**LOGISTICS MANAGEMENT AND PERFORMANCE OF GOVERNMENT AGRICULTURAL DEVELOPMENT PROGRAMMES IN UGANDA**

**A CASE STUDY OF KALANGALA OIL PALM GROWERS TRUST**

**By:**

**KYOGULA ROY**

**2019/FEB/MPLM/M225246/WKD**

**A DISSERTATION SUBMITTED TO THE SCHOOL OF BUSINESS ADMINISTRATION AND INFORMATION TECHNOLOGY IN PARTIAL**

**FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD**

**OF THE DEGREE OF MASTER OF PROCUREMENT**

**AND LOGISTICS MANAGEMENT**

**OF NKUMBA UNIVERSITY**

**JANUARY, 2022**

# DECLARATION

I **Kyogula Roy** declare that this dissertation under the topic “logistics management and the performance of agricultural development programmes for government in Uganda; a case study of of Kalangala Oil Palm Growers Trust (KOPGT)” is my original work. It has not been presented for any academic award at any institution of higher learning. All contributions from other authors cited were fully acknowledged and is presented for approval.

Signature: ………………………………………. Date…………….

Kyogula Roy

**Candidate**

# APPROVAL

This research thesis has been done under my supervision as a University Supervisor. It is now ready for submission to Nkumba University for examination.



Signature: ……………………… Date….14/02/2022

**Mr. Bukenya Peter**

SUPERVISOR

# DEDICATION

I would like to dedicate this work to Kalangala Oil Palm Growers Trust secretariat

# ACKNOWLEDGEMENTS

I acknowledge with the most profound and distinguished thankfulness the following whose assistance enabled me to accomplish this work. I thank the almighty God with all my heart for the gift of life and the opportunity to attend this program.

I wish to thank my supervisor Mr. Bukenya Peter for his tireless efforts he put in, to ensure that this work was completed in time. He tirelessly read and reviewed my work several times and ably directed me with love and encouragement

# TABLE OF CONTENTS

[DECLARATION i](#_Toc93918204)

[APPROVAL ii](#_Toc93918205)

[DEDICATION iii](#_Toc93918206)

[ACKNOWLEDGEMENTS iv](#_Toc93918207)

[TABLE OF CONTENTS v](#_Toc93918208)

[LIST OF TABLES xii](#_Toc93918209)

[LIST OF FIGURES xiv](#_Toc93918210)

[LIST OF ACRONYMS xv](#_Toc93918211)

[ABSTRACT xvi](#_Toc93918212)

[CHAPTER ONE 1](#_Toc93918213)

[INTRODUCTION 1](#_Toc93918214)

[1.1 Background to the study 1](#_Toc93918215)

[1.2 Statement of the problem 6](#_Toc93918216)

[1.3 Purpose of the study 7](#_Toc93918217)

[1.4 Objective of the study 7](#_Toc93918218)

[1.5 Research questions 7](#_Toc93918219)

[1.6 Hypothesis of the study 7](#_Toc93918220)

[1.7 Scope of the study 8](#_Toc93918221)

[1.7.1 Concept scope 8](#_Toc93918222)

[1.7.2 Geographical scope 8](#_Toc93918223)

[1.7.3 Time scope 8](#_Toc93918224)

[1.8 Significance of the study 8](#_Toc93918225)

[CHAPTER TWO 10](#_Toc93918226)

[STUDY LITERATURE 10](#_Toc93918227)

[2.1 Introduction 10](#_Toc93918228)

[2.2 Literature survey 10](#_Toc93918229)

[2.3 Theoretical review 12](#_Toc93918230)

[2.3.1 Resource based view (RBV) theory 12](#_Toc93918231)

[2.3.2 Transaction cost economic (TCE) theory 13](#_Toc93918232)

[2.4 Literature review 14](#_Toc93918233)

[2.4.1 The concept of logistics management 14](#_Toc93918234)

[2.4.2 Performance 16](#_Toc93918235)

[2.4.3 Logistics planning and performance 17](#_Toc93918236)

[2.4.2 Records keeping practices and performance 22](#_Toc93918237)

[2.4.3 Physical distribution and performance 26](#_Toc93918238)

[2.5 Conceptual framework 29](#_Toc93918239)

[CHAPTER THREE 31](#_Toc93918241)

[METHODOLOGY 31](#_Toc93918242)

[3.1 Introduction 31](#_Toc93918243)

[3.1 Research design 31](#_Toc93918244)

[3.1.1 Research approach 31](#_Toc93918245)

[3.1.2 Research strategy 31](#_Toc93918246)

[3.1.3 Research duration 32](#_Toc93918247)

[3.1.4 Research classifications 32](#_Toc93918248)

[3.2 Study population 32](#_Toc93918249)

[3.3 Sample size 33](#_Toc93918250)

[3.4 Sampling methods and techniques 33](#_Toc93918252)

[3.5 Background information of respondents 34](#_Toc93918253)

[3.5.1 Response rate 34](#_Toc93918254)

[3.5.2 Gender of respondents 35](#_Toc93918256)

[3.5.3 Age group of respondents 35](#_Toc93918258)

[3.5.4 Level of education 36](#_Toc93918260)

[3.5.5Length of work period with Kalangala Oil Palm Growers Trust 37](#_Toc93918262)

[3.5 Data sources 38](#_Toc93918264)

[3.5.1 Primary data 38](#_Toc93918265)

[3.5.2 Secondary data 38](#_Toc93918266)

[3.6 Data collection methods 38](#_Toc93918267)

[3.6.1 Interview 38](#_Toc93918268)

[3.6.2 Survey method 39](#_Toc93918269)

[3.6.3 Document review 39](#_Toc93918270)

[3.7 Data collection instruments 40](#_Toc93918271)

[3.7.1 Interview guide 40](#_Toc93918272)

[3.7.2 Self-administered questionnaire 40](#_Toc93918273)

[3.7.3 Document review checklist 40](#_Toc93918274)

[3.8 Validity and reliability 40](#_Toc93918275)

[3.8.1 Validity of the instruments 41](#_Toc93918276)

[3.8.2 Reliability of the instruments 41](#_Toc93918277)

[3.9 Data collection procedure 41](#_Toc93918278)

[3.10 Data analysis techniques 42](#_Toc93918279)

[3.11 Data processing 42](#_Toc93918280)

[3.12 Ethical considerations 42](#_Toc93918281)

[3.11 Limitations of the study 42](#_Toc93918282)

[CHAPTER FOUR 44](#_Toc93918283)

[LOGISTICS PLANNING AND THE PERFORMANCE OF KOPGT 44](#_Toc93918284)

[4.1 Introduction 44](#_Toc93918285)

[4.2 Descriptive statistics on procurement logistics planning and performance 44](#_Toc93918286)

[4.2.1 Procurement planning helps meet customer requirements 44](#_Toc93918287)

[4.2.1 KOPGT’s configuration and implementation of the whole logistics function 45](#_Toc93918289)

[4.2.3 KOPGT logistics activities are well-thought of in advance 46](#_Toc93918291)

[4.2.4 KOPGT logistics activities are well-coordinated 47](#_Toc93918293)

[4.2.5 Integration of logistics processes within all supply chain partners 47](#_Toc93918295)

[4.2.6 KOPGT has increased flow of information to ease the planning process 48](#_Toc93918297)

[4.2.7 Logistics planning aids total operations costs and increases efficiency 49](#_Toc93918299)

[4.2.8 Supply chain collaboration enhances KOPGT’s competitiveness 50](#_Toc93918301)

[4.3 Correlation analysis 51](#_Toc93918303)

[CHAPTER FIVE 53](#_Toc93918305)

[RECORD KEEPING PRACTICES AND PERFORMANCE OF KOPGT 53](#_Toc93918306)

[5.1 Introduction 53](#_Toc93918307)

[5.2 Descriptive statistics on record keeping practices and performance 53](#_Toc93918308)

[5.2.1 Records management policy ensures effective performance 53](#_Toc93918309)

[5.2.2 Special attention to the records required for procurement of each product 54](#_Toc93918311)

[5.2.3 Logistics managers keeping electronic records of inventories 55](#_Toc93918313)

[5.2.4 There are detailed records for each executive transport in KOPGT 56](#_Toc93918315)

[5.2.5 Effective systematic analysis and control of records 56](#_Toc93918317)

[5.2.6 KOPGT has a whole range of activities that properly manage its records 57](#_Toc93918319)

[5.2.7 Records keeping supports KOPGT to make decisions based on evidence 58](#_Toc93918321)

[5.2.8 KOPGT prepares a detailed record transports carried out in a special program 59](#_Toc93918323)

[5.3 Correlation analysis 60](#_Toc93918325)

[CHAPTER SIX 61](#_Toc93918327)

[PHYSICAL DISTRIBUTIONAND THE PERFORMANCE OF KOPGT 61](#_Toc93918328)

