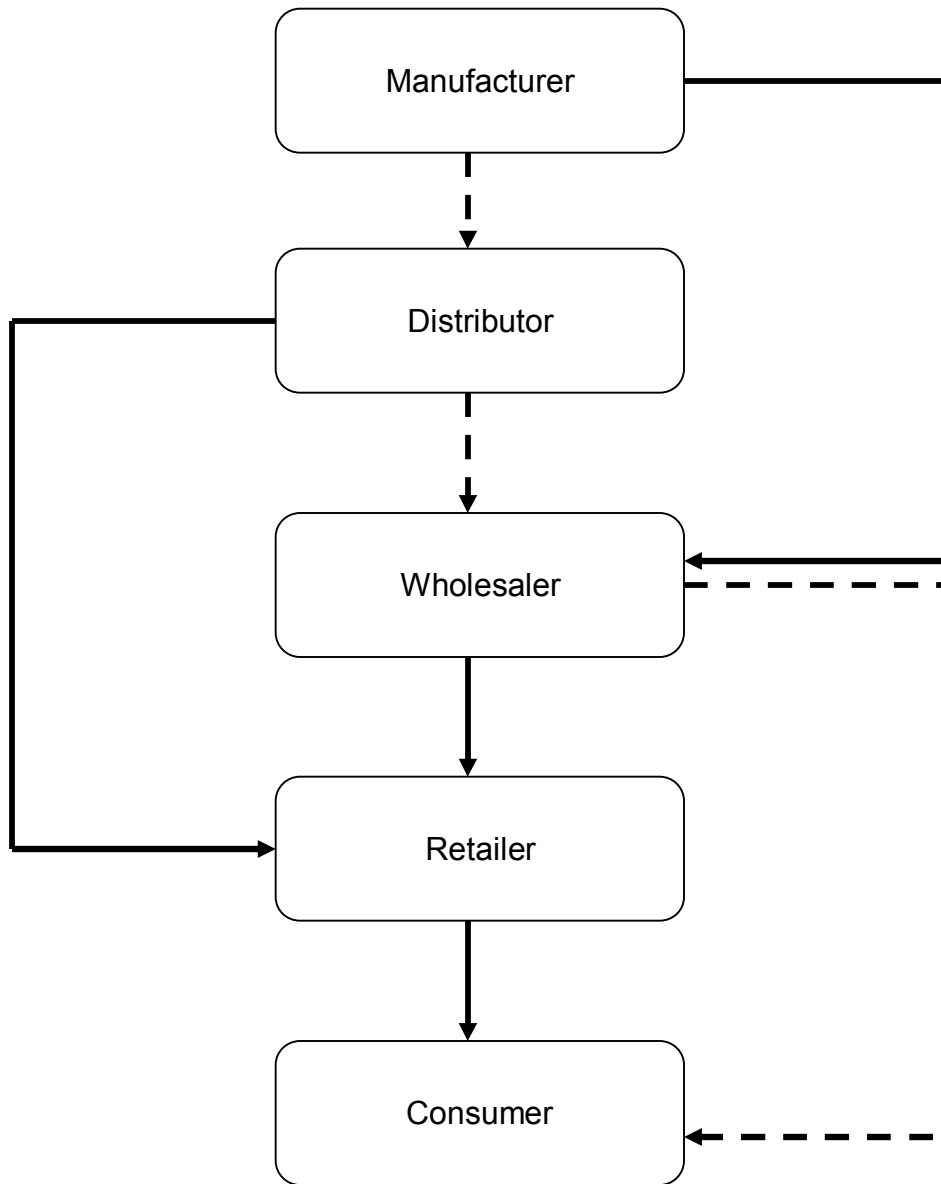


Fig 1: Channel of distribution for Cotton ball.

Note:

