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A CASE STUDY OF

KADUNA REFINING & PETROCHEMICAL COMPANY LIMITED.

BY

AHMED MOHAMMED DANLADI

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APPROVAL SHEET

This project entitled "A System Approach in Industrial Procurement" by Ahmed Mohammed Danladi meets the regulations governing the award of the degree of Master of Business Administration (MBA) of Ahmadu Bello University Zaria and is approved for its contribution to knowledge and literary presentation.

1. Mrs. M.S. Abdullahi 15/10/97
   Supervisor *Date*

2. DR. A.D. SHEIZU 22/5/95
   External Examiner *Date*

3. .... DATE 1-98
   Head of Department *Date*

4. ..... 6/4/98
   Dean of Post Graduate School (ABU Zaria) *Date*

DEDICATION

This research is dedicated to the blessed memory of my late father Alhaji Mohammad Danladi. May Allah grant him eternal peace, (amin). And to my loving mother Hajiya Rabi Mohammad Danladi. May Allah bless her, (amin).

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ABSTRACT.

Industrial procurement function in Kaduna Refining and Petrochemical Company was examined. The function was found to traverse several functional departments within the organisation and several parties outside.

The diversity of the participants and the contributions required of them suggest that the function requires close and competent monitoring and coordination.

To this end the system approach was developed in order to evaluate every facet of the function and come up with the best way to discharge it.

The investigation revealed that the function can be efficiently discharged when certain improvements in Procurement, Stock Management, Users, Finance & Accounts, and Audit Departments are carried out. Also significant are the role of Management, Vendors and Government economic policies.

It is concluded that the competitiveness of the organisation as a business unit rests squarely on the efficient discharge of this function especially for Nigerian industries that depend heavily on imports.

The sucess of the function on the other hand depends on the total understanding of every one concerned with it and the willingness to work towards its objectives.

CHAPTER ONE

INTRODUCTION

This opening chapter introduces the subject matter of industrial procurement followed by a concise statement of the problem the research intends to explore. Also discussed are the objectives, scope, research method, significance and limitations of the research. Definitions of some key terms in the presentation are also provided.

1.1 INTRODUCTION.

Industrial procurement is a necessary function in every manufacturing organisation. This is so because every manufacturing process requires materials and supplies. Providing these materials and supplies at the right quality, in the right quantity at the right time, from the right supplier and at the right price are the specific responsibilities of the procurement function.

In most manufacturing companies, materials cost range between 40 - 60% of the product cost. Progressive trends toward mechanization and automation in manufacturing processes result in savings in labour cost but translates into higher maintenance costs of the sophisticated automated machineries.

Beside the cost of materials and the repair components, there are other hidden costs that have their origin in the procurement function. The cost of down-time due to material outage, shortages, delays and poor quality is very significant.

Improper materials or repair components impair manufacturing efficiency and may result in poor

product quality, excessive waste and rejections which sacrifices not only the spoiled material itself but also the time and the labour expanded on it.

This being the case, it is easy to see that the profitability and competitiveness of an organisation as a business unit are a function of how well the procurement function is discharged.

When considered from the national economic front, the procurement function assumes greater relevance.

Today Nigeria is a debtor nation to the tune of billions of Naira. This state of affairs is a cummulative procurement actions of the uncountable business entities in the country.

Ours being a developing economy, it is characterized by very high level of imports in all the manufacturing sectors. Both government and the private sector are busy procuring (using our hard earned foreign exchange) massive materials and equipment to build infrastructure, maintain and operate existing installations and build entirely new ones. This is a hard evidence that the procurement function pervades the entire economic activities of this country.

For these important roles at the business unit level and at the national economic level, it is crucial that we learn and understand how to carry out this all important function.

1.2 STATEMENT OF THE PROBLEM

Industrial procurement is usually a complex process. It begins with the identification of needs for goods and services; identifying and comparing the supplies and suppliers available; negotiating with sources of supplies and arriving at some agreed terms of trading; making contracts and placing orders, receiving, accepting and paying for the goods and services required. It is also to do with acquisition, make or buy decision, vendor rating, product testing, effective

communication, information on new supply sources, and forecast on supply and prices.

Industrial procurement is made more complex by its detailed involvement with other divisions and control processes such as:-

a. Stock control policies and procedures which determine, control and replenish the range of items stocked.

b. The supply cycle goods pass through as they are dispatched, transported, received, stored and either issued or sold.

c. Production planning and control which determines and controls the quantities of parts and materials required to meet production commitments.

d. Production and Maintenance departments who determine by their right or wrong actions, materials and repair components consumption rates.

e. Finance and Accounts department who controls the budgetary process.

Outside the organisation, the vendors group, government economic policies, the global economic trends all have their influence on the procurement function.

Many people, at various levels of the management hierarchy and several functional departments have to take part before these diverse activities culminating in the procurement function can be successfully carried out.

Having recognized the complex nature of the procurement function, the multiple number of departments and the people participating in the process, it is right to ask:-

i. How is the procurement process carried out in a typical industrial set-up?

ii. Who are the key participating departments, and how are they related in the process?

iii. Who are the key participants outside the organisation and how are they related to the

procurement function?

iv. What are the necessary requirements of all the participants before the function can be successfully carried out?

v. Is there a system approach which can facilitate the coordination of the diverse contributions of each participant so that all conflicting interests will be removed or minimized and the function discharged in the best interest of the organisation?

The specific problem that this research wants to investigate is the problem of lack of commensurate coordination of the several activities necessary in the execution of the procurement function. The function traverse several departments within the organisation and several parties outside of the organisation.

The KRPC case study will reveal the true complexity of what is often taken as a simple issue of raising purchase request and getting it serviced. It will also reveal the extent and sophistication of coordination required. In other words, the need to see the function as a system in which all component parts must function properly if the desired results are to be achieved.

On the surface there may appear to be coordination. But on closer examination it will be shown that this coordination is not commensurate with the sophistication of the function and the level required.

Because of the significance and relevance of the procurement function, it is obvious that it must be properly placed in persfective, constantly reappraised to reflect changes and develop strategies to continue to cope and remain competitive.

The Kaduna Refining and Petrochemical Company Limited is used as a case study in order to have a clear understanding of these questions and find valid answers.

1.3 RESEARCH OBJECTIVES.

The objectives of this research therefore are as follows:

i. Identify the KRPC procurement objectives and procedures.

ii. Identify the key participants within and outside the organisation.

iii. Establish the existing level of coordination of these diverse activities.

iv Establish the inadequacy of such coordination level, and come up with the right approach to handling such a very complex function while keeping the organisation competitive as a business unit.

v. Show that the approach developed can be used to evaluate other NNPC business units.

1.4 SCOPE OF THE STUDY.

In order to bring into sharp focus the need for a coordinated approach in a complex industrial procurement process, the roles played by certain key functions and departments are examined. These are:-

i. Procurement Department;

ii. Stock Management Department;

iii. User departments;

iv. Decision Making Unit (DMU) or Tender Committees;

v. Vendors;

vi. Finance & Accounts/Audit Departments;

vii. Management and

viii Government Economic Policies.

As a case study, the way and manner these key areas are related and coordinated in the Kaduna Refining and Petrochemical Company is thoroughly examined.

Appropriate observations and analysis are also made leading to conclusions and recommendations.

1.5 RESEARCH METHOD

This research requires both primary and secondary data.

As a member of the Procurement Department, primary data was obtained from the operating records of the Procurement Department and interview with some key senior staff of the department.

Secondary data was obtained by interviewing some members of staff of the key departments and the vendors servicing the KRPC.

Secondary data was also obtained from the operating records of the Stock Management, Finance and Accounts and User Departments.

Other details used in the research are as a result of actual observations and participation in the procurement process, both at the Procurement Department level and at the Tender Committees level. Interviews were also held with the members of the tender committees.

1.6. SIGNIFICANCE OF THE STUDY.

This research is significant for the following reasons:-

1. No such study has been made in respect of the KRPC.
2. The KRPC is one of the eleven subsidiaries of NNPC. The research findings at KRPC

can easily be adapted to suit the other subsidiaries of the corporation.

3. In its 1992 bi-annual Turn Around Maintenance, the KRPC spent over 1.5 billion Naira to procure materials and repair components.

   Given that Nigeria has three of such refineries at Kaduna, Port Harcourt and Warri, it can be seen that on the average 4.5 billion Naira is spent for such exercise annually.

   Under normal operations, cost of materials and equipment utilized by each refinery are well over one billion Naira annually. With such huge expenditure, it is mandatory to understand and continuously seek improvement in the discharge of the procurement function. This research is a step in this direction.

4. The issue of oil subsidy and perennial fuel scarcity are all tied to the way and manner the procurement function is discharged. Effective and efficient procurement practice in the Plant means affordable and abundant petrol and its derivatives.