[6.1 Introduction 61](#_Toc93918329)

[6.2 Descriptive statistics on physical distribution and performance 61](#_Toc93918330)

[6.2.1 Availability of products adds value to KOPGT through physical distribution 61](#_Toc93918331)

[6.2.2 Physical distribution effectively provides interface with customers 62](#_Toc93918333)

[6.2.3 The roles of logistics service firms are included in the decision process 63](#_Toc93918335)

[6.2.4 There is accurate delivery of products and raw materials 63](#_Toc93918337)

[6.2.5 Highly responsive and reliable physical distribution system 64](#_Toc93918339)

[6.2.6 Physical distribution helps minimize out-of-stock occurrences 66](#_Toc93918341)

[6.2.7 Physical distribution is the biggest influence on time delivery of products 67](#_Toc93918343)

[6.3 Correlation analysis 67](#_Toc93918345)

[CHAPTER SEVEN 69](#_Toc93918347)

[TOWARDS HARMONISING LOGISTICS MANAGEMENT AND PERFORMANCE 69](#_Toc93918348)

[7.1 Introduction 69](#_Toc93918349)

[7.2 Hypothesis testing 69](#_Toc93918350)

[7.2.2 Regression analysis 69](#_Toc93918351)

[7.2.2 Analysis of variance (ANOVA) results 70](#_Toc93918353)

[7.2.3 Standardized coefficients 70](#_Toc93918355)

[7.3 Logistics planning and performance of KOPGT 72](#_Toc93918357)

[7.4 Record keeping practices and performance of KOPGT 74](#_Toc93918358)

[7.5 Physical distribution and performance of KOPGT 76](#_Toc93918359)

[CHAPTER EIGHT 78](#_Toc93918360)

[SUMMARY, CONCLUSION AND RECOMMENDATIONS 78](#_Toc93918361)

[8.1 Introduction 78](#_Toc93918362)

[8.2 Summary 78](#_Toc93918363)

[8.2.1 Logistics planning and the performance of KOPGT 78](#_Toc93918364)

[8.2.2 Record keeping practices and performance of KOPGT 79](#_Toc93918365)

[8.2.3 Physical distribution and performance of KOPGT 79](#_Toc93918366)

[8.3 Conclusion 80](#_Toc93918367)

[8.4 Recommendations 80](#_Toc93918368)

[8.5 Suggestions for further research 81](#_Toc93918369)

[REFERENCES 82](#_Toc93918370)

[APPENDIX A: SELF ADMINISTERED QUESTIONNAIRE 89](#_Toc93918371)

[APPENDIX B: INTERVIEW GUIDE 94](#_Toc93918372)

[APPENDIX C: DOCUMENT REVIEW CHECKLIST 95](#_Toc93918373)

# LIST OF TABLES

[Table 3.1: Distribution of population size employee level 33](#_Toc93918251)

[Table 3.2 Response rate 35](#_Toc93918255)

[Table 3.3: Gender 35](#_Toc93918257)

[Table 3.4: Age 36](#_Toc93918259)

[Table 3.5: Level of education 36](#_Toc93918261)

[Table 3.6: Length of work period with Kalangala Oil Palm Growers Trust 37](#_Toc93918263)

[Table 4.1: Procurement planning helps meet customer requirements 44](#_Toc93918288)

[Table 4.2: KOPGT’s configuration and implementation of the whole logistics function 45](#_Toc93918290)

[Table 4.3: KOPGT logistics activities are well-thought of in advance 46](#_Toc93918292)

[Table 4.4: KOPGT logistics activities are well-coordinated 47](#_Toc93918294)

[Table 4.5: Integration of logistics processes within all supply chain partners 48](#_Toc93918296)

[Table 4.6: KOPGT has increased flow of information to ease the planning process 49](#_Toc93918298)

[Table 4.7: Logistics planning aids total operations costs and increases efficiency 50](#_Toc93918300)

[Table 4.8: Supply chain collaboration enhances KOPGT’s competitiveness 51](#_Toc93918302)

[Table 4.9 Correlations 52](#_Toc93918304)

[Table 5.1: Records management policy ensures effective performance 53](#_Toc93918310)

[Table 5.2: Special attention to the records required for procurement of each product 54](#_Toc93918312)

[Table 5.3: Logistics managers keeping electronic records of inventories 55](#_Toc93918314)

[Table 5.4: There are detailed records for each executive transport in KOPGT 56](#_Toc93918316)

[Table 5.5: Effective systematic analysis and control of records 57](#_Toc93918318)

[Table 5.6: KOPGT has a whole range of activities that properly manage its records 57](#_Toc93918320)

[Table 5.7: Records keeping supports KOPGT to make decisions based on evidence 58](#_Toc93918322)

[Table 5.8: KOPGT prepares a detailed record transports carried out in a special program 59](#_Toc93918324)

[Table 5.9 Correlations 60](#_Toc93918326)

[Table 6.1: Availability of products adds value to KOPGT through physical distribution 61](#_Toc93918332)

[Table 6.2: Physical distribution effectively provides interface with customers 62](#_Toc93918334)

[Table 6.3: The roles of logistics service firms are included in the decision process 63](#_Toc93918336)

[Table 6.4: There is accurate delivery of products and raw materials 64](#_Toc93918338)

[Table 6.5: Highly responsive and reliable physical distribution system 65](#_Toc93918340)

[Table 6.6: Physical distribution helps minimize out-of-stock occurrences 66](#_Toc93918342)

[Table 6.7: Physical distribution is the biggest influence on time delivery of products 67](#_Toc93918344)

[Table 6.8 Correlations 68](#_Toc93918346)

[Table 7.1: Model Summary 69](#_Toc93918352)

[Table 7.2: ANOVAa 70](#_Toc93918354)

[Table 7.3: Coefficientsa…………………………………………………………………………..71](#_Toc93918356)

# LIST OF FIGURES

[Figure 2.1: The conceptual framework 29](#_Toc93503281)

# LIST OF ACRONYMS

KOPGT - Kalangala Oil Palm Growers Trust

SPSS - Statistical Package for Social Scientists

RBV - Resource – based view

TCE - Transaction cost economics

CLM - Council of Logistics Management

# ABSTRACT

Every company aims at gaining part in the growing global market and taking advantage of the advancement in technology which calls for the need for logistics management in operations to increase immensely as it has been established to positively or negatively impact in gaining competitive advantage and achievement of organisational objectives. Logistics management in the agricultural industry ensures the optimal and continuous flow of agro-goods from manufacturers/suppliers to producers and eventually to customers. The study examined the influence of logistics management and the performance of agricultural development programmes for government in Uganda basing on a case study of Kalangala Oil Palm Growers Trust (KOPGT). It was guided by the objectives to: examine how logistics planning influences the performance of KOPGT; examine how record keeping practices influence the performance of KOPGT; and assess how physical distribution influences the performance of KOPGT. The study adopted a phenomenological and positivist approach, mixed methods, cross sectional duration, and case study strategy. A sample size of 92 respondents and registered a response of 86 (93.4%). It used interviews, survey and document review as methods of data collection. Findings yielded regress value r = 0.845 with Adjusted R square at 0.712 which is an indication that 71.2% of the changes that do occur in performance is due to changes in logistics management. The test also revealed that KOPGT’s logistics management has a statistically significant positive relationship with performance and as such the null hypothesis was rejected. In conclusion, the study notes that the organisation to successfully manage its logistics activities, it requires careful, comprehensive monitoring, evaluation and planning by management. In recommendation, the study suggested logistics information systems be given adequate attention as this strategy is vital to timely customer feedback, information sharing and storage in the organization. It is also suggested that the organisation should give due attention in proper implementation logistics activities for efficient delivery of transportation, better warehouse management and inventory management in oil palm growing and production projects.

**Key words:***Logistics Management, Performance, Logistics Planning, Records Keeping practices, and Physical Distribution*.

# CHAPTER ONE

# INTRODUCTION

# 1.1 Background to the study

This study was about logistics management and performance of government agricultural development programmes in Uganda basing on a case study of Kalangala Oil Palm Growers Trust. The study about logistics management and performance in the agricultural sector warrants research because it has been observed that the recent changes in agricultural business dynamics necessitates organisations to recognise the importance of strategically re-looking at their business processes (Nyaberi and Mwangangi, 2018). Additionally, every company aims at gaining part in the growing global market and taking advantage of the advancement in technology which calls for the need for logistics management in operations to increase immensely as it has been established to positively or negatively impact in gaining competitive advantage and achievement of organisational objectives. Nyaberi and Mwangangi (2018) further state that logistics management in the agricultural industry ensures the optimal and continuous flow of agro-goods from manufacturers/ suppliers to producers and eventually to customers.

Logistics management can be traced back to the British Army before the outbreak of the First World War where a military supply chain system was developed by building infrastructure such as roads, railroads, ports, airfield, supply stores and vehicles to transport goods (Ballou, 2014). In Uganda, which started its agricultural produce distribution across the continent in the mid-20th century, there was a development of industrial goods distribution system which eventually led to the start of logistics management that both the private and public sector adapted into their business practice up until now (Obewo, 2013).