- > Main Channel
- .....> Less Important channel

This is applicable to figures 1 -5

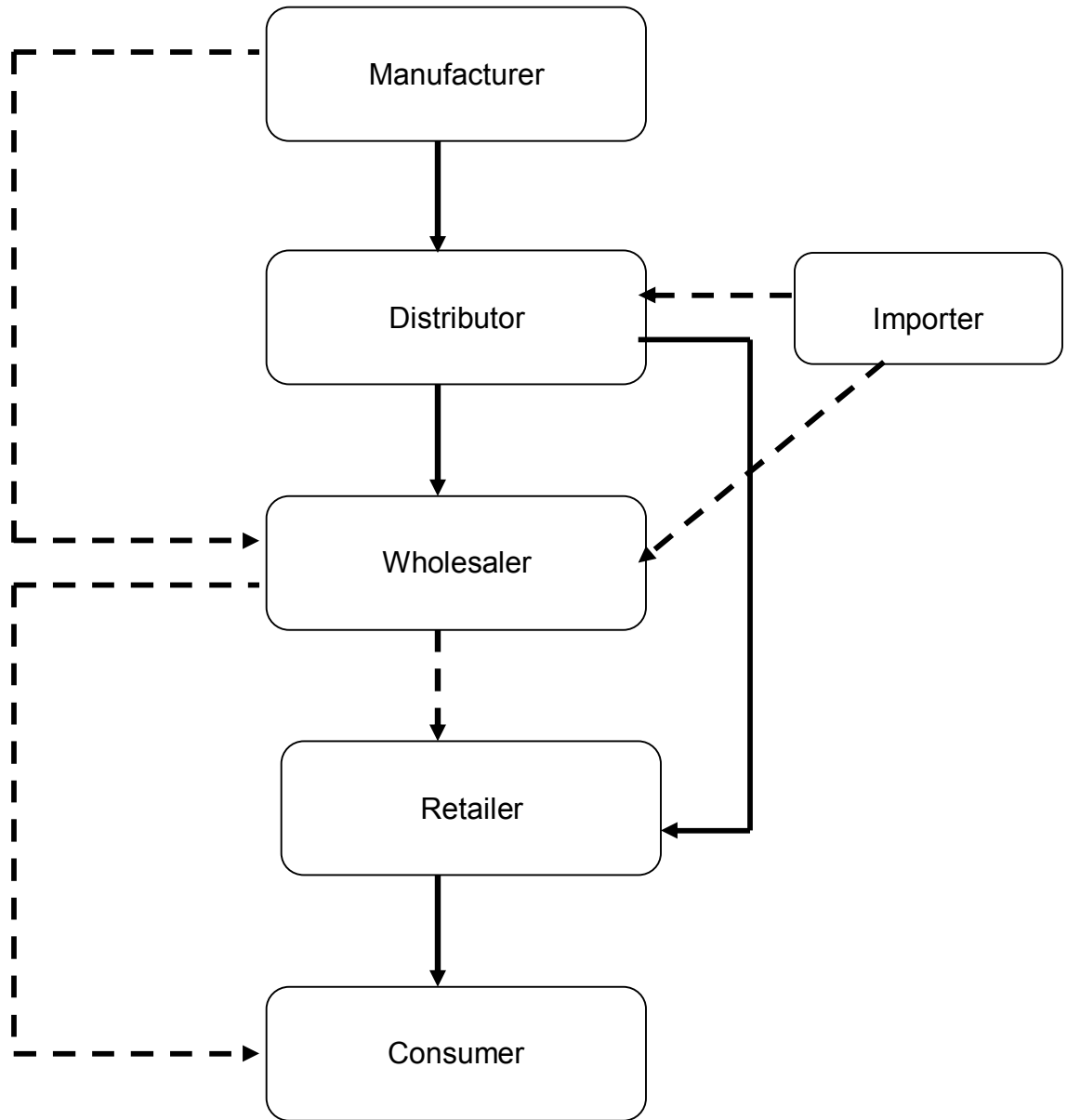


Fig 2: Channel of distribution for Diaper

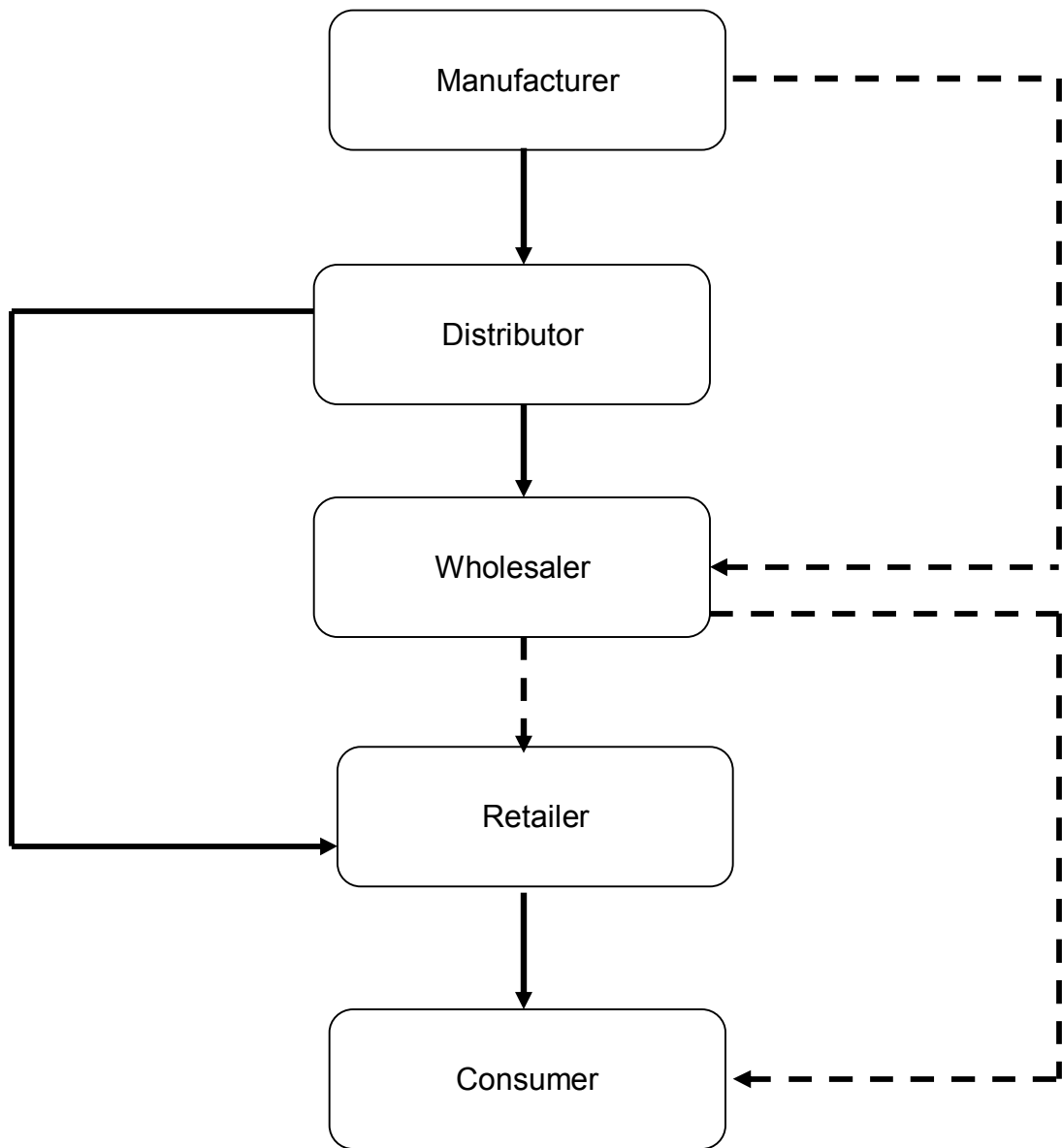


Fig 3: Channel of distribution for Absorbent Cotton wool.

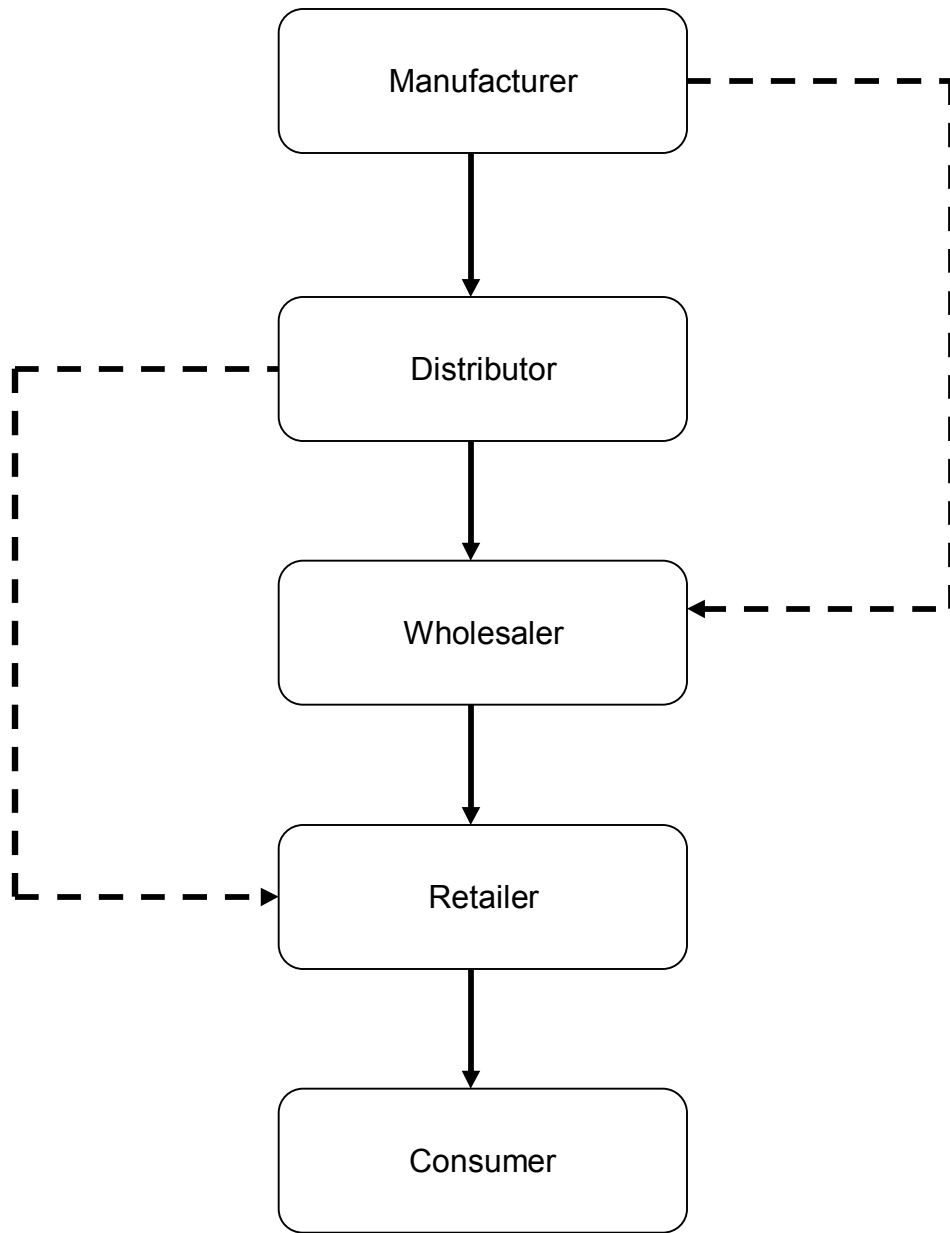


Fig 4: Channel of distribution for Sanitary pad.