   This research is an effort to improve the discharge of the procurement function in KRPC and by adaptation in other business units of the corporation.

1.7 DEFINITION OF KEY TERMS

As much as possible, some key terms in the research have been defined. This is done where the specific words appear for ease of reading.

CHAPTER TWO

LITERATURE REVIEW

INTRODUCTION

This chapter attempts to review current practice in industrial procurement.

The immediate problem encountered is the lack of available literature of scholarly merit in the field. The more reason why this study is a contribution in that direction.

To get round the problem of lack of available literature on current practice in industrial procurement, a survey of what is actually practiced in four companies was carried out. These companies are the KRPC, Port Harcourt and Warri Refineries and Peugeot Automobile of Nigeria (PAN).

This approach has supplemented the lack of scholarly literature. It has also corroborated the need to research more into how Nigerian Companies conduct this all important function.

First the procurement function and the objectives are defined. Then the actual practice in the industries are reviewed.

Finally, the system approach is presented. This approach is believed to be the simplest way to approach a very complex function normally carried out in every manufacturing organisation.

2.2 THE PROCUREMENT FUNCTION

Peter Bailey defined organizational purchasing as the process by which organisations define their needs for goods and services, identify and compare the supplies and the suppliers available to them; negotiate with sources of supply or in some other way arrive at some agreed terms of

trading; make contracts, place orders, and finally receive, accept and pay for the goods and services required.

The procurement function includes all activities in purchasing as described above plus acquisition by any means, the make or buy decisions, more sophisticated procedures for vendor evaluation, product or component testing, more effective communication, information on new sources, materials and equipment, and forecast of supply and prices.

Industrial procurement refers to the procurement function when a person, government or an organisation buys products from industrial manufacturers or producers. The products classified as industrial range from complex machineries and equipment to mass produced supply items.

2.3 THE OBJECTIVES IN PROCUREMENT

Performance is usually judged according to the degree of attainment of defined objectives.

It is therefore necessary to identify the major objectives in procurement, thereby laying the basis for the evaluation of the present practice in KRPC.

It is a general consensus that the following are the major objectives of procurement:-

i] To provide for the continuous operation of the organisation by ensuring availability of goods and services used in the operation of the organisation;

ii] To maintain standards of quality in materials consistent with specifications carefully developed in the procurement process.

iii] To buy equipment, materials, supplies and services at the lowest cost commensurate with acceptable standards of quality and delivery.

iv] To ensure speedy tender process and delivery on time to avoid expensive down-time.

v] To ensure that investment in inventory is at the lowest level consistent with safety and economic advantage.

vi] To develop and receive the necessary services accompanying the purchase of goods and services such as technical support, repairs and maintenance.

vii] To develop favorable long-term vendor relationship and new sources of supply in order to guarantee the continuous availability of goods and services on favorable terms and to make the organisation attractive to do business with.

viii To maintain the company's competitive position in its industry and to conserve its profits, in so far as materials costs are concerned.

When this list is paraphrased, the objectives are to obtain the right quality of goods, in the right quantity, at the right time, from the right supplier, at the right price.

These identified objectives are the guide posts in evaluating the performance of any procurement function in any organisation.

2.5 PROCUREMENT PROCEDURES AND PRACTICE

There are as many variations in the procurement procedures as there are buying organizations. Each organisation develops its version to meet its peculiar needs. However, the essential elements are the same.

2.5.1 THE PROCEDURES IN KRPC

The procedures outlined here are those in use at the Kaduna Refining and Petrochemical Company Limited.

Each distinct activity in the process, its description and the party responsible have been identified.

KRPC PROCUREMENT PROCEDURES

STEP	ACTIVITY	DESCRIPTION	ACTION BY
1	IDENTIFICATION AND NOTIFICATION OF NEED	1. REQUISITION ISSUED BY THE STOCK CONTROL DEPARTMENT FOR REPLENISHMENT OR ESTABLISHMENT OF NEW STOCK 2. REQUISITION ISSUED BY USER DEPARTMENT FOR DIRECT USE ITEMS	STOCK MANAGEMENT DEPT. USERS: PRODUCTION, ENGINEERING ADMIN DEPT.
2	AUTHORIZATION TO PURCHASE	1. STOCK CONTROL VERIFY STOCK CONDITION AND ENDORSES THE PURCHASE REQUEST. 2. USER HEAD OF DEPT. ENDORSE. 3. FINANCE AND BUDGET DEPT CONFIRM AVAILABILITY OF FUNDS 4. DIRECT OR AUTHORIZES THE PURCHASE. (SEE APPENDIX [I] FOR PURCHASE REQUEST)	STOCK MANAGEMENT, USER & FINANCE DEPARTMENTS. MANAGEMENT.
3	PROCESSING OF PURCHASE REQUEST- PHASE I	1. S/LIST PROPOSAL 2. S/LIST APPROVAL 3. INVITATION TO BID 4. RESPONSE TO INVITATION 5. OPENING AND CERTIFICATION OF TENDER BIDS 6. BID ANALYSIS USING PROTIFS 7. RECOMMENDATION DIRECT TO APPROVING COMMITTEE (FOREIGN ORDERS, REPEAT ORDERS, EMERGENCIES)	1. PROC. DEPT 2. MGT (DIRECTOR) 3. PROCUREMENT. DEPT. 4. VENDORS 5. TENDERS COMMITTEE. 6. PROC. DEPT 7. PROC. DEPT
4	TENDER EVALUATION	1. EVALUATION OF TENDER DOCUMENTS FOR COMPLIANCE TO PROCEDURES AND POLICY. (PTO)	TENDER COMMITTEES 1. PURCHASING COMMITTEE (N1.00 TO N500,000.00)

STEP	ACTIVITY	DESCRIPTION	ACTION BY
4	(CONTINUED)	2. INTERVIEW FOR THE FOLLOWING:- a. PRICE NEGOTIATION b. SAMPLE VERIFICATION c. CAPABILITY CONFIRMATION d. REVALIDATION OF INVALID BIDS T. 3. RECOMMENDATION FOR APPROVAL, REFLOATING, SPECIFICATION OR NEED CONFIRMATION	2. MANAGEMENT TENDER COMMITTEE (OVER N500,000.00).
5	APPROVAL TO PURCHASE	APPROVAL OF:- 1. DIRECT RECOMMENDATION FROM PROCUREMENT DEPARTMENT. 2. RECOMMENDATION FROM PURCHASING COMMITTEE 3. RECOMMENDATION FROM MANAGEMENT TENDERS COMMITTEE.	 ENGCOM, OPEXCOM & MEXCOM ENGCOM, OPECOM MEXCOM
6	PROCESSING OF PURCHASE REQUEST PHASE II	1. ISSUANCE OF LOCAL PURCHASE ORDER (LPO) (SEE APPENDIX III) 2. ESTABLISHMENT OF LC 3. EXPEDITING	1. PROCUREMENT DEPT. 2. PROC. & FINANCE DEPT. THEN GROUP EXECUTIVE COMMITTEE. GROUP FAD PROC. DEPT
7	DELIVERY	VENDOR RECEIVE ORDER, OBTAIN FUNDS, PROCURE AND SHIP GOODS.	VENDOR + SHIPPING LINES + MANUFAC-TURERS
8	PROCESSING OF PURCHASE REQUEST PHASE III	CLEARING AND FORWARDING OF GOODS FROM SEA PORTS AND AIR PORTS TO KRPC WAREHOUSE	CLEARING AGENTS
9	RECEIVING & WAREHOUSING	1. RECEIVING GOODS 2. INSPECTION TO SPECIFICATION 3. WAREHOUSING	1. STOCK MGT 2. USER DEPT/ PROC. DEPT. 3. STOCK MGT
10	PAYMENT FOR GOODS ON LPO	AUDIT CHECKS, BUDGET CHECKS THEN PAYMENT.	FINANCE & ACCOUNTS DEPT.

2.5.2 PORT HARCOURT AND WARRI REFINERY CASES.

Both the Port- Harcourt and Warri Refineries have essentially similar procedures as the one outlined here for KRPC. This is so because both are subsidiaries of the NNPC. This means the NNPC has a unified approach to the discharge of the procurement function in the three refineries.

2.5.3 PEUGEOT AUTOMOBILE OF NIGERIA CASE

Peugeot Automobile Company is a joint venture between the Federal Government of Nigeria and the Peugeot Automobile of France.

This company has three distinct group of items procured for its operations.

i. First is the completely knocked down parts (CKD). These are imported from France through the Peugeot Automobile of France. Cost of these parts is repatriated to the parent company by the Peugeot Nigeria LTD.

ii. Second type of parts are the locally produced components used in assembling the cars.