For the agricultural industry, logistics management has since its inception played an important role in reducing costs which in turn increase profits (Lareau, 2017). Furthermore, the practice of logistics management is an important tool in creating competitiveness as it helps create effectiveness in customer service, establish a good relationship with both internal and external customers and also acts as a foundation for the business growth with help from speedy information technology. KOPGT has been selected for the study because it is a good representation of other development programmes in agriculture and has a government mandate of facilitating and delivering of required services for and on behalf of the oil palm farmers in the country (Ssemanda, 2019).

Hayfa and Zgaya (2017) defines logistics management as the supply chain management component that is used to meet customer demands through the planning, control and implementation of the effective movement and storage of related information, goods and services from origin to destination. Cheroue (2018) adds that the logistics management process begins with raw material accumulation to the final stage of delivering goods to the destination and that by adhering to customer needs and industry standards, logistics management facilitates process strategy, planning and implementation.

As the dependent variable, performance refers to the ability of an organisation to accomplish the goals and targets that have been set (Kompula, 2018). Additionally, performance is the efficiency and effectiveness of the organisation determined by how well the organisation/ business is doing in wealth creation and acquiring of resources. Green (2019) adds that organisational performance is also referred to as the efficiency of an organization with relation to its internal operations such as product quality, productivity and satisfaction of its customers.

In this current study, the measures of performance include improved production, service delivery, end-user satisfaction, increased revenue, efficiency and effectiveness (Green, 2019); and these aspects aim at accessing how well the organisation is able to conduct itself with the available resources in attaining competitive advantages. On the other hand, the financial measures may include income or generated revenue; therefore, enhancing the operational performance is vital in improving the overall performance of the organisation (Vijayaraghavan& Raju, 2018). Operational performance of the agricultural development programmes refers to the results or achievements in the field of agriculture including all aspects of land fertility, marketing, technology and labour productivity (Srinivasan, 2016).

The study was informed by the Resource Based Theory which was introduced by Wernerfelt (1984) and later enhanced by Barney (1991). The theory is best to inform the study because it assumes that an organisation has resources (logistics planning, records keeping practices and training support) that are unique and if well managed, will lead to an additional advantage in competition (enhanced performance). Therefore, enhanced performance levels in terms of competitive advantage and success will only be obtained when the available resources are unique and have low possibility of being copied/ duplicated. The study will also be guided by the Transaction Cost Economic Theory advanced by Ronald H. Coase, in 1937; the theory is fit for the study because it provides an analytical framework for investigating the governance structure of contractual relations within a supply chain. Furthermore, also views the relationship between service receiver and service provider as a model that allows economic transactions to take place

Globally, improving on operational performance forms the key priority of all businesses (Narasimhan & Das, 2017). This has seen entrepreneurs and managers constantly coming up with strategies aimed at minimizing operational costs and boosting the returns. Particularly, logistics management has emerged to have huge potential in enhancing production and distribution of goods and material in firms. If well integrated, it significantly improves the supply chain performance and enables the firms to attain competitive edge.

In Africa, the hypothesized importance that logistics management has in organizations, the studies conducted have achieved mixed results on its impact on operational performance. While some scholars established that efficiency in logistics and transportations will result in improved returns, others hold that implementation processes always result in additional expenses being incurred and thus a negative influence on operational performance (Nyaberi & Mwangangi, 2018). This shows inconsistency in the exact effect that exists. Understanding this is very important especially in the milk industry where each and every part of supply chain is essential for the profitability of the entire organization.

In East Africa, the globalization process enables the sale of products for the same purpose from different manufacturers and with different prices. The increased offer on the market has led to intensive competition and some of the companies are faced with the problem of survival. The development of information technology has led to increased flow of information around the world, which resulted in enhanced education of producers and consumers (Delfmann& Gehring, 2018). The only way for companies to survive on the market is constant lowering the price of products and regular improvement of product characteristics. Hence, the continuous intensive development of the company is crucial to its survival on domestic and global markets.

In Uganda, an important management practice that can be applied in organizations today is Logistics management. Logistics management provides business organizations with the total operations costs and increases the efficiency of the company’s business activities. Collaboration among all the supply chain players coupled with a responsive approach can enhance organizational competitiveness through reduced lead-time facilitated by smooth flow of material from upstream towards the downstream end of supply chain. This approach will ensure end customers get value for their money and also reduce the level of uncertainty in the industry (Waiganjo & Gatobu, 2017).

Kalangala Oil Palm Growers Trust is a public organization, was established in June 2006, with a mandate to implement the Oil Palm Project’s Out Growers and Small Holders scheme, on Bugala Islands and outlying islands of Kalangala District. Specifically, KOPGT is meant to develop in partnership with farmers and Oil Palm Uganda Limited (OPUL) a total of about 4,300 Hectares of oil palm has been planted by smallholders in Kalangala, hold 10% share in OPUL in trust for the beneficiary farmers and to administer the KOPGT oil palm growers’ scheme loan fund. The Secretariat is the operational arm of the Trust (<https://gltn.net/2017/10/23/kalangala-oil-palm-growers-trust-kopgt-in-uganda-gears-up-to-launch-the-land-information-database/>).

Government of Uganda support has also seen KOPGT grow stronger from a Trust involved in only mobilizing farmers to plant oil palms to one which is providing, extension, marketing as well as financial services. Also, after 2018, KOPGT is preparing itself to operate as a fully-fledged private entity with a financial arm and a field extension operation for sustainable oil palm development and further more business planning is being undertaken.

According to a 5-year procurement plan (2017-2021) KOPGT is set to achieve the following objectives under logistics management;

1. To stimulate growth and development.
2. To create jobs to people.
3. To improve standards of living.
4. To ensure Infrastructure development.

# 1.2 Statement of the problem

Logistics management plays a pivotal role in supporting organization as they strive for more efficient management system as in the business practices (Nyanchama, 2014). Agricultural development programmes in Uganda have endeavoured to adapt effective logistics management strategies together with effective internal management in a bid to meet the programme goals and objectives at shortest feasible timeframe; however, the performance levels of the programme are still low. According to IFAD Compliance Audit Report 2017/2018, the overall performance of KOPGT in terms of transport services has increased from 57.2% to 88.0% representing 200,000,000 Ugx thus reducing on the revenue earned. The inefficiencies in transportation have led to many situations of having goods damaged while in transit hence incurring the company huge losses.

The last quarter KOPGT Meeting 2018 (Minute 18) indicated that there was poor planning due to inappropriate and ineffective records keeping in which, misplacement of important records rendered decision making ineffective. Poor records’ keeping exposed the organisation to poor performance within its logistics activities. The Logistics Performance Review Report (2018) revealed that the organisation is facing challenges in physical distribution evidenced through ineffective flow of raw materials and goods hence being costly for management and affecting operational efficiency. A supervisor decried about the inadequate logistics activities tied with the lack of skilled employees accounting to about 39.4% and management blamed for the high loss damage and deterioration of stocks. This was evidenced by the level at which employees were uninformed about the correct procedures for manual tasks which caused trouble in health and safety, delivery routines and negligence in various tasks. This poor performance is attributed to poor logistics management within KOPGT which phenomena the study sought to examine.

# 1.3 Purpose of the study

The purpose of the study was to examine the influence of logistics management and the performance of agricultural development programmes for government in Uganda. It based on a case study of Kalangala Oil Palm Growers Trust (KOPGT).

# 1.4 Objective of the study

The study was guided by the following objectives;

1. To examine how logistics planning influences the performance of KOPGT.
2. To examine how record keeping practices influence the performance of KOPGT.
3. To assess how physical distribution influences the performance of KOPGT.

# 1.5 Research questions

The study was guided by the following questions;

1. How does logistics planning influence the performance of KOPGT?
2. How do record keeping practices influence the performance of KOPGT?
3. How does physical distribution influence the performance of KOPGT?

# 1.6 Hypothesis of the study

The study tested the following hypotheses;

**Ho*:*** There is no significant relationship between logistics management and performance of KOPGT.

**H1:** There is a significant relationship between logistics management and performance of KOPGT.

# 1.7 Scope of the study

## 1.7.1 Concept scope

The study focused on logistics management and the performance of agricultural development programmes. The subject scope of the study included; how records planning influences performance of KOPGT, how records keeping practices influences performance of KOPGT and how physical distribution influences performance of KOPGT.

## 1.7.2 Geographical scope

The study was conducted at Kalangala Oil Palm Growers Trust whichis located in Kalangala Town Council, Buggala Island. The offices are housed at Kibanga Village Cell, opposite Kibanga Primary School playground on Bugoma-Kalangala Town Council main road. Its Post Office Box Number is 39, Kalangala. The geographical coordinates of the ministry are 00°18'48.0"N, 32°35'07.0"E (Latitude: 0.313327; Longitude: 32.585275).