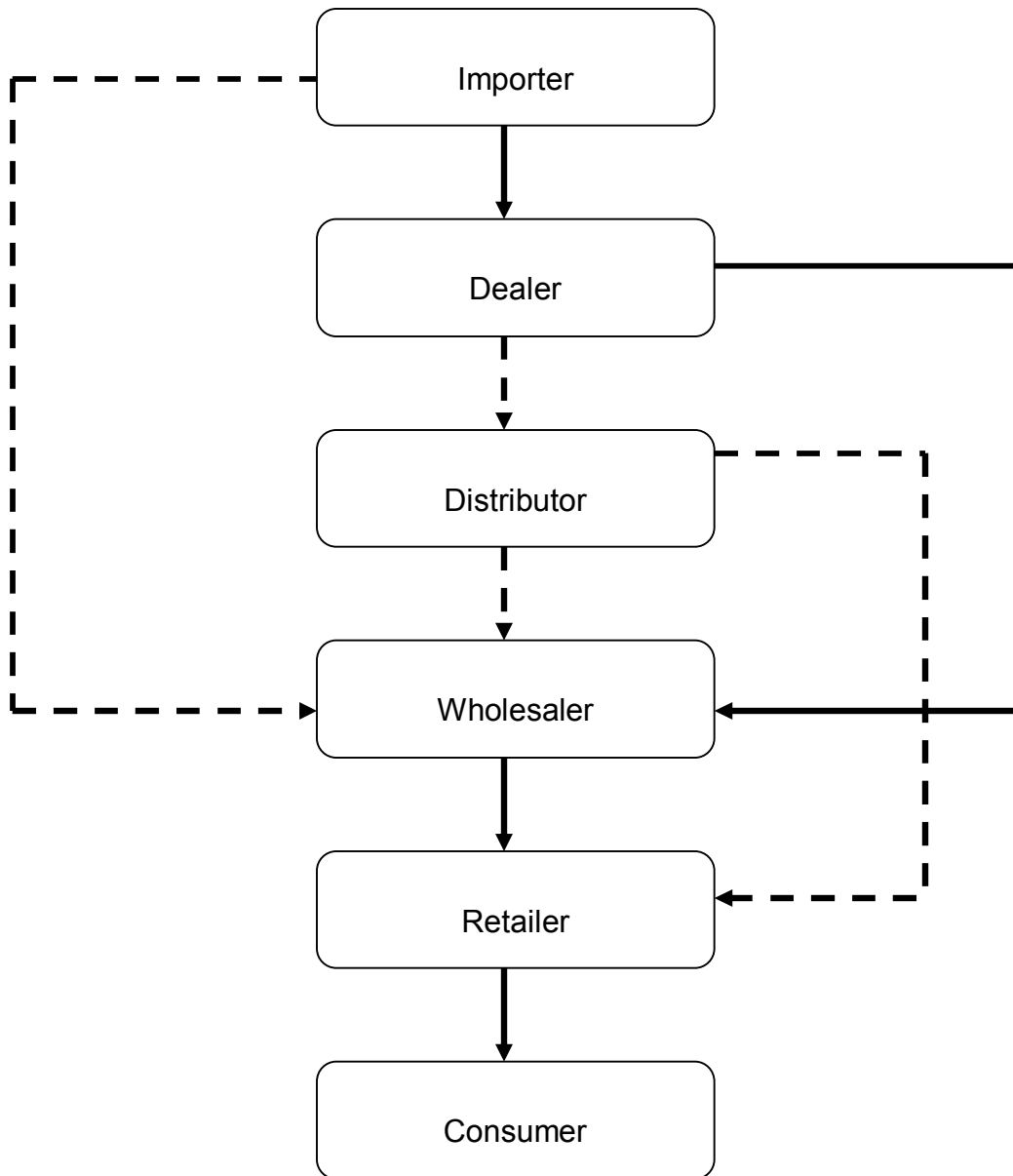


Fig 5: Channel of Distribution for cotton bud.

Figures 1 to 5 are diagrammatic representations of the identified various pathways through which each of the absorbent cotton products move from the producer to the final consumer. The main channel represents the path through which the majority of the respondents sourced their products while the less important channels represent the path through which minority of the respondents sourced their products.

Goods are designed for consumable exchange and this takes place when the goods are physically moved from the producer to the final consumers, thus, the distribution channel is important as it ensures continuous production.

The major participants in the channel of absorbent cotton products in the study area include the distributors, the wholesalers, the retailers and the final consumers. This finding also revealed that importers and dealers are part of the market participants for Diaper and Cotton bud. However, the systematic pathways through which these products move from the producers to the final consumers differ from one another.

Figure 1 indicates that few wholesalers buy cottonball from distributors while Figure 2 shows that many wholesaler respondents (77.78%) sourced diaper directly from the distributors. Figure 1 equally indicates that almost all of the wholesaler respondents (100%) sourced cottonball directly from the manufacturer whereas in Figure 3, few wholesaler respondents (25%) buy absorbent cottonwool directly from the manufacturer.

One common feature among the distribution channels for Cottonball, Absorbent cottonwool, and Diaper is that, majority of the retailer respondents buy the products from the distributors whereas few retailer respondents selling sanitary pad (46.15%) and cottonbud (18.18%) sourced their products from the distributors.

Figures 1, 2 and 3 also indicate that consumers have access and opportunity to buy directly from the wholesalers and retailers of Cottonball, Diaper and Absorbent cottonwool whereas, Figures 4 and 5 show that consumer respondents (100%) sourced only from the retailers of Sanitary pad and Cottonbud. This is basically due to the fact that the marketing strategies employed by the producers and distributors of the two products do not encourage the wholesalers to sell in units but rather in bundles and dozens.

The study also revealed that cottonbud has the longest distribution channel among all the channels of absorbent cotton products. This is explained by the number of participants involved. Only Cottonbud has six marketing participants: importer, dealer, distributor, wholesaler, retailer, and consumer (i.e five exchange points), while other products (Cottonball, Absorbent cottonwool, Diaper and Sanitary pad) have five marketing participants including the manufacturers (i.e five exchange points in their distribution channels. This implies that the product changed hands many more times than the other products before reaching the final consumer. It is also interesting to note that this product is manufactured abroad.

#### 4.4 **Marketing Margin**

Marketing margin differs from one product to another while the size of the margin reflects the complexity of the marketing services involved in moving the product through the marketing system. Marketing margin, though, does not indicate whether a marketing system is efficient or not is some times used as an indirect assessment of the efficiency of a marketing system. In other words, it is used to evaluate the efficiency by comparing marketing margins of two or more enterprises at the same level of marketing chain and at the same point in time. Marketing margin is the difference in price of a given commodity at different stages of time, form, place, and possession as it moves from the producer to the final consumer. It could also be described as the difference between the price paid by the consumer and the price received by the producer. The method used

to estimate the marketing margin in this study involves comparing prices at different levels of marketing chain at the same point in time.

**Table 5: Marketing Margin of Absorbent Cotton products.**

Market participants	Absorbent cotton products (%)				
	Cotton bud	A/cotton wool	Sanitary pad	Diaper	Cotton ball
Producer	43.59	62.13	67.01	49.71	45.52
Importer/Dealer	n.a	-	-	-	-
Distributor	13.41	8.26	8.52	6.80	n.a
Wholesaler	22.20	11.76	8.34	21.32	23.53
Retailer	20.80	17.85	16.13	22.17	30.95
<b>Total Marketing margin</b>	<b>56.41</b>	<b>37.87</b>	<b>32.99</b>	<b>50.29</b>	<b>54.48</b>

n.a = not available

Table 5 shows that the marketing margin of absorbent cotton products ranges from 32.99% for Sanitary pad to 56.41% for cotton bud. It is interesting to note that the most popular product (see Table 1) i.e. Sanitary pad has the lowest marketing margin (32.99%) while its producers get the highest share (67.01%) of the consumers' naira. This could be as a result of the marketing strategies employed by the producers which do not encourage over pricing of the products by the middlemen, thus ensuring reasonable return to the producers and fair pricing to the consumers.