One of the major contributions of the automobile industry is its potential capacity to spin off myriad of other small and medium scale industries which supply parts to the assembly operation.

It is in this spirit that PAN set up time-targeted local parts incorporation programs. So far, This program has seen appreciable progress even though some will say very small progress.

In this regard, it was reported that PAN procure the following parts as listed below-

S/N	PRODUCT	MANUFACTURER & LOCATION
1	Batteries	Associated Battery Manufacturer, Ikeja
2	Various Springs	Auto Springs Co. (Nig) Ltd, Kano
3	Foam Seat Pads	Automotive Compound Ind. Ltd, Kaduna
4	Suspension Device & Shock absorbers.	Automobile Technologies (Nig) Ltd, Kano
5	Paint and chemicals	Barger Paints (Nig) Ltd Ikeja
6	PVC Hoses & Tubing	Augustmoon Plastic Ltd, Ibadan
7	Fuel Tanks, Hoses	Brossette Manufacturing (Nig) Ltd, Kaduna
8	Imitation Leather Seat Covers, Sound Proofing Materials.	Beckers Lay-Tech, Agbor.
9	Safety Seat Belts	Car Components Industries Ltd, Ikeja
10	Tyres	Michelin Ltd, Port Hartcourt, Dunlop Nig Ltd, Ikeja
11	Wheel Weights	Makeri Smelting Co. Jos
12	Carpets	Tabre Factory, Jos
13	Windscreen/ Glasses	Isoglass Ind Ltd, Ibadan
14	Cables	Northern Cables Processing and MFR Co. (NOCACO) Ltd., Kaduna
15	Radiators	Radiators Nig Ltd, Port Harcourt
16	Brake linings and Disc brake pads	Feredo Nig Ltd Ibadan
17	Silencers, Seat frames steering columns	Silencer & Exhaust Pipe Co., Kano
18	Ignition Coils, Hoses and Gaskets	Nigerian Automotive Component Ltd, Zaria

These are few of the components supplied to PAN. There are negotiated terms of supply of these components where quantity, quality, price and time of supply are agreed upon.

iii The third group of items are the daily consumables usually obtainable from the general local market. These are ordered just as is done in KRPC. The need identified, bid invited, analyzed and recommended, then order placed through most competitive bidder followed by delivery and payment.

2.7 SYSTEM APPROACH

The activities identified here as constituting the procurement procedures are very diverse. They are performed by several people in the management hierarchy. There are equally diverse groups of vendors who service the orders under very dynamic economic conditions.

The natural consequence of this situation is the conflict of interests which generate friction instead of results.

Interfunctional conflicts are common mostly as in the following examples.

i] Role conflict when user department may suggest supplier that is rejected by the procurement department.

ii] Price and delivery period may rule over quality and reliability. This will bring friction between procurement and engineering departments.

iii] Budget allocation can also generate friction.

iv] Purchasing department may treat discount as a very important factor and buy large quantities to benefit from the discount without taking into consideration its impact on the warehousing and carrying costs.

These are only a few examples of how conflict of interest do occur.

In Nigeria, ministers, board of directors and top management are changed too often due to political considerations rather than corporate performance. These groups are the driving force in the procurement function especially in large government parastatals and companies. This too often displacement poses threat to the smooth discharge of the procurement function in industry.

It is in recognition of these various problems that the system approach is developed.

THE SYSTEM APPROACH DEFINED.

The system approach is based on the following premise:-

1. The procurement objectives identified can be summarized as buying the right quality and quantity at the right time and price from the right source.

   These fundamental objectives are relevant in every step of the procurement procedure. They are true irrespective of who is buying and what is being bought. The objectives are also true in every buying organisation.

2. In any typical Manufacturing industry, numerous items must be held in stock. This is more true in Nigerian industries due to the dependent nature of the economy on importation of industrial inputs.

3. In any manufacturing Plant, conditions are ever dynamic. A steady operating plant can suddenly develop problems which translate into urgent demand for repair parts.

   Therefore a high degree of preparedness is required to reduce the cost of down-time due to materials and spare parts outage.

4. The buying organisation is dealing with vendors whose objectives is to maximize the returns on their investments.

   This objective of the vendors is inversely related to the objectives of the buying organisation that wants to minimize its costs of operations.

In recognition of these variables and the need to have them in focus, the system approach is conceived.

It is an approach that employs the five basic objectives as the guide posts to use in evaluating the procurement function.

The objectives of the right quality, quantity, time, price and source are super imposed on each step in the procurement chain of activities. The aim being to evaluate the steps in the light of the objectives. When a step satisfies the objectives, then it is safely concluded that it is contributing positively to the procurement plan.

Conversely, when the step does not satisfy the objectives, then it is safely concluded that there is need for corrective action. This evaluation of each step ensures that no step in the process undermines the procurement plan. And since the objectives are the same in every step, then the chain of activities constituting the procurement process are now treated as a system. Since it is the characteristic of a system that its component parts are related and function within a given set of rules.

Therefore the system approach to procurement is when each step in the process is constrained to operate in line with the five fundamental objectives of buying at the right quality, quantity, time, price and source.

Once these objectives are kept as the guidelines for each step, then the function can be discharged efficiently.

This is the approach proposed in order to evaluate current practice in KRPC and find suitable solutions to the shortcomings therein.

It should also be noted that this approach can be used to evaluate any buying organisation with a view to solving the short comings in its procurement practices.

CHAPTER THREE

RESEARCH METHODOLOGY

INTRODUCTION

In this chapter an outline of the research methodology is discussed.

These include an explanation of the type of research method used, why the method is chosen and the manner in which the information used was secured.

The study is an investigation into the present practice in the procurement of materials and services at the Kaduna Refining and Petrochemical Company. Therefore the descriptive research method is used.

DESCRIPTIVE RESEARCH METHOD

Descriptive research is one that attempts to describe a given phenomenon. It gives the picture of a situation or population.

Descriptive research deals with factual and accurate data relating to actual situations or events and it gives the exact situation at a point in time.

METHOD OF SECURING DESCRIPTIVE RESEARCH DATA

There are three basic methods of obtaining data in a descriptive research.

i. Direct observations in which the researcher is physically present to observe events as they occur naturally.

ii. Indirect observation in which the researcher relies on the physical observation of a competent observer.

iii Analysis of records maintained other than for research purposes.

WHY THE METHOD IS USED

The descriptive research method as described above is used for this study because of the following reasons:-

i. Direct observation of events as they occur was made as a member of Procurement Department and secretary of Purchasing Committee.

ii. Indirect observation of other events in the procurement process was made though the opinions of other participating colleagues in Procurement and other departments including the vendors servicing the KRPC.

iii Analysis of procurement records was also carried out as all relevant documents are readily available. Accessing contract document is usually close to impossible for anybody not in the Procurement Department. Usually only panels setup by Government can have easy free access to such records.

METHOD OF SECURING DATA AT KRPC

As outlined earlier, three methods of data collection are available in descriptive research. All of these methods were employed in securing the relevant data . Primary data was secured by the actual observations made of the Procurement Department practice, as a member of the Procurement Department.

Secondary data was obtained by interviewing key officers in procurement and other departments. These officers are the heads of Stock, Maintenance, Production (fuels, lubricant, Petrochemical & Manufacturing Plants), Finance & Accounts and Audit Departments.

Chairmen and members of the tender committees were also interviewed.

Some seasoned vendors were also interviewed.

Finally, available contract records were examined to obtain information relevant to the research.

CHAPTER FOUR

DATA ANALYSIS AND RECOMMENDATIONS

4.1 INTRODUCTION

In chapter II, we have identified the objectives of the procurement function. These are procuring the right quality and quantity at the right time and price from the right source.

We have also described in detail the procurement procedures with respect to Kaduna Refining and Petrochemical Company. By so doing, we have identified the key participants.

In this chapter, we shall take each participating department or influencing factor and identify the contributions each must make in order to achieve the set objectives.

The interdependence, diversity and complexity of the contributions required of each participant confirm the need to handle the procurement function from a system approach. By a systems approach we refer to the situation when all the actions of the participants are performed in a coordinated and controlled manner as to enhance the realization of the identified objectives.

Appropriate recommendations have been made that will ensure the discharge of the function in a coordinated and controlled manner.

As already highlighted in the scope of the study, the major participants discussed are the following:-

i) Procurement Department;

ii) Stock Management Department;

iii) User Departments;

iv) Tender Committees;

v) Vendors;

vi) Finance & Accounts/Audit Departments;

vii) Management and

viii) Government Economic Policies.

4.2 PROCUREMENT DEPARTMENT

This is the deparment charged with the duty of procuring the right quality and quantity of materials at the right time and price from the right source.