## 1.7.3 Time scope

The study was conducted at KOPGT, within the duration of 6 years that is from 2016 to 2021. The study focused on this period because it is the time when the organisation faced issues of poor performance due to logistics management.

# 1.8 Significance of the study

The study findings may help to inform the different organizations on different ways of how Logistics management can be relevant to performance.

**Government:** This study is of immense value to government, as it may provide a picture of where public entities stand in relation to the existing trend of logistics management. Further it may provide evidence that may inform formulation and adoption of a logistics management policy at the KOPGT which may also be used in other public institutions in Uganda.

**The KOPGT:** The study findings might help the organisation by providing an insight about all aspects of logistics management under KOPGT and other agricultural development programmes and the extent to which the concept can lead to successful performance.

**Policymakers**: The study findings may also help policymakers such as members of parliament and local governments in Uganda management by availing them with information that they may use to make decisions that are more informed, as far as Logistics management is concerned.

**Academicians**: Finally, the findings may be of great use to the academia, especially those who may wish to carry out further research on logistics management and performance. It may build on the existing body of literature and knowledge.

It may also contribute to enhancement of theory and knowledge on contracting in particular and logistics in general, more so in the context of Uganda’s public Institutions.

# CHAPTER TWO

# STUDY LITERATURE

# 2.1 Introduction

This chapter reviewed the literature in line with the research problem. Literature review examined the models and theories that scholars have used to understand and explain similar problems involved in other settings for the study, from which a conceptual framework was drawn. The body of the literature survey identifies the research gaps that this study closed.

# 2.2 Literature survey

The purpose of literature survey is to analyse what has been covered of the problem under study within Uganda, the key findings, and gaps left and propose how the current study intended to fill that important void in research.

Bamwesigye (2015) conducted a study about the effect of logistics management on organisational performance of manufacturing companies basing on Kakira Sugar Works. The study was guided by three research objectives namely; to analyze the effect of transportation management on organizational performance at Kakira Sugar Works Company, to examine the effect of inventory management on organizational performance at Kakira Sugar Works Company and to investigate the effect of warehouse management on organizational performance at Kakira Sugar Works Company. The study revealed that factory inventory planning and management is not supported by technology, Maximum and minimum inventory levels are not properly maintained. It was also revealed that an inventory management practice within the operations of the firm is positively significant on their performance. Transportation and inventory management are the most critical activities for organizational performance and strong correlation with the performance of organization. However, Bamwesigye’s study had a knowledge gap in that it did not provide information on how logistics planning influences organisational performance; the current study intended to fill the identified gap.

Another related study was conducted by Obewo (2016) about the impact of logistics management on organisational performance of Mukwano Group of Companies. The study was guided by three research objectives namely; to examine the importance of managing the logistics function in organisations, to investigate the challenges encountered in logistics management and appropriate solutions to the challenges and to establish the relationship between logistics management and organisational performance. Obewo’s study revealed that logistics management has a positive impact on organizational performance as per the evidence showed by the findings of the study. This is mainly due to its importance in streamlining the supply function, improved customer care and satisfaction, efficient material handling, effective communication plus stock control and recycling of wastesplusits impact on the performance as seen in financial influence, increase in sales volume and production planning. However, there is both an environmental and knowledge gaps in Obewo’s study; his study focused on manufacturing companies while the current study focuses on agricultural development programmes hence case studies operate under different environments, his study did not also focus on how records keeping practices influence organisational performance; the identified gap was sought to be filled by the current study.

Juma (2020) conducted a study about the influence of logistics management practices on the logistics performance of humanitarian organisations in Uganda. His study was guided by three research objectives to establish the influence of inventory management practices, Transport management practices, information flow practices and Warehouse Management practices on performance of Humanitarian organizations. The study findings revealed that humanitarian organisations, engaged transport management practices that allow for timely deliveries of goods and services to consumers, employ logistic management practices, which help the organization to avoid inventory disruption in the production cycle. The research also found that warehouse management methods promote the delivery of goods to the customers in the appropriate quantity. However, Juma’s study did not look at how physical distribution can influence organisational performance. The current study sought to fill the identified gap.

# 2.3 Theoretical review

This section reviews the theoretical framework on which the concept of logistics management for performance is anchored on. Logistics management is based on many theories of which this research project was supported by the following theories: Resource Based View, Transaction Cost Economics, Core Competency, and contractual Theories. As illustrated below:

## 2.3.1 Resource based view (RBV) theory

The concept of logistics management is rooted in the theory of resource-based view advanced by Barney in 1991. The theory assumes that internal resources and capabilities determine strategic choices made by firms while competing in their external business environment. It is also noted that the organisation’s abilities also allow some firms to add value in customer value chain, develop new products or expand in new marketplace. Therefore, the RBV draws upon the resources and capabilities that reside within the organization in order to develop sustainable competitive advantages, therefore, the theory of logistics management comes in handy to explain the operationalization of the independent variable.

According to Barney (1991), logistics management can be explained from the dimension of relationship between service receiver and service provider. The resource-based view (RBV) analyses other aspects, taking into account internal strengths and weaknesses. A firm’s resource perspective generates the core competencies and competitive advantage for specific business activity, RBV defines resources as tangible and intangible assets within the firm. According to Barney, (1991) the resource-based view is based on the concept of productive resources.

RBV theory is relevant to this current study because it puts more emphasis on the firm’s internal resource rather than external opportunities and threats created by industry conditions. The theory maintains that in order to generate sustainable competitive advantage a resource must provide economic value and must be presently scarce, difficult to imitate, non-substitutable and not readily obtainable from markets. The theory also relies on two key points; first that resource are determinants of firm performance and second that resources must be rare, valuable, difficult to imitate and non-substitutable by other rare resources.

## 2.3.2 Transaction cost economic (TCE) theory

The concept of logistics management also roots in the theory of transaction cost economic theory advanced by Williamson in 1979. The theory assumes that transaction costs arise from the fact that it is not possible for a firm to completely contract while incomplete contracts create renegotiations when the balance of power between the transacting parties shifts (Williamson, 1986). The attribute of a firm’s transactions positively associated with transaction costs include the necessity of investment in durable, specific asset, inefficiency of transacting, task complexity and uncertainty, difficult in measuring task performance and interdependence with other transactions. Therefore, the Transaction Cost Economic Theory draws upon a rational decision made by firms after considering transaction related factors such as asset specificity, environmental uncertainty and other types of transaction cost. Activities conducted under conditions of high uncertainty require specific assets for example human and physical capital. Asset specifically refers to the non-trivial investments in transaction that is specific assets.

The theory of transaction cost economics (TCE) or theory is relevant to this current study because it views the relationship between service receiver and service provider as a model that allows economic transactions to take place. Transaction costs include time, money, human resources, contract issues negotiation matters, risks etcetera. Hence the relationship between service receiver and service providers is closely integrated due to cost considerations (Shaharudinet al*,* 2014). However, according to Mclvoret al., (2008), the two theories RBV &TCE can be combined to form a combined view through which logistics management decisions can be based upon as RBV & TCE complement each other.

# 2.4 Literature review

This section outlined the different views and ideas that have been written about the topic. It formed a basis of comparative data between the researcher and the work of other researchers.

## 2.4.1 The concept of logistics management

The Council of Logistics Management defined logistics management as the process of planning, implementing and storage of raw materials, in-process inventory, finished goods and related information from point of origin to point of consumption for the purpose of conforming to customer requirements. Kasilingam (2018) states that, logistics is the management of the flow of goods between the point of origin and the point of consumption in order to meet customer requirements. Therefore, logistics represents a collection of activities that ensures the availability of the right products in the right quantity to the right customers at the right time. The resources managed in logistics can include physical items, such as food, materials, animals, equipment, and liquids, as well as abstract items, such as time, information, particles, and energy.

Logistics activities serve as a link between production and consumption and provide a bridge between production and market locations or suppliers separated by distance and time. The main purpose of logistics is to coordinate a bunch of related activities which work together to create a supply chain and provide time and location benefits for customers (Çanci, 2017). European Journal of Logistics, Purchasing and Supply Chain Management Vol.7 No.1, pp.12-28, February 2019 Published by European Centre for Research Training and Development UK (www.eajournals.org) 14 ISSN 2054-0930 (Print), ISSN 2054-0949 (Online) Today, efficient logistics and transportation system are important prerequisites of the development of any economy. In modern competitive environment, it is not enough to offer a product that meet customers’ requirements. The way of delivery is very important as precision of product delivery can help businesses operate more efficiently, lower costs and gain new customers which eventually lead to higher performance (Balakrishnan, 2019). Also, Fugate, Mentzer, and Stank (2010) observed that logistic management is a strategic vector in companies’ organization and influences their performance, in terms of service quality, effectiveness and overall profitability.