For all the products except cotton bud, the retailers enjoy a higher marketing margin than either the wholesaler or distributor. It is equally interesting to note that the wholesalers for cottonball enjoy the highest marketing margin (23.53%) among the wholesalers for other products.

It was observed that cottonbud has the largest marketing margin (56.41%), this could be as a result of the complex marketing services involved in moving the products through the marketing system as reflected in the number of the

marketing participants: the producers (foreign), the importers, the dealers, the distributors, the wholesalers, the retailers and the final consumers.

From Table 5, middlemen's shares of the consumers' expenditure appear to be high, except for absorbent cotton wool and sanitary pad. This assertion agrees with the observations made by Alamu (1996) in his study. The producers' share of consumers' expenditure for absorbent cotton wool and sanitary pad (62.13% and 67.01 respectively) as shown in Table 5, is consistent with the results of earlier research conducted by Hays (1976) and Isitor (1992).

Although, it is difficult to determine whether or not the marketing margins are excessive at this point in time, the obvious facts are that the marketing margins of cottonbud (56.41%), Diaper (50.29%) and cottonball (54.48%) are higher than that of Absorbent cottonwool (37.87%) and Sanitary pad (32.99%). However, marketing margins include marketing cost plus the normal profit earned by the marketing intermediaries. It is equally expected that marketing costs should reflect the true costs of providing marketing services, in a perfectly competitive economic environment.

Assuming that equal percentage of the marketing margins is taken as the normal profit earned by the marketing intermediaries for the absorbent cotton products identified, one can deduce that the marketing system of Sanitary pad is most efficient among others.

#### **4.5 Determination of Dependence of Product Availability on Consumer Locations.**

Consumers are often regarded as "kings" in the market place in as much as their consumption and satisfaction are said to be ultimate goal of the marketing system. In view of the strategic position occupied by the consumers, the way and manner by which the product gets to them despite their wide spread is very important.

In order to determine whether the accessibility or availability of the products is independent of the distribution systems identified in 4.3, chi-square test of independence was conducted.

Chi-square test is used in situations where there are two qualitative variables in which cases are classified in only one of the two levels. Qualitative variables are measurable not in numerical scale but in ordinal scale however, the extent (size) of the measurement depends on personal judgment.

Chi-square test under the hypothesis of independence involves comparing the observed and the expected counts. This concept emphasizes the tenacity of independence of one variable on the other. If the expected and the observed counts are the same (i.e the residual is zero) then the two variables are independent of each other.

The test was conducted to determine the existence of association between products availability at various consumer locations and distribution channels identified. In other words, it was an effort to ascertain whether or not the accessibility of the products or their availability at various consumer locations is influenced or not by the distribution channel employed.

The locations of respondents were grouped based on their estimated distances from a common reference point within the only urban regional market situated in the study area. These distances were cross-tabulated with the identified distribution channels. Tables 6 and 7 show the result obtained from the test conducted.

**Table 6: Result of cross tabulation of distance of consumer to the market and the distribution channels of the absorbent cotton products.**

Distance of consumer to the market	Counts	Distribution Channel					
		Cotton bud	A/cotton wool	Sanitary pad	Diaper	Cotton ball	Total
0.5km– 2.5km	Obs	8	5	8	3	8	32
	Exp	7.8	5.9	7.8	3.7	6.8	32.0
2.55km -4.5km	Obs	1	1	1	1	1	5
	Exp	1.2	0.9	1.2	0.6	1.1	5.0
4.55km–6.5km	Obs	2	3	4	1	2	12
	Exp	2.9	2.2	2.9	1.4	2.6	12.0
6.55km-8.5km	Obs	8	5	4	4	7	28
	Exp	6.8	5.2	6.8	3.3	6.0	28.0
8.55k–10.5km	Obs	6	5	8	3	4	26
	Exp	6.3	4.8	6.3	3.0	5.6	26.0
Total	Obs	25	19	25	12	22	103
	Exp	25.0	19.0	25.0	12.0	22.0	103.0

Table 6 shows that the difference between observed and expected counts (i.e the residual) for the distribution channels of Sanitary pad, cotton bud and cotton ball becomes larger as the consumer moves farther away from the reference point while the residual for distribution channel of absorbent cotton wool reduces as the consumer moves farther away from the reference point. This implies that the availability of sanitary pad, cottonball, cotton bud and absorbent cotton wool depend on the distribution systems employed in moving the products to the various consumer locations in the study area.

However, the expected and observed counts for distribution channel of diaper have equal values (i.e residual is zero) where the consumer distance is between 8.55km and 10.50km, implying that the availability of diaper to consumers at this distance within the study area is independent of the distributions systems hence the need to take a closer look at the other constraints identified for future studies.

**Table 7: Output of chi-square test**

	Value	Df	Asymp. Sig (2-sided)
Pearson chi-square	4.707 <sup>a</sup>	16	0.99
Table chi-square	5.812	16	0.99
No. of valid cases	103		

a. 14 cells (56%) have expected count less than 5. The minimum expected count is 0.58.

Table 7 shows that the calculated chi-square value (4.707) is less than the table value (5.812) at 1 percent level of significance. This implies that the availability of the products is independent of the distribution systems. This is due to the fact that the output is affected by the total frequency. About 56 percent of the total number of cells have expected counts less than 5, with a minimum expected count of 0.58. This could also imply that for Chi-square statistic to be used as an analytical tool and for maximum accuracy, the expected counts should be greater or equal to 5 hence, a larger sample size per cell is desirable. The calculated statistic is approximately distributed as the table Chi-square distribution, therefore the greater the expected count, the better the approximation.

However, the assessment of distribution systems of various absorbent cotton products individually shows that availability of absorbent cotton products is dependent on the distribution system employed in moving the products to various consumer locations within the study area except for availability of diaper at a distance of 8.55km – 10.50km from the reference point within the study area which is independent of the distribution system.

#### 4.6 Efficiency of the distribution systems

Efficiency is measured as a ratio of output to input. It is frequently used in agricultural industry to measure market performance. However, the efficiency of the distribution system in this circumstance was determined as a ratio of benefit to cost. Here, the outputs and inputs were monetized. The output in this case is the benefit or the consumer satisfaction, which the distribution system ought to



have provided by making the products available at various consumer locations. This is quantified as the difference between consumer and producer prices, which is taken as the value added as the product moves through the system. The input is simply the transportation cost incurred in moving the product from the market to the various consumer locations.

The result of the efficiency of the distribution system for absorbent cotton products is presented in Table 8.

**Table 8: Co-efficient of efficiency for distribution systems of Absorbent cotton products.**

Distribution system (percentage)				
Cotton bud	Absorbent cotton wool	Sanitary pad	Diaper	Cotton ball
1570.43	3637.37	983.33	1767.65	5209.09

Table 8 shows the co-efficient of efficiency of distribution systems for Cottonbud (1570.43%), Absorbent cottonwool (3637.37%), Diaper (1767.65%), and Cottonball (5209.09%). These appear to be outrageous and obviously made the marketing system to be price inefficient. This was due to the various marketing strategies employed by the manufacturers and distributors of these products which allow high prices, hence higher profit margins.

In a competitive economic environment, prices ought to adequately reflect marketing and production costs plus a normal profit margin. However, in real life situation, this is hardly obtainable. The manufacturers and distributors of these products supply the wholesalers and retailers in their shops on most occasions, whereas the cost of transfer with additional margin are built into the selling prices which were ultimately passed on to the consumers with profit margin added at other stages or levels ( wholesaler and retailer) of the distribution channels.

The wholesalers and retailers could account for the transfer cost only on the few occasions they made purchases from the manufacturers and distributors' premises. In other words, the consumer prices did not adequately reflect the costs of providing the marketing services for these products. It equally shows that the consumers' prices are in the excess of producers' prices, transfer cost and profit margin that could be assumed to be normal. Therefore, it could be assumed that most of the market participants consider profit maximization much more important than having a common objective of improved marketing efficiency.