The activities required to achieve these objectives depend upon the entire departments that make up the organisation. Therefore the Procurement Department is the focal point where such activities are coordinated to arrive at a systematic approach to the discharge of the function.

This coordinating function is in addition to the activities specific to the department itself. This section therefore discusses those contributions required of the procurement department in order to realize the set objectives.

Now we bring into use the concept of the system approach earlier described in order to X-ray the procurement department and see what contributions are required of it in order to achieve the overall procurement objectives.

OBJECTIVES	REQUIRED CONTRIBUTIONS	RECOMMENDATIONS
QUALITY	The procurement department can influence the purchase of the right quality of supplies in the following manner: i. Cross-checking all specification on the Purchase Request. Where there are ambiguities, they should revert to the user to furnish more accurate specification or additional details like engineering drawings, samples etc. ii. When materials list is ready to be sent to the short-listed bidders, it should be cross-checked properly to eliminate any typographical errors. This is esssential since the computer operators are not experts in the technical specifications. iii When the bids are returned, again they should be cross checked to fish out undesirable errors. Quotations must conform to the specifications in all respect.	Always cross-check specifications at each stage. It is never too late to make corrections.

OBJECTIVES	REQUIRED CONTRIBUTIONS	RECOMMENDATIONS
QUANTITY	The right quantity can be achieved if every purchase request is checked to see that the reorder levels and maximum stock levels are observed. All quantities on order must conform to the requirement of economic order quantities (EOQ)	Check all Purchase Requests for compliance with economic order quantity. Return all Purchase Requests not complying back to Stock Management Dept.
TIME	A lot depends on the Procurement Department before a timely purchase is made. To this end the following are necessary:- i. Short-list proposal for Management approval must be according to the capabilities of the vendors to execute the order. Wrong short list results in avoidable delays.	Categorize and rate all vendors. This will ensure a scientific approach to the short-listing of vendors.
	ii. Material list and bid analysis is done by computer in KRPC. This is good in handling massive data. But a basic requirement of the computerized process is that there must be sufficient terminals and operators to handle the massive data. Otherwise less than adequate terminals and operators create bottle necks instead of enhanced speedy processing of the data.	Provide adequate PCs and train everyone to be able to operate them. At least each buyer should be able to operate the PC. This will totally eliminate all constraints in processing procurement data.
	iii. As much as possible, every purchase request must be accompanied by a price guide to the tender committees. This way no award will be made in error with the consequent loss of time when the vendor fail to perfect the order.	Always accompany each purchase request with a price guide. This helps the tender committees to make sound decisions.

OBJECTIVES	REQUIRED CONTRIBUTIONS	RECOMMENDATIONS
TIME (continued)	iv. Repeat Purchases should be removed from normal purchases. These type of purchases only serve to congest the processing centers. For example, the computer time taken by these type of purchases can be recovered and used for normal purchases. v. Emergency Purchases are many in an operating plant. This is so because some equipment or its repair components may not be stock items. When the need for such component arise, the system must be capable of doing away with bureaucracy and getting the desired requirements. Also, from this learning process, advise Stock Management Department to establish stock levels for such components.	Identify repeat purchases and design a workable format for executing them. This will decongest the processing time, leaving it for more serious pressing requests. Invite very capable vendors for such tasks. Establish stock levels to avoid repeat situation.
PRICE	Buying at the right price can be influenced in the following manner. i. Proper short list ensures competition. It is therefore basic to make sure that the short listed suppliers are capable of perfecting the order when the award is made. Improper shortlist may lead to loss of time due to orders not perfected. And by the time a capable vendor is given the order the price may have gone up due to inflation.	Categorize and rate the vendors according to agreed standard rating procedures.

OBJECTIVES	REQUIRED CONTRIBUTIONS	RECOMMENDATIONS
	ii A well equipped and manned Market research unit is essential in controlling prices. Since the KRPC is buying from all over the world, it is necessary to have a well equipped market research unit. This will help guide the tender committees in their deliberations. iii Quick processing of requests ensure that we are ahead of inflation. Therefore it is always necessary to do away with all unnecessary protocols that will delay the processing of the requests. iv. From the Market research and statistics section of the procurement department, reports should be compiled that advise on inflation trend on all major cost items. This in turn should be used to advice Stock Management Department to revise stock levels. Economic order quantities should also be adjusted in the light of these statistical reports. v. The procurement department should also review the working factors periodically and advice management. For local purchases, cost of goods plus 50% of the cost as profit and handling charges. For foreign purchases, cost of goods plus 80% of the cost as profit and handling charges.	Equip the market research unit with Telephones, Faxs, Serviceable vehicles, Brochures and Catalogues. Encourage the attendance of trade fairs to see new potential suppliers and supplies. Compile statistical reports on economic trends.

OBJECTIVES	REQUIRED CONTRIBUTIONS	RECOMMENDATIONS
	It is often necessary to review these working factors in view of the rapid changes in tariff regulations and monetary policies in the country. This is necessary in order to make it possible for the vendors to want to service the KRPC. When this is not done, many orders are not perfected. And by the time the factors are adjusted, the increase in cost of the goods to KRPC is normally substantially high.	Review and advise management on the working factors periodically.

SOURCES	The choice of the right source is almost the exclusive responsibility of the Procurement Department. It should be realized that over 80% of the purchases are industrial machinery and chemicals. The choice of whom to buy from was made as early as when the plants were being designed. This is so because once equipment is installed, the original manufacturer may be the only source for the repair components.	
	However, certain repair components are not proprietory to the manufacturer. They are normally from sub-suppliers. An example is like Peugeot Automobile Company and its sub-suppliers of batteries, tyres, paints etc.	Always try to reach the sub-suppliers to the manufacturers.
	So the right sources are always the sub-suppliers to the equipment manufacturers. Therefore procurement department should short list vendors that have the capability to identify and reach these sub-suppliers. This result in huge savings in operation and maintenance costs.	This eliminates the overhead cost of the manufacturer who is usually big. This is substituted by the overheads of the smaller vendors handling the order. The net result is savings for the KRPC.

These identified contributions which lead to the recommendations are key inputs that the Procurement department must make. This is in addition to the coordinating function of the contributions of other participants in the procurement process.

4.3 STOCK MANAGEMENT DEPARTMENT

The Stock Management Department is a major contributor to the procurement function success or failure.

In this section, we have traced how the Stock Management function can make positive contributions to the procurement objectives.

These necessary contributions are identified followed by the relevant recommendations.

OBJECTIVES	REQUIRED CONTRIBUTIONS	RECOMMENDATIONS
QUALITY	Stock Management Department can contribute to the purchase of the right quality of materials in the following manner.	
	i. During the purchase request compilation, specification writing is important. And over 90% of the purchases are for stock replenishment normally compiled by stock management. Therefore the right quality materials begins from the right specification accompanied by relevant drawings, samples, etc.	Provide adequately specified purchase requests.
	ii. Stock Management receives the goods and arrange for inspection by the user. So the right quality can be ensured if Stock Management Department arrange for the inspection of delivered goods. Wrong specification should be rejected and Procurement department informed accordingly. This will be basis for further shortlisting of the supplier.	Always arrange for inspection of received goods.
QUANTITY	i. The right quantity is that which conform with the economic order size. Stock control is the main department responsible for determining this.	Always request quantities that conform with economic order quantity (EOQ)
	ii. Good storage facility means less damage to items held in stock. And this in turn means less replacement rate of damaged items. The net result means less quantities are ordered.	Always provide storage facilities that preserve items to their maximum shelf life.
	iii Normally materials stocked are susceptible to pilferage. Therefore it is very important to ensure adequate security of stocked items.	

OBJECTIVES	REQUIRED CONTRIBUTIONS	RECOMMENDATIONS
	When there is no losses due to pilferage, there is less need for replacements, hence less quantities on order.	Provide adequate security in all warehouses.
PRICE	i. Economic order quantities (EOQ) have direct bearing on the price at which stock is replenished. As much as possible this should be observed. Economic order quantities result in discounts from the manufacturers. ii. Certain equipment and repair components are very expensive. Therefore the carrying cost is heavy. And when several of such items are held in stock, the carrying cost is over blown. It is good practice to identify such items and procure them on a "just-in-time" basis. When the items are purchased on this basis, their cost is reduced. The critical requirement is determining the lead time between placing order and delivery. iii. Certain chemicals used in operation have shelf life. Therefore the quantity ordered and stocked should always be mindful of this. Otherwise expired chemicals, bought in large quantities to enjoy discounts, could turn out to be expensive.	i] Raise PR in line with (EOQ) ii] Identify items with high carrying costs and order such items on "just-in-time" basis. iii] Match stock level of items with their consumption rate and shelf life.