There is growing need for organisations to find new ways in which they can create value and deliver it to their customers in order to be competitive (Dolven, 2017). The increasing need for industry to compete with its products in a global market, across cost, quality and service dimensions, has given rise to the need to develop logistic systems that are more efficient than those traditionally employed. Therefore, in the last two decades, logistics has moved from an operational function to the corporate function level. There has been a growing recognition that effective logistics management throughout the firm and supply chain can greatly assist in the goal of cost reduction and service enhancement (Fekadu, 2017).

The key to success in logistics management (LM) requires heavy emphasis on integration of activities, cooperation, coordination and information sharing throughout the entire supply chain, from suppliers to customers (Frazelle, 2019). To be able to respond to the challenge of integration, modern businesses need sophisticated decision support systems (DSS) based on powerful mathematical models and solution techniques, together with advances in information and communication technologies. There is no doubt that quantitative models and computer-based tools for decision making have a major role to play in today’s business environment. This is especially true in the rapidly growing area of logistics management (Green, 2018). These computer-based logistics systems can make a significant impact on the decision process inorganizations. That is why both industry and academia alike have become increasingly interested in using logistics management.

## 2.4.2 Performance

From an organisation point of view, performance is evaluated by how it reduces cost or increases value. Firms’ performance monitoring is important; in many industries, the supply chain represents roughly 75 percent of the operating budget expense Palevich (2017). Three common measures of performance are used when evaluating performance: efficiency, responsiveness and effectiveness Chase et al., (2018). Efficiency implies minimization of total system wide costs from transportation and distribution to inventories of raw materials, work in process (WIP) and finished goods. To be efficient, firms should utilize strategies aimed at creating highest cost efficiency and for such efficiencies to be achieved, non-value adding activities should be eliminated, economies of scale pursued and optimization techniques deployed so as to get the best utilization capacity.

Janat (2019) explains that to be responsive means ensuring that customers’ needs/demands are attended to at the right time without delays. In order to achieve responsiveness, the firms should be flexible to the changing and diverse needs of the customers and also build to order and mass customization processes as a means to meet the specific requirements of the customers. Effectiveness on the other hand means doing the right thing at the right time. Firms should ensure that they do enough research to know what their customers need and should also get the right resources so as to serve their customers satisfactorily (Wilson, 2018).

Organizational performance can therefore be best measured through operational cost reduction and customer service delivery levels (Palevich, 2017). As more manufacturers struggle with global markets, competition from low-cost counties and faltering home economies, the attention of many manufacturers and retailers have naturally turned to cost and waste reduction. It is therefore very important to understand the best cost reduction strategies, and identify the main cost drivers in a firm’s operations. While an obvious need for cost reduction arises, the reality is that many firms do not know where most of the cost of a product occurs. It is also equally important to understand the overhead structure, as this can help to identify perverse incentives that may affect later decisions (Meeker and James, 2016).

## 2.4.3 Logistics planning and performance

The role of logistics has been increasingly highlighted as central to any contemporary business activity. Logistics lie at the core of both operational and marketing processes. It is actually logistics that provides companies with the ability to effectively and efficiently meet their customers’ requirements (Kenyon, 2017). Without appropriate configuration and implementation of the whole logistics function, companies are risking being rigid, disorientated and ultimately being driven out of the market. However, such appropriate configuration and implementation of logistics have little chance of success without careful and detailed strategic planning. Activities such as procurement, inventory management, warehousing, materials management, distribution and customer service, which are included in logistics, should be well-thought out in advance, well-coordinated and above all, should be facilitating the achievement of the overall goals of the company (Mukolwe, 2015).

Logistics is an important component of supply chain management (Stank, 2015). The Council of Supply Chain Management Professionals (2017) defines logistics management as “that part of Supply Chain Management that plans, implements, and controls the efficient, effective forward and reverse flow and storage of goods, services and related information between the point of origin and the point of consumption in order to meet customers’ requirements.” Both Stank et al. (2012) and Lin (2016) describe the importance of integrating the logistics processes of all supply chain partners to better serve the needs of ultimate customers.

The globalization process enables the sale of products for the same purpose from different manufacturers and with different prices. The increased offer on the market has led to intensive competition and some of the companies are faced with the problem of survival. The development of information technology has led to increased flow of information around the world, which resulted in enhanced education of producers and consumers (Delfmann& Gehring, 2013). The only way for companies to survive on the market is constant lowering the price of products and regular improvement of product characteristics. Hence, the continuous intensive development of the company is crucial to its survival on domestic and global markets. Globalization had a critical impact on manufacturing, both locally and internationally.

Through broadening the marketplace and increasing competition, globalization led customers to place greater demands on manufacturers to increase quality, serviceability and flexibility, while maintaining competitive costs (Laosirihongthong & Dangayach, 2015). One of the ways of improving efficiency on manufacturing firms was to improve logistics performance. That is why if manufacturing firms needed to become efficient and flexible in their manufacturing methods, they needed different strategies to manage the flow of goods from the point of production to the end user (Awino, 2018).

One important management practice that can be applied in organizations today is Logistics planning. Logistics planning provides business organizations with the total operations costs and increases the efficiency of the company’s business activities. Collaboration among all the supply chain players coupled with a responsive approach can enhance organizational competitiveness through reduced lead-time facilitated by smooth flow of material from upstream towards the downstream end of supply chain. This approach will ensure end customers get value for their money and also reduce the level of uncertainty in the industry (Waiganjo&Gatobu, 2018).

Many factors such as deregulation, competitive pressures, information technology, globalization, profits leverage, contributed to the increase of Logistics management in the form we know it today (Ittmenn& King, 2010). The goal of Logistics management was to optimize the number, size, and geographical arrangement of plants and warehouse facilities, select transportation methods, and control distribution costs. With the increasing awareness of strategic implications of logistics and the growing awareness of the benefits of leveraging logistics to increase customer value measuring the performance of logistics had become a high priority (Goldsby *et al,* 2017). In this study the dependent variable was organizational performance and it was called dependent because any successful firm’s performance depended on many different factors which were termed as independent variables.

Logistics is the process of planning, implementing and controlling procedures for the efficient and effective transportation and storage of goods including services and related information from the point of origin to the point of consumption for the purpose of conforming to customer requirements and includes inbound, outbound, internal and external movements (Lambert & Stock, 2018). Logistics management is a supply chain management component that is used to meet customer demands through the planning, control and implementation of the effective movement and storage of related information, goods and services from origin to destination. Logistics management helps companies reduce expenses and enhance customer service (Fugate, et al,2019). Logistics planning is the part of supply chain management that plans, implements, and controls the efficient, effective forward, and reverses flow and storage of goods, services, and related information between the point of origin and the point of consumption in order to meet customer's requirements.

The complexity of logistics can be modelled, analysed, visualized, and optimized by dedicated simulation software. The minimization of the use of resources is a common motivation in all logistics fields. A professional working in the field of logistics management is called a logistician (Christopher, 2017). According to the Council of Logistics Management (CLM) “Logistics is the process of planning, implementing and controlling the efficient and effective flow of goods, services and related information from point of origin to point of consumption in order to meet customer requirements”*.* Logistics management is the process of strategically managing the procurement, movement and storage of materials, parts and finished inventory (and the related information flows) through the organization and its marketing channels in such a way that current and future profitability are maximized through the cost-effective fulfilment of orders (Christopher, 2017).

Logistics encompasses all of the information and material flows throughout an organization. It includes everything from the movement of a product or from a service that needs to be rendered, through to the management of incoming raw materials, production, the storing of finished goods, its delivery to the customer and after-sales service‖ (Ittmenn& King, 2017). The commonality of the recent definitions in logistics is that, it is a process of moving and handling goods and materials, from the beginning to the end of the production, sale process and waste disposal, to satisfy customers and add business competitiveness (Yue, & Taylor, 2015). It is the process of anticipating customer needs and wants; acquiring the capital, materials, people, technologies, and information necessary to meet those needs and wants; optimizing the goods or service-providing network to fulfil customer requests; and utilizing the network to fulfil customer requests in a timely way (Tseng, Yue, & Taylor, 2015).

There has been a change in the way business is conducted today. Due to the development in technology, the logistics management has evolved and gained greater significance in doing business. Logistics management is treated as a part of the supply chain management that deals with management of goods in an efficient way. It is the management process that integrates the movement of goods, services, information and capital, right from the sourcing of raw material, to the consumer (Springinklee & Wallenburg, 2018). The goal of the logistics management is to provide the right product with the right quality at the right time in the right place at the right price to the ultimate customer (Mentzer et al., 2014). Logistics management has been defined as a high priority for contemporary organizations. The success of logistics management is determined through the combination of efficiency, effectiveness and differentiation. Eventually, supply chain management measures through procrastination affect price/cost, product’s quality, innovation (Mamad & Chahdi, 2019).