On the other hand, the most traded product (Sanitary pad) had the lowest coefficient (983.33%). The distribution system appears to be most efficient amongst others. This is due to the fact that the prices that consumers pay for the product delivered by the marketing system relatively reflected the cost of providing the marketing services.

#### 4.6.1 **Organization, Structure and Conduct of Absorbent Cotton products Market**

The participants involved in marketing of absorbent cotton products include the manufacturers, distributors, wholesalers, and retailers in some cases the importers and dealers as shown in Section 4.2.

Figures 1 to 5 also describe the channels through which each of these products gets to the consumers in their various locations.

The structure refers essentially to the degree of competition in a market. It considers the number and size of buyers and sellers in a market. It is also concerned with the ease of entry and exit of buyers and sellers into and out of the market. Structure also relates to the degree of product differentiation and market intelligence. In this study, these factors were examined to determine the structure of absorbent cotton products market.

Furthermore, this study revealed that eight different brands of Cotton bud, six brands of Absorbent cotton wool. Six brands of Sanitary pads, five brands of Diaper and three brands of Cotton ball exist in the study area.

This implies that few producers are involved in the marketing of absorbent cotton products. However, different brands are identified to exist in the study area. The packaging, different producers, and brand names differentiate these products. It is also observed that producers employed different strategies in capturing their consumers. The entry and exist from the market is free, this was confirmed by all of the distributors and wholesalers as there exist no barrier, association or agency restricting or regulating their marketing activities. Similarly, the distributors are not given any territorial right implying that any of the distributors can sell to any customer anywhere.

The market intelligence refers to the flow of information among the buyers and sellers in the market. Information regarding the prices of competing absorbent cotton product in the study area is readily available at any point in time, this enables the buyers and sellers to make rational decisions. However information concerning the immediate and future actions regarding marketing strategies of competitors is jealously guarded.

In view of the foregoing, it could be said that absorbent cotton product market in the study area has differentiated oligopolistic structure. This is in agreement with the result obtained in the research conducted by Abdulsalam (2005)

#### **4.7 Constraints confronting the marketing of absorbent cotton products.**

The views of the respondents were sought on the problems encountered either in purchasing or selling these products. The problems enumerated include:

##### **i. Delay in getting products.**

Advance payment is one of the modes of payment in the market. This is practiced most especially when wholesalers are sourcing products directly from the producers. Cottonwool wholesaler respondents (23.08%) complained of delay in getting supply, which affect their business adversely.

ii. **Increase in prices**

Distributor (66.67%), wholesaler (7.69%), and diaper consumer (16.67%) respondents complained about incessant increase in prices of the products. This was mostly connected to unstable economic situation, but particularly attributed to hike in price of petroleum product (diesel) used in power generation in the factories. Multiple taxes were also reported as one of the factors that contributed to incessant increase in prices.

iii. **Insufficient Fund**

This is one problem affecting all marketing participants. Availability of sufficient working capital determines the quantities of the products they handled, it equally determined their continuous existence in the market.

iv. **Lack of Credit**

Credit facilities in the face of insufficient working capital would have provided much needed succor to the problem of the respondents, this however, is lacking. Wholesaler (71.69%) and retailer (66.06%) respondents complained about lack of credit sale from their suppliers.

v **Scarcity**

This could mean non – availability of products or inadequate products at the consumer locations. About 22% of consumers of Absorbent cottonwool reported non-availability of the product. Similarly, about 14% of consumers of cottonball and 16% of consumers of Sanitary pad reported non-availability of preferred brands.

About 67% of the distributors reported non-availability of Sanitary pads and Diaper at a particular time. This was due to non-availability of the packaging materials for these products.

vi **Quality**

The quality of the Absorbent cotton products is mostly expressed in the packaging of the products, thus differentiating the products from one another. About 7% of consumers of Absorbent cottonwool complained that they are not satisfied with the packaging of some brands of the product. In addition, cottonbud

consumers (16%) complained that the packaging is often tampered with before getting to the final users.

vii. **Pricing**

This refers to the prices that consumers pay for absorbent cotton products at their various locations. Consumers of Cottonbud (4%), Absorbent cottonwool (6%), Sanitary pad (4%), and Diaper (17%) complained that the prices of these products are high.

## CHAPTER FIVE

### SUMMARY, CONCLUSION AND RECOMMENDATIONS

One of the major challenges of the marketing system is to make commodities available and accessible to the consumers in their various locations. This study examines the various distribution systems of absorbent cotton products in Kaduna Metropolis. It identifies the market participants and various absorbent cotton products available in the study area. Attempt was also made to identify the constraints facing the marketing of absorbent cotton products in Kaduna Metropolis.

Data was collected from primary source and major conclusions drawn from the analysis are summarized in the paragraphs below.

#### 5.1 Summary of Finding

The findings showed that five different types of Absorbent cotton products exist within the study area. These are Cotton bud, Absorbent cotton wool, sanitary pad, Diaper, and Cotton ball. It equally revealed that there are various brands of these products in the market.

The participants involved in the marketing of these products include the distributors, wholesalers, importers, dealers, retailers and producers.

The study also described various distribution channels employed in moving each of the products to the consumers. The efficiency of each of these distribution systems was equally determined.

Furthermore, the marketing margin of each market participant for each of the absorbent cotton products was determined, Sanitary pad producers having the highest share (67.01%) of consumers' naira.

Chi-square test was conducted to determine the accessibility and availability of the products at consumer locations through the distribution systems. This was an attempt to establish the utility of place created by the distribution system hence

the satisfaction the consumers derived by having the products at their various locations.

## 5.2 **Conclusion**

A number of conclusions could be made based on the results of the analysis. These are:

- i. Sanitary pad is the most popular product amongst the five absorbent cotton products identified, and this is closely followed by Diaper.
- ii. Cotton bud is an imported product while some brands of Diaper are equally imported from overseas countries.
- iii. The market of absorbent cotton products in the study area has a differentiated oligopolistic structure.
- iv. The distribution systems of the existing absorbent cotton products differ from one another.
- v. Sanitary pad has the most efficient distribution system amongst others.
- vi. The availability of the products to the consumers in the study area is dependent on the distribution system employed in moving the products to various consumer locations.
- vii. Sanitary pad has the lowest marketing margin implying thus the producers of sanitary pad get the largest share of consumers' naira.

### 5.3 Recommendations

On the basis of the findings of the study, the following recommendations are made to enhance the marketing of Absorbent Cotton products thus promoting the production and utilization of cotton in Nigeria.

- i Government should review policies affect prices of petroleum products, tax administration, and price control in such a way that the local manufacturers would not take undue advantage of the economic situation to strangle unsuspecting consumers.
- ii Considering the major policy shift of the Federal Government in the most recent times, which favour agriculture, most especially, value addition to exportable agricultural commodities. It is recommended that local entrepreneurs should step up manufacturing units for the processing of cotton into the identified products for both local and foreign markets. This will in no small way increase the foreign exchange earning capacity, diversify the country's export base and create more employment opportunities.
- iii One of the major constraints of the marketing participants is insufficient capital. It is therefore recommended that marketing loans from institutional sources like National Poverty Eradication Programme (NAPEP), Nigerian Agricultural Cooperative and Rural Development Bank (NACRBD) and commercial banks should be granted in order to encourage and enhance capacity building.
- iv Producers of absorbent cotton products should improve on the quality of their products to meet international standard in order to provide equal leverage with similar products produced abroad.
- v Regulatory and consumer protection agencies should ensure that rules and standard are not compromised.