OBJECTIVES	REQUIRED CONTRIBUTIONS	RECOMMENDATIONS
TIME	Buying at the right time is influenced by stock management in the following manner:	
	i. Observing reorder levels and raising the purchase request for replenishment. When reorder levels are not observed, the result is emergency purchases that create confusion at the user department where the items are badly needed and at the procurement department where hurried purchases have to be arranged. Therefore once the safety limit is reached, new request for replenishment must be raised.	Always observe reorder levels
	ii. The KRPC is located remotely from the manufacturers. This peculiar situation demand that reorder levels should be observed. Then for high cost items, buying on "just-in-time" basis should be the practice. Record of lead times between placement of order and delivery should be analyzed so that the "just-in-time" purchasing practice can be successful.	Analyze lead times for each order. Then on this basis practice JIT purchasing
	iii There are over 100,000 stock items in KRPC. It is essential therefore to computerize the stock records for ease and speed of retrieval of information.	Computerize stock management for easy and speedy processing. This is an ongoing exercise now in KRPC.

OBJECTIVES	*REQUIRED CONTRIBUTIONS*	*RECOMMENDATIONS*
SOURCES	Since Stock Management Department raises over 90% of the purchase requests, it is clear they can influence the source of purchase if they furnish complete information on the manufacturer/vendor of the equipment.	Provide on the PR address of the manufacturer, phone and fax numbers. Indicate if it is actual manufacturer, vendor or sub-supplier.

These are the key contributions required of Stock Management Department in order to achieve the procurement objectives.

4.4 USER DEPARTMENTS.

User departments refer to those that ultimately utilize the procured supplies to run the plants. The major users are the production and manufacturing Departments. They utilize the production supplies to produce the products.

Maintenance, Engineering and Technical Services Departments utilize plant spare parts to maintain and keep the plants producing.

In the following table, an evaluation of the way the user departments can contribute in achieving the objectives is presented. Then recommendations are made that will facilitate the users contribution in realizing these basic objectives.

OBJECTIVES	REQUIRED CONTRIBUTIONS	RECOMMENDATIONS
QUALITY	Most purchase requests are raised by the user. Therefore specifying the need correctly is very important. It is also very important not to over specify or under specify. Over specifying add to the cost of purchased items without commensurate additions in value. Conversely, under specifying leads to poor quality supplies which can cause plant failure leading to expensive down-time. Also poor quality supplies result in poor quality products. Incomplete specification leads to longer processing time of order since additional information must be provided to the suppliers at a later stage in the processing.	Provide optimum specification that will give value.
QUANTITY	Properly run and maintained plants require less maintenance, less maintenance means less consumption of repair components. The plants can attain this operating condition when operated under excellent care. The effect of good maintenance on quantities on order is to reduce them to a level commensurate with profitable production.	Make sure plants are properly maintained. Run the Plants under excellent care. Preventive maintenance rather than break down maintenance should be instituted.

OBJECTIVES	REQUIRED CONTRIBUTIONS	RECOMMENDATIONS
PRICE	The required contributions in [1] & [2] above will also influence the price.	
	When over specified, the order costs much more than is necessary. When under specified, the effect is seen in the rejection rate in finished products.	Always specify optimally
	So user can contribute in buying at the right price by providing optimum specifications.	
	Also, worn out equipment should be recommended for replacement. This will reduce maintenance cost. Worn out equipment whose maintenance cost is more than the replacement cost should be identified and their substitute (new models or existing models) acquired. This action will result in buying the right items at the right price.	Identify worn out equipment and recommend replacement to counteract high maintenance cost.

OBJECTIVES	REQUIRED CONTRIBUTIONS	RECOMMENDATIONS
TIME	Buying at the right time is very important to a plant like KRPC. Some equipment are very critical such that their failure results in shut down of whole process units. The down-time is very expensive running into millions of Naira per day. Therefore, it is important that the users (especially Production, Engineering and Technical services and Maintenance departments) give adequate notice of the plant conditions. These in turn leads to the right decision to place order and stock critical repair components. Preventive maintenance rather than break down maintenance, and predictive inspection and testing of plant conditions are therefore critical. Just-in-time is the new approach in procurement. Some stock are very expensive to carry . So when the plant conditions are monitored properly, it is possible to place order exactly when the need arises. This way plant shut down is avoided and carrying cost of expensive stock is avoided.	Always monitor plant conditions. Recommend stock levels or new stock level establishment so as to permit ordering in time. Preventive, and predictive inspection rather than break down situation should be the practise.

OBJECTIVES	REQUIRED CONTRIBUTIONS	RECOMMENDATIONS
SOURCE	New equipment are continuously developed to counter the short-comings of their predecessors. Therefore Engineering and Technical Services Department should be able to keep abreast of these developments and advise both Stock and Procurement departments of the trends so that the best equipment is bought from the best source.	Recommend new sources based on trends in technological developments.

These are the key contributions required of the user departments in order to achieve the set procurement objectives. These contributions are not given in the required level in KPRC.

4.5 THE TENDER COMMITTEES

There are six tender committees in KRPC. Two are recommending while the remaining four are approving committees.

4.5.1 RECOMMENDING COMMITTEES

The two recommending committees are as follows:-

1. Purchasing Committee (PC) responsible for recommending purchases of up to N500,000.00.
2. Management Tenders Committee (MTC) responsible for recommending purchases over N500,000.00.

Members are drawn from the User department and the Procurement Department. Membership is reviewed annually by the Management.

These two committees receive complete tender documents from the Procurement Department and scrutinize them for propriety in all aspects of the tender.

The major criteria for recommending any purchase in favour of any of the bidders are price, delivery period, reputation of the supplier and quality of sample where applicable.

We now examine how the recommending committees contribute to the attainment of the basic procurement objectives.

OBJECTIVES	REQUIRED CONTRIBUTIONS	RECOMMENDATIONS
PRICE	Buying at the right price is a major term of reference of the recommending committees. This is achieved by insisting of the Procurement Department to furnish each purchase request with a market research guide. When none of the bidders is close to the researched market price, negotiation is done by inviting all or a few of the bidders.	Conduct price negotiation to obtain good bargains. Insist on Procurement Department to Provide price verification report.
QUALITY	The right quality is also of concern to the recommending committees. This is achieved by making sure all purchases are properly specified. Where necessary, samples are requested from the user to show to the bidders or samples are obtained from the bidders and the user invited to select the right one.	Always clarify ambiguity on specification.
QUANTITY	As members of the committees are also members of the user departments, they occasionally recommend reduction/increase of quantities ordered. When unit of measure is not clear on the purchase request both user and the bidders are contacted by the committee to clarify. The committee also should check the stock parameters and advise as appropriate.	All PR's should be in compliance with the economic order quantities.
TIME	Buying at the right time is influenced by the recommending committees in the following ways:- i] When the validity of the quotations have expired due to long processing time at the Procurement department,	

OBJECTIVES	REQUIRED CONTRIBUTIONS	RECOMMENDATIONS
	the committees arrange for an interview whereby the bidders revise and revalidate their prices.	
	An award made on the basis of revalidated quotation is normally subject to no price review or part-delivery.	Revalidated quotations eliminate request for price review and therefore the attendant delays.
	This means the successful bidder does not come back for price review, which is often rejected leading to refloating of the tender.	
	Refloating introduces a minimum time loss of 3 months or maximum of over 12 months.	
	Part-delivery means those items not delivered are now to be refloated with similar time loss as above.	
	ii By interviewing the bidders, the committees have opportunity to see them and assess their competence to handle the order. By so doing, unnecessary loss of time is avoided.	Select competent supplier. This has bearing on timely delivery
	iii Also when an order is critical, the committee makes sure the most reputable bidder is allowed to handle it even if it costs more. The assurance of timely delivery is always emphasized to the supplier.	

SOURCE	Again as pointed out above, the right source is always sought after by the committee. This is achieved mainly by interviewing the shortlisted bidders. The best in terms of price, knowledge of the items required and previous record of performance is selected and recommended for the contract	Interview vendors to reveal the most competitive to do the job.

4.5.2 APPROVING COMMITTEES

There are four approving committees. These are:-

i ENGCOM -- Engineering and General purpose Executive Committee

ii OPEXCOM -- Operations Executive Committee

iii SERVCOM -- Services Executive Committee

iv MEXCOM -- Management Executive Committee

Each of these committees is chaired by a director. The purchases for the departments under each director are presented to the committee chaired by that director.

MEXCOM is made up of the three executive directors and the Managing Director as the chairman. All purchases over N500,000.00 are recommended to MEXCOM while those below are for the rest of the committees.

All of these committees receive recommendations from the recommending committees and approve or reject the recommendations. Criteria for approval of the recommendations is to meet the procurement objectives of the right quality, quantity, time, price and source.