## 2.4.2 Records keeping practices and performance

Logistics managers pay special attention to the records of the time required for procurement and retention according to each product. For each product in stock, they should know the time needed for their purchase from order to delivery, the time each product spends in stock indirectly reduces the value of the product. There is a need for keeping products in stock is less possible. As long as the quantity of products in stock is lower, the inventory cost will be smaller. Logistics managers keeping electronic records of inventories facilitate inventory control and shorten the time required for ordering products (Storey et al., 2016). Detailed records kept for each executive transport in the company, facilitates the selection of any subsequent transport, comparing the cost of previous transports.

Records management is the application of systematic analysis and control of records from their creation through processing, maintenance and protection to final disposal. Records management is aimed at preparing, arranging, storing and retrieving of records and information when they are needed. It refers to the whole range of activities which an organization should perform to properly manage its records. The key activities include setting records management policy, assigning responsibilities, establishing and promulgating procedures and guidelines, as well as designing, implementing and administering recordkeeping systems. Records management is important because it supports an organization to make decisions based on evidence; meet operational, legal and regulatory requirements; be open and accountable; enhance operational efficiency and effectiveness; and maintain organization or collective memory.

The evidence of each transport shows the time required for delivery and the so-called breakpoints. The future planning of any transport avoids all breakpoints that have occurred in previous transports. A detailed record of any transport should also be carried out in a special program or electronically. The existence of such systems and databases allows quick comparison of data from past activities and provides improved activity or reducing potential costs and time lost so the company can choose the most favourable and cheapest option (Bowersox et al., 2017). Logistics managers know how to properly choose the location of warehouses. Good location of the warehouse is advantage and every transport can be handled more promptly. Although the so called "idle" is inevitable in every transport, companies are constantly seeking ways to reduce it through proper storage of products and therefore, increasing their lifespan.

Having data collected and recorded is critically important, but it is only the first step. Visibility of data throughout a supply chain is also critical, and it depends on moving the data up and down the supply chain to provide supply chain workers and managers at various levels the right information, of the right quality, at the right time (Aronsson, 2018). A paper system moves physical reports; a digital system moves electronic data that are displayed on user interfaces and dashboards or other decision-support systems. Whether paper based or digital, a reporting system must be in place to ensure that information flows correctly and consistently (Ahrne, 2016). A reporting system in a supply chain may include levels outside storage and distribution points. For example, a district health office might not hold stock or be involved in the distribution of products, but this office still needs to receive LMIS reports to ensure that facilities are stocked appropriately to determine if it needs to invest additional funding and/or resources into training, staffing, and commodity quantities (Alberto, 2015).

Boute (2018) notes that preparing summary and feedback reports is easier and less time consuming when the logistics records management system is automated. Digital logistics records management system applications can automatically populate report elements, especially if the logistics records management system is also used for routine inventory control, and for opening balance, receipts, consumption, losses or adjustments that are recorded with every transaction. With the click of a button, the logistics records management system can generate a summary report and a requisition order with suggested replenishment quantities. It also can quickly identify mathematical errors, highlight missed deadlines, list the percentage of expected reports received, and search for data averages, highs, and lows (Bourke et al, 2018).

Digital logistics records management system can also streamline and customize feedback reports by generating and transmitting notifications, reminders, and alerts (Caridi et al, 2014). A notification might be a SMS message to a manager to log in and review and approve a requisition, or to a health care worker that a consignment is ready for pick up or delivery. A reminder can help personnel attend to routine activities, such as conducting physical inventory at the end of the month and submitting their requisition order. An alert can flag a problem, such as a product that has limited shelf life remaining, or an impending stockout. Digital logistics records management system can also enable routine reporting to other stakeholders, programs and divisions within a ministry of health, development partners, and funding agents (Coyle and Langley, 2017).

Fugate and Stank (2017) explains that there is great importance of learning in today's hypercompetitive global supply chain environment especially through adopting learning principles in logistics. Moreover, managers should be cautious to note the critical role of organizational contexts that is culture, affecting the relationship between supply chain integration and operational performance. Logistics managers are committed to check the quantity of products in stock daily, to check the minimum allowable amount of each product that is in stock at least once a week. In cases where the quantity of a product in inventory is below the minimum allowable value, they immediately place orders for that product ((Esper et al., 2017). Besides the quantity, the basic information for every product that is in stock is its unit price and the total value of all products in stock should be as small as possible or within the optimum.

Gravier (2017) emphasised the need for companies developing and implementing a logistics management information system of physical- and technology-based records and reports that supply chain workers and managers use to collect, organize, present and use logistics data gathered across all levels of the system. An effective LMIS depends on the right combination of people, processes, and technology. Skilled people must record, analyse, manage, and use supply chain data at every level. Kent and Flint (2018) add that the LMIS must enable efficient business processes and workflows forecasting, inventory management, distribution planning, reporting and ordering, order fulfilment, temperature monitoring, equipment maintenance, performance monitoring and incorporate routine data management processes. And the LMIS must leverage appropriate technology that is feasible to deploy and sustain, and is embraced by users at each level.

The second records management practice according to Mountain (2015) is compliance with policies and procedures. Mountain argues that a firm’s record management process should incorporate policies and procedures addressing all the records management program components as specified by the legal and operational requirements. The third practice involves access and indexing. In this process, Mountain (2015) argues that an effective records management program depends on an organization’s ability to attain information for litigation response, business support, or compliance purposes. The last practice involves accountability and compliance. In this practice, Mountain (2015) argues that a records management program will not be successful if employees do not abide by the program and its regulations. Auditing and organization-wide accountability include critical elements for compliance.

## 2.4.3 Physical distribution and performance

Physical distribution of goods and services has been an essential feature of industrial and economic life. Hesse and Rodrigue (2018) observed that distribution is a service that adds value to products by making them available at the right time, in the right place, which provides an interface with the customer. Physical distribution is a whole process that concern materials and finished product, of physical movement of goods from the manufacturers to intermediaries and finally to the ultimate consumer. There are various routes that products or services use after their production until they are purchased and used by end users. Therefore, distribution channels are all those organizations that a product has to go through between its production and consumption (Kotler and Keller, 2016).

Distribution channel management is very critical for the firms when they decide to enter one or more markets. Increasingly, the roles of logistics service firms are included in the decision process for distribution channel, especially when they are a dominant element within the supply chain.The ability to ensure accurate delivery of a product and raw materials, especially over long distances is vital to the overall operation and success of manufacturing firms (Flowmaster, 2010). Also, Richard (1965) concluded that a highly responsive and reliable physical distribution system facilitates marketing efforts and actually help to generate additional sales volume for firms. More so, it helps to minimize out-of-stock occurrences through more accurate inventory placement and control, hence, sales lost due to being out of stock will be minimized (Richard, 1965).

More so, Bovee and Thill (2013) observed that physical distribution is often one of the biggest influences on a firm’s ability to successfully deliver products on time and it plays major roles in the performance of manufacturing firms. Transportation Generally, transportation is the actual physical movement of people and goods from one place to another (Ahukannah, Ndinaechi, and Arukwu, 2013). It is basically the movement of products from one location to another as it makes its way from the beginning of a supply chain to the customer’s hands. Transportation not only ensures movement of people but also goods thus assisting the economy in the growth of trade and commerce (Cooper *et al,* 2013).

Transportation plays a connective role among the several steps that result in the conversion of resources into useful goods in the name of the ultimate consumer. It is the planning of all these functions and sub-functions into a system of product movement from supply sources to demand destinations in order to minimize cost and maximize service to the customers that constitutes the concept of business logistics (Fair and Williams, 1981) European Journal of Logistics, Purchasing and Supply Chain Management Vol.7 No.1, pp.12-28, February 2019Published by European Centre for Research Training and Development UK (www.eajournals.org) 15 ISSN 2054-0930 (Print), ISSN 2054-0949 (Online) The transportation cost includes the means of transportation, corridors, containers, pallets, terminals, labours, and time hence logistics managers must comprehend transport system operation thoroughly (Hesse and Rodrigue, 2018).

Transportation system makes goods and products movable and provides timely and regional efficacy to promote value-added under the least cost principle (Yung-Yu *et al,*2015). Transport affects the results of logistics activities and influences production and sale (Hesse and Rodrigue, 2017). More so, Long and Michael (2015) opined that transportation is the base of efficiency in logistics management and a good transport system brings benefits not only to service quality but also brings about sales growth in the firm.

Furthermore, Geraldine and Chikwendu (2013) observed that continuous increase in the cost of transportation due to poor nature of roads, high cost of vehicles and spare parts poses a serious problem to an effective coverage of territories and on time delivery of firm’s products. Sales Growth The corresponding ratio of a firm performance in either quarterly, half-yearly or yearly basis to measures its performance is known as sales growth and it is achieved by annual addition of previous sales figures derived by a firm compared to the corresponding period of time that exceeds the former year (Nwokah, 2018). Mohd and Yusuo (2013) posited that key players in industries try to increase their revenue in terms of sales growth and market share.