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## QUESTIONNAIRE FOR THE RETAILERS

1. Which of the absorbent cotton products do you sell?
  - a. Cotton bud (tips) \_\_\_\_\_
  - b. Absorbent cotton wool \_\_\_\_\_
  - c. Sanitary pad \_\_\_\_\_
  - d. Diapers \_\_\_\_\_
  - e. Cotton balls \_\_\_\_\_
  - f. Others \_\_\_\_\_
  
2. How much quantity (bags or bundles) of the product(s) did you purchase from your source(s) in the last six months?

<b>Products</b>	<b>Sources</b>														
	<b>Wholesaler</b>			<b>Distributor</b>			<b>Importer</b>			<b>Dealer</b>			<b>Manufacturer</b>		
			Mar Apr			Mar Apr			Mar Apr			Mar Apr			Mar Apr
	Dec	Feb		Dec	Feb		Dec	Feb		Dec	Feb		Dec	Feb	
<b>Cotton bud (tips)</b>  Brand name:  a. b. c. d.															
<b>Absorbent cotton wool</b>  Brand name:  a. b. c. d.															



<p><b>Sanitary Pad</b></p> <p>Brand name:</p> <p>a.</p> <p>b.</p> <p>c.</p> <p>d.</p>															
<p><b>Diaper</b></p> <p>Brand name:</p> <p>a.</p> <p>b.</p> <p>c.</p> <p>d.</p>															
<p><b>Cotton ball</b></p> <p>Brand name:</p> <p>a.</p> <p>b.</p> <p>c.</p> <p>d.</p>															
<p><b>Others</b></p> <p>Brand name:</p>															

a.															
b.															
c.															
d.															

3. Do you purchase from the source(s) on cash and carry basis?

es o

4. Do you get credit facility from the source(s) where you obtain the

product(s) es No

5. How much did you purchase the product(s) from your source(s) in the last six months?

Products	Cost Price ₦ (bag/bundle)														
	Wholesaler			Distributor			Importer			Dealer			Manufacturer		
			Mar			Mar			Mar			Mar			Mar
			Apr			Apr			Apr			Apr			Apr
	Dec	Feb		Dec	Feb		Dec	Feb		Dec	Feb		Dec	Feb	
<b>Cotton bud (tips)</b>															
Brand name:															
a.															
b.															
c.															
d.															

<p><b>Absorbent cotton wool</b></p> <p>Brand name:</p> <p>a.</p> <p>b.</p> <p>c.</p> <p>d.</p>															
<p><b>Sanitary Pad</b></p> <p>Brand name:</p> <p>a.</p> <p>b.</p> <p>c.</p> <p>d.</p>															
<p><b>Diaper</b></p> <p>Brand name:</p> <p>a.</p> <p>b.</p> <p>c.</p> <p>d.</p>															
<p><b>Cotton ball</b></p> <p>Brand name:</p>															

a.														
b.														
c.														
d.														
<b>Others</b>														
Brand name:														
a.														
b.														
c.														
d.														

6. Do you transport the product(s) to your shop yourself?  
 Yes  No

7. If Yes, how much did it cost you to transport the product(s) to your shop in the last six months?

Products	Cost of transportation												
	Nov		Dec		Jan		Feb		Mar		April		
<b>Cotton bud (tips)</b>													
Brand name:													
a.													
b.													
c.													

d.						
<b>Absorbent cotton wool</b> Brand name: a. b. c. d.						
<b>Sanitary Pad</b> Brand name: a. b. c. d.						
<b>Diaper</b> Brand name: a. b. c. d.						
<b>Cotton ball</b>						

<p>Brand name:</p> <p>a.</p> <p>b.</p> <p>c.</p> <p>d.</p>						
<p><b>Others</b></p> <p>Brand name:</p> <p>a.</p> <p>b.</p> <p>c.</p> <p>d.</p>						

8. How much did you sell a pack/bag/bundle of the product(s) in the last six months?

Products	Selling Price											
	Nov		Dec		Jan		Feb		Mar		Apr	
<b>Cotton bud (tips)</b> Brand name: a. b. c. d.												
<b>Absorbent cotton wool</b> Brand name: a. b. c. d.												
<b>Sanitary Pad</b> Brand name: a. b. c. d.												

<p><b>Diaper</b></p> <p>Brand name:</p> <p>a.</p> <p>b.</p> <p>c.</p> <p>d.</p>						
<p><b>Cotton ball</b></p> <p>Brand name:</p> <p>a.</p> <p>b.</p> <p>c.</p> <p>d.</p>						
<p><b>Others</b></p> <p>Brand name:</p> <p>a.</p> <p>b.</p> <p>c.</p> <p>d.</p>						

9. What do you think could be responsible for the price variation?

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10. What problem(s) do you encounter when purchasing the product(s) \_\_\_\_\_ from \_\_\_\_\_ the \_\_\_\_\_ source(s)?  
 \_\_\_\_\_  
 \_\_\_\_\_

11. What problem(s) do you encounter when selling to your customers?  
 \_\_\_\_\_  
 \_\_\_\_\_

**QUESTIONNAIRE FOR DISTRIBUTOR/WHOLESALERS**

1. Are you a distributor  or a wholesaler  ?
2. Which of the absorbent cotton products do you sell?
  - a. Cotton bud (tips) \_\_\_\_\_
  - b. Absorbent cotton wool \_\_\_\_\_
  - c. Sanitary pad \_\_\_\_\_
  - d. Diapers \_\_\_\_\_
  - e. Cotton balls \_\_\_\_\_
3. What quantity (bags or bundles) of the product(s) did you purchase from your source(s) in the last six months?

Products	Sources										
	Distributor			Importer			Dealer			Manufacturer	
			Mar Apr			Mar Apr			Mar Apr		Mar Apr
	Dec	Feb		Dec	Feb		Dec	Feb		Dec	Feb
<b>Cotton bud (tips)</b>  Brand name:  a. b. c. d.											
<b>Absorbent cotton wool</b>  Brand name:											

a. b. c. d.											
<b>Sanitary Pad</b> Brand name: a. b. c. d.											
<b>Diaper</b> Brand name: a. b. c. d.											
<b>Cotton ball</b> Brand name: a. b.											

c.												
d.												
<b>Others</b>												
Brand name:												
a.												
b.												
c.												

4. Do you get discounts on purchasing the product(s) from the source(s)?

es o

5. If Yes, at what percentage(s)? \_\_\_\_\_

6. Do you get credit facility from the source(s) where you obtain the product(s) es o

7. Do you purchase from the source(s) on cash and carry basis?

es o

8. How much did you purchase the product(s) from your source(s) in the last six months?

Products	Cost Price ₦ (bag/bundle)											
	Distributor			Importer			Dealer			Manufacturer		
			Mar Apr			Mar Apr			Mar Apr			Mar Apr
		Dec	Feb		Dec	Feb		Dec	Feb		Dec	Feb
<b>Cotton bud (tips)</b>												
Brand name:												
a.												
b.												

c. d.											
<b>Absorbent cotton wool</b>  Brand name:  a.  b.  c.  d.											
<b>Sanitary Pad</b>  Brand name:  a.  b.  c.  d.											
<b>Diaper</b>  Brand name:  a.  b.  c.  d.											

<b>Cotton ball</b>  Brand name:  a.  b.  c.  d.												
<b>Others</b>  Brand name:  a.  b.  c.  d.												

9. Do you transport the product(s) to your warehouse yourself?

Yes  No

10. If yes, how much did it cost you to transport the product(s) to your warehouse in the last six months?

Products	Cost of transportation												
	Nov		Dec		Jan		Feb		Mar		April		
Cotton bud (tips)													

lxxxv

<p>Brand name:</p> <p>a.</p> <p>b.</p> <p>c.</p> <p>d.</p>						
<p><b>Absorbent cotton wool</b></p> <p>Brand name:</p> <p>a.</p> <p>b.</p> <p>c.</p> <p>d.</p>						
<p><b>Sanitary Pad</b></p> <p>Brand name:</p> <p>a.</p> <p>b.</p> <p>c.</p> <p>d.</p>						
<p><b>Diaper</b></p> <p>Brand name:</p> <p>a.</p> <p>b.</p>						

c.						
d.						
<b>Cotton ball</b> Brand name:						
a.						
b.						
c.						
d.						
<b>Others</b> Brand name:						
a.						
b.						
c.						
d.						