The approving committees ensure that these objectives are used as the basis for the recommendations before approving.

4.5.3. NEW TREND

Presently all purchases are sent to the Lagos Head Quarters of the NNPC for approval. That means, the approving committees of KRPC only endorse the recommendations. The approval is now by a group executive committee (GEC) at the head office. The chairman is the Group Managing Director.

This is a new development which is seen as a temporary measure. All the other Nigerian refineries also submit their procurement contracts to the GEC for approval.

4.6 VENDORS

4.6.1 INTRODUCTION

There are well over 2000 vendors registered with KRPC and the number is increasing daily. Nonetheless only about 15% of the number are actively serving the KRPC.

The KRPC does not require so much number of vendors for the services it needs. However, because KRPC is the largest single investment of its kind in the North, most companies find it beneficial to service it.

These large groups of vendors are not categorized or rated in a formal manner as to facilitate mutual benefit to the vendors and the KRPC. The effect of which is extreme pressure on the procurement system in trying to sort out the right vendors for the right service.

This section will therefore examine the existing state of affairs and recommend appropriate measures that will bring the best benefits to both KRPC and its vendors.

4.6.2 VENDOR REGISTRATION

Vendors are registered after completing and submitting the registration form and credentials.

The basic requirements for registration are:-

1. Reference later from the bank;
2. A photocopy of current tax clearance certificate;

3. Curriculum vitae of key personnel (applicable to consulting companies only)
4. *Two passport size photographs;*
5. certificate of registration of business premises;
6. certificate of incorporation/registration and
7. Non refundable registration fees which is according to the desired category.

4.6.3 CATEGORIZATION

There is an attempt at categorization of the vendors at the registration stage. Each applicant for registration pays the fees for the category of contract he intends to handle. This Categorization stops right at this stage. It has no relevance in actual practice to the contract the vendor is allowed to handle.

Below is the categorization made:-

CATEGORY	NATURE OF WORK	VALUE	REGISTRATION FEES
A	Minor supplies, services and construction works	up to but not exceeding N500,000.00	N500.00
B	General supplies, services and construction works	up to but not exceeding N1,000,000.00	N1000.00
C	Major supplies, services and construction works	Unlimited	N1500.00

For complete registration details see the registration form in appendix III.

4.6.4 OBSERVATIONS

These are observations of actual practice in KRPC. The observation are the specific ones that have relevance to our analysis of how the vendors and the KRPC can mutually benefit.

1. VENDOR CATEGORIZATION/RATING

There are various equipment, materials and services required by the KRPC. Being an industrial concern, these supplies and services are complex, highly technical, requires heavy capital and too numerous in their variety.

They may be categorized as follows:-

i. Rotating machineries;

ii. Static plant equipment;

iii. Electrical/Instrumentation equipment;

iv. Chemicals;

vi. General supplies and

vi. General civil construction and services

These array of equipment and chemicals are sourced and bought from manufacturers all over the world.

Therefore for a vendor to be able to service any category, he requires specific technical and international business know-how. Also required is large reserve of foreign exchange. In view of this situation therefore, it is essential to categorize the vendors and rate them according to their capabilities. This will facilitate a systematic way of shortlisting them for any contract. At present, there is no such formal documented useable vendor

categorization and rating in KRPC inspite of the obvious need.

As a result of this lack of formal vendor categorization and rating, the Procurement Department spends considerable man- hour in handling the extreme pressure from the vendors in their bid to be given chance to service the system.

This situation have direct bearing on the unusually long processing time of the orders. Each purchase request requires usually eight vendors to bid for it. This places demand on processing facilities and add to the cost of processing which would have been unnecessary.

PROPRIETORY ITEMS

Some equipment and chemicals are bought on proprietary basis. This means only specific vendors are allowed to supply them.

This is as a result of the following:

Criticality of the supply to operations. Such items that their outage can cause plant shutdowns are handled on proprietary basis.

When the manufacturer responds only through his appointed agents.

This class of equipment and chemicals constitute a sizeable percentage of the required supplies in KRPC. Only reputable vendors are accorded this status. And it is a function of management of the day.

There is no competitive bidding and so the prices are accepted on the basis of trust.

The arrangement seems good in that it removes critical equipment and chemicals from the open bidding thereby ensuring maximum plant on-stream availability and reliability.

This proprietary categorization of the vendors is the only attempt towards a systematic bidding.

Other equipment and supplies not under this categorization are for open bidding on a shortlist drawn on the instincts of the procurement department and directors.

5. CONFLICTING INTERESTS

The vendors are the only participants in the procurement process external to the company. For this reason, it is important to note the contradiction and conflict of their interests with that of KRPC.

Since every vendor seek to maximize his profit, he will then mostly quote the maximum possible price.

The KRPC on the other hand seeks to minimize its costs, therefore it will always demand the lowest possible price.

Similarly, in foreign procurement where the vendor is normally paid **before** delivery by letter of credit, undue delays occur between letter of credit establishment and delivery to KRPC.

This is against KRPC's interest that is always after delivery in the shortest possible time.

In local purchase order (LPO) procurement where the vendor is paid **after** delivery, there is undue delay by KRPC in settling these accounts payable. This is not in the best interest of the vendor who bears the cost of capital for the period the payment is delayed.

In terms of quality most vendors are tempted to supply the low quality cheep items especially where confirmation of the quality is difficult. By quoting for the best quality

expensive items and supplying the cheep low quality version, the vendor hopes to maximize his returns on investment. Again this is in conflict with the procurement objectives.

Below is the summary of the conflicts with respect to the procurement objectives.

OBJECTIVES	VENDOR'S INTEREST	KRPC's INTEREST
PRICE	Maximum profit, therefore maximum competitive price	Minimum cost, therefore minimum possible price
QUALITY	For low level vendors, temptation to supply cheep quality at the price of best quality, especially where it is not easy to confirm. Only top level vendors strive to supply best quality although at very expensive rate.	Top quality consistent with the requirements of the plant operations.
TIME	For LC procurement, vendors do not push hard to meet delivery schedules sine they are paid before delivery.	For LPO procurement, undue delays in settling accounts payable by KRPC.
QUANTITY	Not easily deviated	No conflicts.

Since equity aid the vigilant, it means each party (KRPC & vendors) must look out for its interests and develop strategies to achieve them.

4.6.5 RECOMMENDATION

In view of the general observations and the analysis made, the following are recommended:-

1. Vendors should be categorized on the basis of type of industrial equipment they will supply.

   Within each category of vendors, they should be rated in accordance with proven technical and international business know - how coupled with evidence of financial capacity and proven performance. Just as in the case of tender committees, management should also set up vendors categorization and the rating committee with members drawn from the procurement, stock, finance, audit and user departments. Categorization and rating should be made on the basis of previous performance. For a recommended sample rating table see the appendix IV..

2. KRPC is supposed to maintain a minimum stock balance of two years operational spare parts. Therefore on biannual basis, the proprietory items should be made open for bidding.

   The computerized stock control should allow the sorting out of potential stock replenishment need. This should then be the basis for bidding on biannual basis by interested competent vendors. The most competitive and competent bidder should then be accorded the proprietary status until the next two years when the process should be repeated.

The KRPC will benefit in the following ways when these recommendations are adopted:-

i. Reduced processing time and cost;

ii. Quick delivery;

iii. Competitive bidding;

iv. Reliable quality;

v. Enhanced reliability of vendors and

vi. Since the vendor rating is done by a committee, it means shortlisting will be independent of the highly mobile management/board of the company.

4.7 FINANCE & ACCOUNTS/AUDIT DEPARTMENTS.

Finance & Accounts Department have the following dealings with the procurement process:-

1. Budget clearance of purchase requests when first raised.
2. Budget clearance of Local Purchase Order (LPO) based on actual award price.
3. Raising the letter of credit (LC) in the case of Foreign procurement,
4. Raising check in the case of Local Purchase Order and letter of intent.

Audit Department has the following dealings:-

1. Cross checking of and witnessing delivery of goods at the KRPC Warehouse.
2. Cross checking all tender documents including shipping, clearing /forwarding and inspection documents.

We now analyze how the two departments can enhance the procurement objectives.

TIME	When the recommendations in objectives 1. & 2. are observed, vendors will try to meet standard and therefore eliminate the associated time loss in processing orders that fall short of agreed specification of quality and quantity.	Timely payment enhances the liquidity and credit worthiness of the vendors. This in turn makes it possible for them to continue servicing the KRPC on a timely efficient basis.