Also, every business organization wants to stay on the top and remain there and for those that are not there they want to get to the top. However, for that to happen businesses has to measure their previous year’s performance with current year performance which will help them measure up with competition and improve sales where necessary and increase their profit through sales. Yung-Yu, Wen- Long and Michael (2015); Nwokah (2018) further noted that the sales growth of a firm can be affected by some controllable or uncontrollable factors like income level, change in taste, technology, quality and ineffective logistics management.

According to Stern and El-Ansory, (2017) a strategically planned physical distribution system can provide the company with a better understanding of its impact on organisational performance in terms of distribution responsiveness, increased sensitivity to the distribution environment and increase awareness and understanding of distribution cost reduction and customer service level. The strategy planning process for a physical distribution system therefore involves a valuation of alternate physical distribution system configuration that meet customer service requirement (Miller, 2017). Therefore, the physical distribution process begins with the determination of customer service goals and services which in turn serve as the basis for the determination of inventory, warehousing, transportation and order processing strategies. In order for firms to become closer to their customers and provide improved customers services, they need to be able to deliver goods and services on time (Griffith *et al,* 2014).

# 2.5 Conceptual framework

# Figure 2.1: The conceptual framework

***Independent Variable***

***Dependent Variable***

**Logistics Management**

**Performance**

* Improved production
* End user satisfaction
* Increased revenue
* Efficiency
* Effectiveness
* Improved standard of living
* Revenue growth
* Infrastructure development
* Job creation

**Logistics Planning**

* Increased flow of information
* Collaboration of players
* Coordination and facilitate

**Record keeping practices**

* Records management policy
* Evidence based decisions
* Systematic analysis and control

**Physical Distribution**

* Availability of products
* Interface with customers
* Minimization of stock-outs

*Source:Adopted with modification from Stank (2015)*

According to the above conceptual framework, it implies that the independent variable that is logistics management has measurable dimensions of logistics planning, records keeping practices and physical distribution clarity if they are properly complied with then the organisation will expect enhanced performance through improved production, service delivery, end user satisfaction, increased revenue, efficiency and effectiveness for the above to be successful the process factors like organisation management style will make the performance levels improve.

The conceptual framework reflects two variables namely logistics management as the independent variable and performance as the dependent variable. In other words, it’s conceptualised that performance depends on logistics management.

# CHAPTER THREE

# METHODOLOGY

# 3.1 Introduction

This section described the research design, study area, data population, and sample size, sampling methods, data collection methods, sources and methods, research instruments, validity and reliability, method and procedure, data collection, data processing, data analysis techniques, ethical considerations and anticipated limitations to the study.

# 3.1 Research design

According to Cresswell (1997), the research design refers to the overall strategy chosen to integrate the different components of the study in a coherent and logical way. It was sectioned into the: research approach, research strategy, research duration, and research classification/methods.

## 3.1.1 Research approach

According to Trochim (2006), this is the basic approach to research. The study adapted a phenomenological and positivist approach because it gave the experience of logistics management and performance phenomena by people to involved in the investigation. It gave a greater understanding of what was happening and therefore yielded valuable data.

## 3.1.2 Research strategy

The study adapted a case study strategy. The justification for the choice of a case study research strategy is that it used specific subjects with common characteristics enough to represent the rest other than studying the entire population and the study was able to dwell on the information from KOPGT for deductions and generalization on logistics management and performance of agricultural development programmes.

## 3.1.3 Research duration

The study adapteda cross-sectional survey duration. A cross-sectional survey duration was adopted because a cross-section of the population made the research feasible involving only one study population which was contacted once for the required data. The cross sectional duration enabled faster collection of data over a short period of time inorder to establish the influenceof logistics management and performance.

## 3.1.4 Research classifications

The study adapted both a quantitative and qualitative methods to data collection and analysis. According to Sarantakos (2015) a quantitative methodology involves the use of structured technique of data collection that allowed quantification measurement and operation using quantitative methods of analysis. Quantitative methods were used in the study because data sought to be quantified on a Likert scale in order to establish the relationship between logistics management and performance by way of regression.

The qualitative method was used because obtaining nominal data was critical to giving a detailed picture of logistics management and performance inKOPGT. Thus, the research used both descriptive and inferential statistics in the analysis, interpretation and drawing conclusions. This involved using frequencies and hypothesis testing by analysing variance (ANOVA), standardised coefficients in multivariate regression analysis of findings on logistics management and performance inKOPGT.

# 3.2 Study population

Study population according to Dylan (2011) this is the total number of respondents from which the sample size is derived. The study population targeted 120 people. These included among others, managers, department heads, procurement, human resource department and finance departments are the major participants in the logistics management of activities within the KOPGT. The study also involved student leaders from the guild government and other student associations of the KOPGT because they are representatives of the main beneficiaries of performance. These population elements were chosen because they were expected to have enough knowledge required in understanding how logistics management affects performance.

# 3.3 Sample size

The study used a sample size of 92. The sample size was determined using the Krejcie and Morgan’s table of sample size determination (Appendix 1), a target population of 120 would require a sample size of 92 elements. This is as indicated in table 3.1.

# Table 3.1: Distribution of population size employee level

|  |  |  |  |
| --- | --- | --- | --- |
| **Category** | **Population** | **Sample Size** | **Sampling technique** |
| Managers | 10 | 10 | Census sampling |
| Department heads | 20 | 19 | Simple Random Sampling |
| Procurement department | 24 | 21 | Purposive sampling |
| Human resource dept. | 22 | 10 | Purposive sampling |
| Marketing department. | 20 | 10 | Purposive sampling |
| Finance department. | 16 | 14 | Simple Random Sampling |
| I.T department. | 8 | 8 | Census Sampling |
| **Total** | **120** | 92 |  |

*Source: primary data, 2021*

# 3.4 Sampling methods and techniques

Determining the sample elements for the study to constitute the sample size of 92, both the probability and non-probability sampling methods were used in this study. There is need for non-probability sampling method in which the elements of the population may have no known probability of being selected (Donna and Tedesco, 2010). Though biased, it offered a faster, cheap and less complicated approach to sampling besides not offering any chance to leaving out key informants in the study population. While, the probability sampling method in which all the elements of the population have known probability of being selected (Elliot, 2020) were also applied to this study.

The simple random sampling technique was used in selecting the participants. This sampling procedure was selected because it gave equal chance of each element in the population to be selected, since the given population geographically is concentrated the technique therefore seems appropriate compared to other techniques. A list of employees was obtained from KOPGThuman resource office and names of study participants were drawn randomly using fish and bow method, and employees corresponding with the chosen names were approached for interviews.

Purposive sampling was used to collect information from the respondents. The study used purposive sampling aimed atparticular characteristics of the study population that ultimately enabled the researcher answer questions.

The census sampling technique was used because it is judgmental such that it enables the selection of only those members of the population with sufficient technical knowledge of the subject matter so as to access technically required information (Lavrakas, 2018).

# 3.5 Background information of respondents

This gives the background information of respondents including: response rate, age, education, gender, and work experience.

## 3.5.1 Response rate

Following the distribution of questionnaires, the researcher expected an above average response rate. Out of the 92 respondents sampled and reached, 86 were able to respond to questionnaires and had them availed for collection by the researcher. 6 respondents did not return questionnaires indicating a 93.4% response rate and a 6.6% non-response rate as shown in table 3.2. This implies that the information obtained gives a significant representation of the population studied.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Table 3.2 Response rate | | | | | |
|  | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | Response | 86 | 93.4 | 93.4 | 93.4 |
| Non response | 6 | 6.6 | 6.6 | 100.0 |
| Total | 92 | 100.0 | 100.0 |  |

*Source: Primary data, 2021*

## 3.5.2 Gender of respondents

Respondents were asked to identify the gender in which they belonged and Results to this question are summarised in Table 3.3

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Table 3.3: Gender | | | | | |
|  | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | Male | 37 | 43.0 | 43.0 | 43.0 |
| Female | 49 | 57.0 | 57.0 | 100.0 |
| Total | 86 | 100.0 | 100.0 |  |

*Source: Primary data, 2021*

As seen in Table 3.3, results revealed that 43.0% of the respondents were males while 57.0% of the respondents were females. This can be interpreted to mean the information obtained gives a significant representation of the population studied.

## 3.5.3 Age group of respondents

Respondents were also asked to identify the age brackets they belonged, results to this question are summarised in Table 3.4

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Table 3.4: Age | | | | | |
|  | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | 20-30 years | 32 | 37.2 | 37.2 | 37.2 |
| 31-40 years | 19 | 22.1 | 22.1 | 59.3 |
| 41-50 years | 19 | 22.1 | 22.1 | 81.4 |
| Above 50 years | 16 | 18.6 | 18.6 | 100.0 |
| Total | 86 | 100.0 | 100.0 |  |

***(Source: Primary data, 2021)***

As seen in Table 3.4, results indicate that 37.2% belonged to the age bracket of 20-30 years, this was the majority age bracket. 22.1% were 31-40 years of age while 18.6% were above 50 years. This shows that at KOPGT are still in the age bracket of public service and have not yet reached retirement.