11. Who are your customers?

Products	Retailers		Consumers		Wholesaler
	Street Hawkers	Shop Owner	Individual	Corporate	
<b>Cotton bud</b> <b>(tips) Brand</b> name: a. b. c. d.					
<b>Absorbent cotton</b> <b>wool Brand</b> name: a. b. c. d.					
<b>Sanitary Pad</b> Brand name: a. b. c.					



d.					
<b>Diaper</b> Brand name: a. b. c. d.					
<b>Cotton ball</b> Brand name: a. b. c. d.					
<b>Others</b> Brand name: a. b. c. d.					

12. How much did you sell the product(s) to your customers in the last six months?

Products	Selling Price (₦) (Bag/Bundle)											
	Retailers						Consumers					
	Nov	Dec	Jan	Feb	Mar	Apr	Nov	Dec	Jan	Feb	Mar	April
<b>Cotton bud (tips)</b>  Brand name:  a. b. c. d.												
<b>Absorbent cotton wool</b>  Brand name:  a. b. c. d.												
<b>Sanitary Pad</b>  Brand name:  a. b. c. d.												
<b>Diaper</b>												

<p>Brand name:</p> <p>a.</p> <p>b.</p> <p>c.</p> <p>d.</p>						
<p><b>Cotton ball</b></p> <p>Brand name:</p> <p>a.</p> <p>b.</p> <p>c.</p> <p>d.</p>						
<p><b>Others</b></p> <p>Brand name:</p> <p>a.</p> <p>b.</p> <p>c.</p> <p>d.</p>						

13. What do you think could be responsible for the price variation?

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14. What problem(s) do you encounter when purchasing the product(s) from the source(s)?

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15. What problem(s) do you encounter when selling to your customers?

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**16. Are you granted exclusive territorial right as a distributor? Yes**

**No**

17. If Yes, what problems do you encounter in covering your territory effectively? \_\_\_\_\_

18. What do you think could help to achieve effective coverage? \_\_\_\_\_

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19. Do you belong to any trade union or association that co-ordinate and oversee the trade activities in respect of the products? Yes  No

20. If Yes, what is the name of the union or association? \_\_\_\_\_

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21. What would you say about the condition(s) or term(s) of entering the trade? \_\_\_\_\_

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**QUESTIONNAIRE FOR COTTON BUD (TIPS) CONSUMERS**

**A. SOCIO – ECONOMIC CHARACTERISTICS**

1. Community where the respondent is residing \_\_\_\_\_
2. Age of Respondent \_\_\_\_\_
3. Sex of respondents (a) Male  (b) Female
4. Marital status of respondent. (a) Single  (b) Married
5. Highest educational attainment of respondent
- (a) Primary Education
- (b) Secondary Education
- (c) Tertiary Education
- (d) Others (specify) \_\_\_\_\_
6. Occupation of the respondent \_\_\_\_\_
7. Monthly income of respondent
- a. Less than ₦7500.00
- b. ₦7500.00 – ₦10,000.00
- c. ₦10,000.00 – ₦15,000.00
- d. ₦15,000.00 – ₦20,000.00
- e. ₦20,000.00 – ₦30,000.00
- f. ₦30,000.00 and above

**B. PRODUCT CONSUMPTION HABIT**

8. How frequent do you use the product?

	Once	2 times	3 times
Daily			
Weekly			
Monthly			
Yearly			

9. How much quantity of the product did you obtain from these source(s) in the last six months?

Period	Sources			
	Retailer (Street Hawker)	Retailer (Shop owners)	Sales Rep.	Wholesaler
November				
December				
January				
February				
March				
April				

10. How far do you have to go from your house to obtain the product?

Distance	Sources			
	Retailer (Street Hawker)	Retailer (Shop owners)	Sales Rep.	Wholesaler
Less than 10 metres				
10 – 50 metres				
50 – 100 metres				
100 – 250 metres				
250 – 500 metres				
500 metres & above				

11. Why do you prefer your source to the other sources of the product? \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

12. How much did you obtain a pack of the product in the last six months?

Period	Nov	Dece	Jan	Feb	Mar	April
Unit cost price (₦)						

13. What do you think could be responsible for the price variations?

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14. Do you get the product in as much quantity as you desire?

Yes  No

15. Do you get the product as often as you desire?

Yes  No

16. If no, what do you think would be responsible for your inaccessibility to the product? \_\_\_\_\_

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17. What other problems do you encounter when looking for the product?

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18. Which other absorbent cotton product(s) are you familiar with apart from the following (i) Absorbent Cotton wool, ii Sanitary pad, iii Diapers, iv Cotton Balls?

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19. What do you think could be done or added to make the product to make it pleasing and more desirable to you? \_\_\_\_\_

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## QUESTIONNAIRE FOR SANITARY PAD CONSUMERS

### A. SOCIO – ECONOMIC CHARACTERISTICS

1. Community where the respondent is residing \_\_\_\_\_
2. Age of Respondent \_\_\_\_\_
3. Marital status of respondent.      (a) Single       (b) Married
4. Highest educational attainment of respondent
  - (e) Primary Education
  - (f) Secondary Education
  - (g) Tertiary Education
  - (h) Others (specify) \_\_\_\_\_
5. Occupation of the respondent \_\_\_\_\_
6. Monthly income of respondent
  - a. Less than ₦7500.00
  - b. ₦7500.00 – ₦10,000.00
  - c. ₦10,000.00 – ₦15,000.00
  - d. ₦15,000.00 – ₦20,000.00
  - e. ₦20,000.00 – ₦30,000.00
  - f. ₦30,000.00 and above

### B. PRODUCT CONSUMPTION HABIT

7. List the brands of sanitary pad according to your choice of preference.
  - i
  - ii
  - iii
  - iv
  - v



8. Why did you choose or prefer No i to Nos. ii, iii, iv and v above? \_\_\_\_\_

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9. Which of the above do you use mostly? \_\_\_\_\_

10. Why do you prefer to use it mostly? \_\_\_\_\_

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11. How much quantity of the most preferred brand of the product did you obtain from these source(s) in the last six months?

Period	Sources			
	Retailer (Street Hawker)	Retailer (Shop owners)	Sales Rep.	Wholesaler
November				
December				
January				
February				
March				
April				

12. How far do you have to go from your house to obtain the product?

Distance	Sources			
	Retailer (Street Hawker)	Retailer (Shop owners)	Sales Rep.	Wholesaler
Less than 10 metres				
10 – 50 metres				
50 – 100 metres				
100 – 250 metres				
250 – 500 metres				
500 metres & above				

13. Why do you prefer your source to the other sources of the product? \_\_\_\_\_

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14. How much did you obtain a pack of the product in the last six months?

Period	Nov	Dec	Jan	Feb	Mar	April
Unit cost price (₦)						

15. What do you think could be responsible for the price variations?

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16. Do you get the product in as much quantity as you desire?

Yes  No

17. Do you get the product as often as you desire?

Yes  No

18. If no, what do you think would be responsible for your inaccessibility to the product? \_\_\_\_\_

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19. What other problems do you encounter when looking for the product?

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20. Which other absorbent cotton product(s) are you familiar with apart from the following (i) Absorbent Cotton wool, ii Cotton buds (Tips), iii Diapers, iv Cotton Balls?