4.8. MANAGEMENT

The management here refers to the top management made up of the Managing Director and the Executive Directors for Operation, Engineering & Maintenance and Services. Their role is significant in the procurement process and is manifested in the following Manner:-

MANAGEMENT'S ROLE

i. Authorizes all purchases.

ii. Approve all purchases.

iii. Control the Budget.

iv. Appoints all key personnel in Procurement, Stock management, Accounts, Audit and User departments.

v. Appoints all the members of the tender committees.

vi. Approve the shortlisting of all vendors.

vii. Set all the business goals and objectives.

viii. Bears the responsibility for overall business performance.

Viewed from this perspective therefore, authority for all actions is derived from management and the final responsibility for overall business performance rests squarely on the management. Accordingly therefore, it is recommended as follows:-

1. Management has the task of achieving result through people. Therefore competent staff should be appointed and complete authority commensurate with the responsibilities should be given.
2. Management should review the set objectives and establish new standards consistent with the dynamic Nigerian economy and the world economy in general.
3. Management should ensure the implementation of the outlined recommendations in this study for each department /participant in the procurement process.

4.9 GOVERNMENT ECONOMIC POLICIES

It is an obvious fact that every organisation is affected by the rapidly changing economic environment. Today in Nigeria this is one of the most influential factor in the success of any business.

Therefore, Procurement Department should be able to consistently monitor the policies as they affect the procurement function and develop coping strategies.

Notable parameters to watch are:-

i] Changes in the foreign exchange;

ii] Tariff on imports;

iii] Inland transportation charges and

iv] Bank interest charges.

These factors are always changing and they have direct bearing on the cost of supplies. Accordingly, the working formula for paying contractors for their services and supplies should be constantly re-evaluated to reflect the changes.

This will make it worthwhile to do business with KRPC and therefore enable long term vendors-KRPC relationships.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATION

5.1 INTRODUCTION

This chapter summarises the presentation of the subject matter of this study.

The objectives of the research and steps taken to achieve the objectives were all summarized.

Then conclusions are drawn based on the findings of the study.

Finally recommendations are made on the uses of the reaserch findings.

5.2 SUMMARY

This study was undertaken to examine the Procurement Practice in Kaduna Refining and Petrochemical Company. The objective being to establish the relevance of the function and its complexity due to the diverse contributions required to discharge it.

Then in recognision of the diversity of the contributions, effort was made to trace the level of coordination.This coordination was found to be below what is required.

In order to understand the function in all its facets, the system approach was developed. This approach recognises that the function must be operated as a system. This means all its component parts must operate within a given set of rules if its desired results are to be achieved.

Eight participants were identified as the component parts making up the procurement function. These are the Procurement, Stock Management, Users, Finance & Accounts and Audit Departments, Vendors, Tender Committees, Management and Government Economic Policies.

Each of these participants was examined to see what contributions it must make in order to satisfy the five basic procurement objectives. It is believed that if such identified contributions are made, then it will lead automatically to an efficient procurement practice.

i] Begining with Procurement Department, it was discovered that checking specifications on purchase request and stock level parameters will go a long way to ensure that the right quality and quantity are purchased. Categorizing and rating vendors, using computers, separating repeat from non-reapeat purchases and placing orders through best rated vendors will ensure getting orders at the right time. This is not the practice now. Competent market research unit also ensures that the contracts are made in good judgement thereby eliminating time waste when vendors fail to perfect the orders. Presently no competent market research unit. For buying at the right price, the department must have a well equiped market research unit. These equipment are telephones, fax machines, vehicles, brochures and catalogues.

To buy at the right price, the department must also be able to compile statistical records of purchase prices and general economic trends. This way it can forecast and plan ahead. This is not the practice now in KRPC.

The right source is always the sub supplier to the main equipment manufacturers. Most purchases are for repair components manufactured by sub-suppliers.

Presently very few vendors know how to reach these sub-suppliers. This is adding to procurement costs. Therefore vendor rating must be instituted.

These are the key areas needing improvement in the Procurement department.

i. In the case of Stock Management Department, they must raise purchase requests that reflect economic order quantities. Adequate storage and preservation facilities must be provided.

Presently, more than fifty percent of the purchase requests do not even indicate stock levels not to talk of economic order quantities. This practice has negated the objective of the right quantity.

Buying at the right time is best influenced by the Stock Management. Reorder levels must be closely observed since all components could turn out to be critical to operations. Present practice does not respect this very religiously as would be expected of a refinery that have very expensive down-time.

Just-in-time purchasing save carrying cost but it is hardly practiced in KRPC. Too many purchase are done on emergency basis which increases the cost of the orders.

Computerized stock control is important for the size of inventory in KRPC. This is recognised by Management and is presently receiving top level attention.

Adequate security and preservation of materials ensures that losses due to filferage and damage are eliminated. KRPC has an excellent practice in this regard.

User Departments, especially maintenance and production help reduce unnecessary purchase if the plants are operated and maintained properly.

Preventive maintenance is very crucial especially since certain failures not only damage the equipment concerned but may also lead to large scale damage of whole process units due to fire.

Present preventive maintenance in KRPC is not commensurate with the risk of failure of equipment. This may be partly due to ageing of the equipment, low staff morale and lax safety practice.

Production, Maintenance and Engineering departments could help in buying at a good price by specifying optimally. Replacing worn out old equipment with new ones can eliminate high maintenance costs. Buying at the right time can also be achieved where there is adequate plant monitoring by production and inspection.This will give advance notice of imminent plant needs.

iv. The Tender Committees play crucial role in the process. They normally negotiate price, delivery period and quality. They also check propriety of the procedures.

v. Finance & Accounts/Audit departments help in successful procurement by ensuring speedy payment of commitments, proper budget control and honest auditing practice.

vi The vendors are external to the department. Their objective of maximum returns on their investment is in inverse relationship to that of the company. It is therefore important to recognise this.

Vendor rating is important especially in KRPC. This is so because there are too many registered vendors who have no capability for the sophisticated international procurement.

vii Management has the responsibility for overall business performance. Their role is in appointing able staff to the departments responsible in the procurement functions. They are also to approve capable vendors to execute the contracts.

viii Government Economic Policies are ever dynamic and so must be constantly appraised to reflect changes. Government policy on exchange rates, tariff, bank interest rates etc. directly affect the procurement function.

These are the highlights of the findings of this study.

5.2 CONCLUSIONS

It is now right to conclude from the findings of this study that:-

i. Present Procurement practice in KRPC need to be improved. Almost all the participants in the process need to improve their conduct in many ways as clearly identified.

ii. The procurement function indeed traverse several departments and even beyond the organisation. The approach developed in this study is the sure way to discern the interplay of the diverse contributions required.

It must be seen and operated as a system. Failure in any of its component parts means total failure of the function.

iii. The system approach can be employed in other industrial business units of the NNPC and beyond. The system approach can be used to adequetely analyse and improve the procurement practice of such units. The approach is a universal analytical tool.

iv The function is very relevent to business competitiveness. There is no how a business can be profitable when the procurement function is not performed properly.

v. Vendors normally have their objectives in inverse relationship to that of the company. Goverment economic policies are also independent of the company.

So, while it is possible for the company to control factors internal to it, it is important to realise the unique position of these two factors that it does not control.

Accordingly therefore, coping strategies must be constantly developed to place the company at a position of bargaining power.

vi) Procurement budgets for companies as the KRPC are very huge running into billions of Naira and the industry is very relevent to the well being of the economy. Therefore proper understanding of the function is very important.

5.3 RECOMMENDATIONS

In view of all that is discussed so far, it is now possible to recommend as follows:-

i. The system approach to industrial procurement should be used to analyse the procurement practice in the NNPC group of companies with a view to finding lasting improvements. It has already been demonstrated that the KRPC case revealved vital deficiencies. The function is such that its success can only be certain where there is total understanding by all concerned and a ready willingness to work towards the objectives.

ii. At least on annual basis, executives in various management hirarchy in the KRPC should be exposed to this system approach through a seminar organised to impart such vital appreciation of a function so important.

iii. Erratic plants with too much down-time lead to product scarcity. And when such product is so critical as petrol and its derivatives, then this translates into acute pains in the daily economic life of the people.

Erratic Plants are as a result of poor procurement practice. Also the cost of petrol and its

derivatives and the issue of subsidy are all related to the procurement practice in the refineries. For these reasons government must look into the procurement practices in the NNPC if it is to bring constant supply of the products at affordable prices to the general public.

iv. This research can be given added significance if the tentative losses incured as a result of poor procurement practice can be computed. It is therefore recommended that another research in this direction be carried out.

v. Today Nigeria is a huge debtor nation. This state of affairs is as a result of the cummulative ill-understood and ill-performed procurement actions of the various business entities in the economy. Therefore it is mandatory that Government and captains of industry should be exposed to the system approach of procurement. This will facilitate better procurement practices in the country.

vi Nigerian entrepreneurs should adopt the Peogeot Automobile approach. That of local content substitution. Easy to produce components should be identified by the KRPC. Through the Business Development department , these parts should be introduced to the Nigerian enterpreneurs.