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21. What do you think could be done or added to your most preferred brand to make it more pleasing and more desirable to you? \_\_\_\_\_

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## QUESTIONNAIRE FOR COTTON BALL CONSUMERS

### A. SOCIO – ECONOMIC CHARACTERISTICS

1. Community where the respondent is residing \_\_\_\_\_
2. Age of Respondent \_\_\_\_\_
3. Marital status of respondent.      (a) Single                       (b) Married
4. Highest educational attainment of respondent
  - (i) Primary Education
  - (j) Secondary Education
  - (k) Tertiary Education
  - (l) Others (specify) \_\_\_\_\_
5. Occupation of the respondent \_\_\_\_\_
6. Monthly income of respondent
  - a. Less than ₦7500.00
  - b. ₦7500.00 – ₦10,000.00
  - c. ₦10,000.00 – ₦15,000.00
  - d. ₦15,000.00 – ₦20,000.00
  - e. ₦20,000.00 – ₦30,000.00
  - f. ₦30,000.00 and above

### B. PRODUCT CONSUMPTION HABIT

7. How frequent do you use the product?

	Once	2 times	3 times
Daily			
Weekly			
Monthly			
Yearly			

8. How much quantity of the product did you obtain from these source(s) in the last six months?

Period	Sources			
	Retailer (Street Hawker)	Retailer (Shop owners)	Sales Rep.	Wholesaler
November				
December				
January				
February				
March				
April				

9. How far do you have to go from your house to obtain the product?

Distance	Sources			
	Retailer (Street Hawker)	Retailer (Shop owners)	Sales Rep.	Wholesaler
Less than 10 metres				
10 – 50 metres				
50 – 100 metres				
100 – 250 metres				
250 – 500 metres				
500 metres & above				

10. Why do you prefer your source to the other sources of the product? \_\_\_\_\_

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11. How much did you obtain a pack of the product in the last six months?

Period	Nov	Dec	Jan	Feb	Mar	April
Unit cost price (N)						

12. What do you think could be responsible for the price variations?

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13. Do you get the product in as much quantity as you desire?

Yes  No

14. Do you get the product as often as you desire?

Yes  No

15. If no, what do you think would be responsible for your inaccessibility to the product? \_\_\_\_\_

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16. What other problems do you encounter when looking for the product?

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17. Which other absorbent cotton product(s) are you familiar with apart from the following (i) Absorbent Cotton wool, ii Sanitary pad, iii Diapers, iv Cotton Bud (Tip)?

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18. What do you think could be done or added to the product to make it pleasing and more desirable to you? \_\_\_\_\_

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## QUESTIONNAIRE FOR DIAPER CONSUMERS

### A. SOCIO – ECONOMIC CHARACTERISTICS

1. Community where the respondent is residing \_\_\_\_\_
2. Age of Respondent \_\_\_\_\_
3. Marital status of respondent.      (a)Single                       (b) Married
4. Number of children \_\_\_\_\_
5. Highest educational attainment of respondent
  - (m) Primary Education
  - (n) Secondary Education
  - (o) Tertiary Education
  - (p) Others (specify) \_\_\_\_\_
6. Occupation of the respondent \_\_\_\_\_
7. Monthly income of respondent
  - a. Less than ₦7500.00
  - b. ₦7500.00 – ₦10,000.00
  - c. ₦10,000.00 – ₦15,000.00
  - d. ₦15,000.00 – ₦20,000.00
  - e. ₦20,000.00 – ₦30,000.00
  - f. ₦30,000.00 and above

### B. PRODUCT CONSUMPTION HABIT

8. How frequent do you use the product?

	Once	2 times	3 times
Daily			
Weekly			
Monthly			
Yearly			

9. How long (months or year) have you been using **diapers** for your children? \_\_\_\_\_
10. List the brands of diaper according to your choice of preference.  
 i  
 ii  
 iii  
 iv  
 v
11. Why did you choose or prefer No i to Nos. ii, iii, iv and v above? \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_
12. Which of the above do you use mostly? \_\_\_\_\_
13. Why do you prefer to use it mostly? \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_
14. How much quantity of the most preferred brand of the product did you obtain from these source(s) in the last six months?

Period	Sources			
	Retailer (Street Hawker)	Retailer (Shop owners)	Sales Rep.	Wholesaler
November				
December				
January				
February				
March				
April				

15. How far do you have to go from your house to obtain the product?

Distance	Sources			
	Retailer (Street Hawker)	Retailer (Shop owners)	Sales Rep.	Wholesaler
Less than 10 metres				
10 – 50 metres				
50 – 100 metres				
100 – 250 metres				
250 – 500 metres				
500 metres & above				

16. Why do you prefer your source to the other sources of the product? \_\_\_\_\_  
\_\_\_\_\_

17. How much did you obtain a pack of the product in the last six months?

Period	Nov	Dec	Jan	Feb	Mar	April
Unit cost price (₦)						

18. What do you think could be responsible for the price variations?  
\_\_\_\_\_  
\_\_\_\_\_

19. Do you get the product in as much quantity as you desire?

Yes  No

20. Do you get the product as often as you desire?

Yes  No

21. If no, what do you think would be responsible for your inaccessibility to the product? \_\_\_\_\_  
\_\_\_\_\_

22. What other problems do you encounter when looking for the product?  
\_\_\_\_\_  
\_\_\_\_\_

23. Which other absorbent cotton product(s) are you familiar with apart from the following (i) Absorbent Cotton wool, ii Cotton buds (Tips), iii Diapers, iv Cotton Balls?

\_\_\_\_\_  
\_\_\_\_\_

24. What do you think could be done or added to your most preferred brand to make it more pleasing and more desirable to you? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



**QUESTIONNAIRE FOR ABSORBENT COTTON WOOL CONSUMERS**

**A. SOCIO – ECONOMIC CHARACTERISTICS**

1. Community where the respondent is residing \_\_\_\_\_
2. Status of Respondent      (a). Individual       (b). Corporate
3. Highest educational attainment of respondent
- (q) Primary Education
- (r) Secondary Education
- (s) Tertiary Education
- (t) Others (specify) \_\_\_\_\_
4. Occupation of the respondent \_\_\_\_\_
5. Monthly income of respondent
- a. Less than ₦7500.00
- b. ₦7500.00 – ₦10,000.00
- c. ₦10,000.00 – ₦15,000.00
- d. ₦15,000.00 – ₦20,000.00
- e. ₦20,000.00 – ₦30,000.00
- f. ₦30,000.00 and above

**B. PRODUCT CONSUMPTION HABIT**

6. How frequent do you use the product?

	Once	2 times	3 times
Daily			
Weekly			
Monthly			
Yearly			

7. List the brands of cotton wool according to your choice of preference.

i

ii

iii

iv

v

8. Why did you choose or prefer No i to Nos. ii, iii, iv and v above? \_\_\_\_\_

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9. Which of the above do you use mostly? \_\_\_\_\_

10. Why do you prefer to use it mostly? \_\_\_\_\_

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11. How much quantity of the most preferred brand of the product did you obtain from these source(s) in the last six months?

Period	Sources			
	Retailer (Street Hawker)	Retailer (Shop owners)	Sales Rep.	Wholesaler
November				
December				
January				
February				
March				
April				

12. How far do you have to go from your house to obtain the product?

Distance	Sources			
	Retailer (Street Hawker)	Retailer (Shop owners)	Sales Rep.	Wholesaler
Less than 10 metres				
10 – 50 metres				
50 – 100 metres				
100 – 250 metres				
250 – 500 metres				
500 metres & above				

13. Why do you prefer your source to the other sources of the product? \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

14. How much did you obtain a pack of the product in the last six months?

Period	Nov	Dec	Jan	Feb	Mar	April
Unit cost price (₦)						

15. What do you think could be responsible for the price variations?  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

16. Do you get the product in as much quantity as you desire?

Yes  No

17. Do you get the product as often as you desire?

Yes  No

18. If no, what do you think would be responsible for your inaccessibility to the product? \_\_\_\_\_  
 \_\_\_\_\_

19. What other problems do you encounter when looking for the product?  
 \_\_\_\_\_  
 \_\_\_\_\_

20. Which other absorbent cotton product(s) are you familiar with apart from the following (i) Sanitary Pad, ii Cotton buds (Tips), iii Diapers, iv Cotton Balls?  
 \_\_\_\_\_  
 \_\_\_\_\_

21. What do you think could be done or added to your most preferred brand to make it more pleasing and more desirable to you? \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_