This will mutually benefit KRPC and any such vendors who take the initiative of manufacturing and supplying such components.

vii. Billions of Naira is spent on the Turn Arround Maintenance (TAM) of the refineries.This services are provided by large multinational companies.

Careful study can show how Nigerian companies can begin to render such lucrative services.

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KADUNA REFINING & PETROCHEMICAL CO. LTD.

(MATERIALS MANAGEMENT DEPT)

PURCHASE REQUEST FORM

PURCHASE REQUEST NO

SHEET OF

DIRECT USE | REPLENISHMENT | STOCK ESTABLISHMENT | T.A.M.

DELIVERY TIME

DATE OF ISSUE

REQUESTING DEPARTMENT	COST CENTRE	JOB NO	ACCOUNT CODE NO	DELIVERY PRIORITY	DELIVERY POINT	DATE OF COMPILATION
				NORMAL URGENT EMERG.		

ITEM NO	N.N.P.C. CODE NO	DESCRIPTION (STATE FULL DETAILS, MAKE, MODEL, PART NO. ETC.)	U/M	QTY REQ.	ESTIMATED UNIT PRICE ₦	ESTIMATED UNIT PRICE K	ESTIMATED VALUE ₦	ESTIMATED VALUE K	STOCK BALANCE	STOCK LEVEL RL	STOCK LEVEL ML

REASON FOR REQUISITION

SUGGESTED SUPPLIERS

INSPECTION. TESTING POINT	FIN. BUDGET CONTROL	PREVIOUS PR NO	DATE
MANUF PREMISES	NAME	PREVIOUS L PO NO	DATE
DELIVERY POINT	DESIGNATION	ESTIMATED TOTAL COST	
AFTER INSTALLATION	SIGN		
	DATE		

OFFICERS	COMPILER	STOCK CONTROL	WAREHOUSE	REQUESTING DEPT. HEAD	USER DEPT. HEAD	MATERIALS MANAG. HEAD	PURCH. SECTION
NAME							L.P.O.
DESIGNATION							DATE
SIGNATURE							AMOUNT
DATE							SIGN

AUTHORIZATION APPROVED REJECTED REASON FOR REJECTION

Managing Director Executive Director Operations Services NAME SIGNATURE DATE

DISTRIBUTION: ORIGINAL Purchasing Section, DUPLICATE: Purchasing Section, TRIPLICATE Stock Control, QUADRUPLICATE: Requesting Department, QUINTUPLICATE: Stock

PURCHASE DEPARTMENT

ROUGH COPY OF

PURCHASE ORDER

N.N.P.C./K.R.P.C.

KADUNA

Supplier

PURCHASE ORDER NO.....

KADUNA .....

Subject

Your Offer

Forwarding

Delivery Date

Invoice in one original and ..... copies

Forwarding Terms

Type of Packing

Destination

Terms of Payment

Our Ref:

Total Amount

Request of Purchase

Job Centre

Class

Item No.	Description	U.M.	Qty	Unit Price	Amount

COMPILE LEGIBLY BY HAND

PREVIOUS ORDERS

Supplier	Order	Date	Prices and Conditions						

ACTUAL OFFERS

Supplier	Offer	Date	Price and Conditions						

PURCHASE ORDER TO

Approval Signatures

Remarks

Enclosures

Appendix 8.6

KADUNA REFINING AND PETROCHEMICAL COMPANY LIMITED
P. M. B. 2252,
KACHIA ROAD,
KADUNA

Cablegram NAPETCOR

Telephone:- 062 - 200210 (6-Lines)

Telex: 71375 NG

Ref:- KRPC/SEC/MEXCOM

Date:- .....

APPLICATION FOR REGISTERATION/RENEWAL OF REGISTRATION AS A CONTRACTOR TO THE COMPANY

THIS Document is the property of
KADUNA REFINING AND PETROCHEMICAL COMPANY LIMITED

N.B.
This Form is given out at a fee of Twenty Naira only.

KADUNA REFINING AND PETROCHEMICAL COMPANY LIMITED

APPLICATION FOR REGISTRATION/RENEWAL OF REGISTRATION AS A CONTRACTOR TO THE COMPANY

PART 1

The Secretary, MEXCOM
Kaduna Refining and Petrochemical Co. Ltd.
P. M. B. 2252,
Kachia Road,
Kaduna

Dear Sir/ Madam,

I/We hereby apply to be registered as a Contractor for your company in the Category indicated herein. Attached hereto is a photocopy of the receipt issued by your Finance and Accounts Division for the non-refundable registration fee pertaining to the Category of my/our registration.

I/We agree that registration with the Company does not in any way guarantee the registered Contractor any form of work for the Company. The Company is not precluded from placing of its work on an open tender whereby registered and un-registered contractors would be free to bid for the work.

I/We also declare that information given herein are true and correct, and however understand that any false information given about myself/ourselves will lead to my/our disqualification or subsequent cancellation of any contract award to me/us at the full discretion of Kaduna Refining and Petrochemicals Company.

Applications should be accompanied by:-

1. A Reference letter from your Bank.
2. A Photocopy of Current Tax Clearance Certificate.
3. Curriculum Vitae of your key personnel (applicable to consulting companies only)
4. Two Passport size photographs.
5. Certificate of Registration of business premises.
6. Certificate of Incorporation/Registration.
7. Including originals of certs for sighting.

1. Name of Applicant/Company: .....

2. Are you doing business as a Private Individual? .....

3. Are you in partnership with any individual/Firm/Company? .....

7. Is the Firm/Company registered or incorporated?

....

8. What was the date of Registration? ....

9. (Photocopy of certificate of registration to be attached). How long have you been in business?

....

10. Are you registered as a contractor for any other large organisation like KRPC?

....

11. If yes, give name and address ....

....

....

12. Give brief details of the type and value of work you have done in ...
for the past 24-months.

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16. Write down details of works which you are undertaking at present.

S/N	NATURE OF EACH CONTRACT	TYPE AND LOCATION OF CONSTRUCTION	PERCENTAGE COMPLETED	NAME AND ADDRESS OF OWNER	NAME AND ADDRESS OF PROFESSIONAL WHO SUPERVISE THE CONSTRUCTION

17. Financial stand.
    (a) Capital Available .....

    (b) State Name and Address(es) of your Banker(s) .....

    .....

18. Kaduna Refining and Petrochemical Co. Ltd. does not grant advance payment/mobilisation fees. However, where this becomes absolutely necessary, such payment could be made only on presentation of Letter of Indemnity or Bank Guarantee for the amount under request.

19. Have you paid the requisite registration fee to the Finance and Accounts Division of KRPC.

    .....

20. If so quote details: .....

(Photocopy of receipts to be attached)

Yours faithfully,

Name of Company _____

Address _____

Signature _____

Official Rubber Stamp

Official Designation _____

Figure 8.1 Supplier/contractor evaluation form (W = weighting)

SUPPLIER	ADDRESS	TELEPHONE	DATE

	ALWAYS		USUALLY		SELDOM		NEVER
	6	5	4	3	2	1	0
1. *Delivery*							
1.1 Delivers per schedule							
1.2 Delivers per routing instructions							
1.3 Delivers without follow-up							
1.4 Clears order quantities accurately							
1.5 Keeps promises							
1.6 Currently advises of progress or trouble							
1.7 Has good packaging, including packing slips							
1.8 Has adequate delivery service							
W X Total							
2. *Quality*							
2.1 Reject performance rate ("right first time")							
2.2 Concession rate							
2.3 Corrective action efficiency							
2.4 Adequate quality control systems							
2.5 Knowledge of and adherence to RR quality requirements							
2.6 Co-operation							
2.7 Is rated as quality verified supplier							
2.8 Approval status							
W X Total							
3. *Price*							
3.1 Has competitive prices							
3.2 Delivers at quoted prices							
3.3 Invoices correctly							
3.4 Escalation history							
W X Total							
4. *Manufacturing Skill and Know-how*							
4.1 Has technical ability for difficult work							
4.2 Is experienced in aero engine work							
W X Total							
5. *Attitude to RR, DEG*							
5.1 Anticipates our requirements							
5.2 Regularly solicits our business							
5.3 Answers all communications promptly							
5.4 Willingly helps in emergencies							
5.5 Supplies quotations promptly							
5.6 Has sincere desire to serve							
W X Total							
6. *General*							
6.1 Relatively free of labour problems							
6.2 Will stock special items							
6.3 Solves own raw materials problems							
6.4 Maintains good records							
W X Total							
Comments							
Total Points							