## 3.5.4 Level of education

Respondents were asked to identify their respective levels of education. Results to this question are summarised in Table 3.5

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Table 3.5: Level of education | | | | | |
|  | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | Certificate | 9 | 10.5 | 10.5 | 10.5 |
| Diploma | 17 | 19.7 | 19.7 | 30.2 |
| Bachelor’s degree | 37 | 43.0 | 43.0 | 73.2 |
| Master’s degree | 19 | 22.1 | 22.1 | 95.3 |
| If others, specify | 4 | 4.7 | 4.7 | 74.3 |
| Total | 86 | 100.0 | 100.0 |  |

***(Source: Primary data, 2021)***

As seen in Table 3.5, results revealed that majority of the respondents had academic level of degree as represented by 43.0%, an indication that respondents had prior knowledge and understanding about logistics management and performance of government agricultural development programmes.

## 3.5.5Length of work period with Kalangala Oil Palm Growers Trust

Respondents were asked to identify the number of years they had lived in Nakawa Division. Results to this question are summarised in Table 3.6

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Table 3.6: Length of work period with Kalangala Oil Palm Growers Trust | | | | | |
|  | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | 0-3 years | 20 | 23.3 | 23.3 | 23.3 |
| 4-7 years | 19 | 22.1 | 22.1 | 45.4 |
| 8-11 years | 23 | 26.7 | 26.7 | 72.1 |
| 12-15 years | 10 | 11.6 | 11.6 | 83.7 |
| Over 15 years | 14 | 16.3 | 16.3 | 100.0 |
| Total | 86 | 100.0 | 100.0 |  |

***(Source: Primary data, 2021)***

As seen in Table 3.6, results revealed that the highest number of respondents worked in KOPGT for a period between 8-11 years was represented by 26.7%, this was followed by 23.3% who worked in the area for a period of 0-3 years, 22.1% worked for a period between 4-7 years while the least 11.6% worked for a period of 12-15 years. This can be interpreted that a bigger number of respondents had worked in KOPGT long enough to understand how logistics management influences performance.

# 3.5 Data sources

The study used both primary and secondary sources as this necessary to provide a triangulated analysis of the logistics management and performance phenomena in attempting to analyse the causal relationship that exists between them.

## 3.5.1 Primary data

Primary data is an original data source, that is, one in which the data are collected first-hand by the researcher for a specific research purpose or project (Neil, 2010). The study used face to face interviews in order to save time and the data was collected using structured questionnaires that was self-administered by the respondents. Primary data was mainly got from staff and students because they had most of the information needed for this study.

## 3.5.2 Secondary data

According to Keen (2017) Secondary data refers to data that was collected by someone other than the user. This study collected secondary data through document reviews and other sources such as textbooks, business reports/ manuals, journals so as to get enough relevant information about the research topic. This was used because the data tends to be readily available and inexpensive to obtain

# 3.6 Data collection methods

## 3.6.1 Interview

Andrea (2014) states that interview method of data collection is a verbal conversation between two people with the objective of collecting relevant information for the purpose of research. Therefore, the purpose of research interviews was to explore the views, experiences, beliefs and/or motivations of individuals on specific matters and are particularly appropriate for exploring sensitive topics, where participants may not want to talk about such issues in a group environment.

## 3.6.2 Survey method

Groves (1989) defines this method as a field of applied statistics of human research surveys, and survey methodology studies involve the sampling of individual units from a population and the associated survey data collection techniques, such as questionnaire construction and methods for improving the number and accuracy of responses to surveys. Survey method was used because it saves time. The questionnaire comprised of statements requiring the respondents to opt for one out of the five opinions using the 5-point Likert scale with strongly disagree=1, disagree=2, not sure=3, agree=4 and strongly agree=5.

Therefore, five points rating scales of questionnaire from strongly disagree (1) to strongly agree (5) were adopted to measure the variables of reward management. Academic performance was measured by a one-item questionnaire on five-point Likert scale [where disagree (1) to strongly agree (5), this is the single global rating approach (Davidson,1979) as it is believed to be an easier approach to collect data (Haque and Taher,2008; Yu and Egri,2005).

## 3.6.3 Document review

According to Brent (2016), document review involves systematic data collection from existing records. This method was used to gather information about the study variables that is logistics management and performance. This method was used because a lot of information was reviewed to provide the most reliable and relevant information. The researcher reviewed logistics management at KOPGT to find out how required performance level is being achieved. The researcher reviewed supply chain performance reports, cost management reports, logistics strategic planning reports and logistics service quality reports.

# 3.7 Data collection instruments

## 3.7.1 Interview guide

Face to face interviews were conducted alongside self administered questionnaires so as to enhance response to questions generally regarded as sensitive. The researcher used structured and face to face interviews because they provide first-hand information; data was collected because it is less costly and has the ability to clarify questions. In this method, interview guides were drafted and questions were asked and then note responses corresponding the asked questions.

## 3.7.2 Self-administered questionnaire

This was the main research instrument that was used to gather primary data from the individual respondents. The study made cross ended questions and sought information from the respondents to get information about the current level of logistics management in the area of study using self-administered questions.

# 3.7.3 Document review checklist

Document review is a systematic collection, documentation, analysis and interpretation, and organization of data as a data collection method in research. The document review was used to collect secondary data because the process can be done independently without needing to solicit extensive input from other sources.

# 3.8 Validity and reliability

This section tested the reliability is the degree to which an assessment tool produces stable and consistent results.

## 3.8.1 Validity of the instruments

Validity of the instrument is the degree to which the results are truthful (Robson, 2011). A pre-test of the research instrument to establish its validity was done. The instruments were given to two experts who gave their opinions on the relevance of the questions using a 5- point scale of relevant to not relevant. It was further pre-tested by administering it to probable respondents (n=10) and test their understandability of the items. Items that were found not to be relevant were eliminated and those found not to be understood were adjusted for understandability for the final research instrument that was used.

## 3.8.2 Reliability of the instruments

Reliability is the degree to which an assessment tool produces stable and consistent results (Ibid). Reliability of the questionnaire items was tested using the Cronbach’s alpha coefficient. Reliability of this study’s instruments was ascertained by pre-testing the questionnaires and interview guide in the field. The researcher established the reliability of the questionnaire by using pre-testing. The researcher gave questionnaire guides to the same groups of respondents and re-testing was done. This indicates that the instruments to be used to collect data from the respondents were dependable and reliable and also yielded good results. Therefore, the results and conclusions of this study was a basis for decision making.

# 3.9 Data collection procedure

In order to collect required data from KOPGT, the researcher obtained an introductory letter from the Dean of School of Business Administration and Information Technology of Nkumba. The letter was delivered to KOPGT to seek permission to conduct the research in their institution. After, the researcher collected data on how logistics management influences performance from respective respondents.

# 3.10 Data analysis techniques

Data was analysed after making reference to the available literature so as to compare and contrast opinions presented to statistical analysis to generate descriptive statistics in order to draw conclusions and make recommendations. The data collected was presented and used in explaining the relationship between the two variables of the research study. The researcher then presented the findings qualitatively and quantitatively in a research report. The quantitative collected information was altered, coded and cross-checked for completeness utilizing Ms Excel and copied to SPSS version 25 for examination. The inferential measurements such as regression analysis and correlation will be utilized to test the hypotheses.

# 3.11 Data processing

The response rate was carried out using tables, percentages and frequencies as this was relatively simple. After data is collected, the researcher recorded the percentage responses and rate these results in relation to the phenomenon. By use of the response rate, the researcher established the extent to which independent variable affactes the depend variable.

# 3.12 Ethical considerations

The researcher obtained consent of respondents and assured them that the study is purely academic and voluntary; they have a right to withdraw from participation. All sources used and referred to by the researcher in the study were acknowledged and respected, confidentiality and privacy of respondents too were considered.

# 3.11 Limitations of the study

Non response: The researcher faced a problem of non-response from the respondents; this was overcome by using a relatively small sample size.

Methodological challenges in view of measuring the variables. It may be cumbersome to choose measures to use for the different variables. The researcher encountered a trade-off between measurability and significance.

# CHAPTER FOUR

# LOGISTICS PLANNING AND THE PERFORMANCE OF KOPGT

# Introduction

This chapter deals with the first objective of the study; to examine how logistics planning influences the performance of KOPGT. In order to effectively conduct a valid analysis of data, the researcher used descriptive statistics, adopting tables to depict the relevant data.

# 4.2 Descriptive statistics on procurement logistics planning and performance

In relation to objective one, the descriptive data was presented in form of frequencies and percentages of the collected data.

## 4.2.1 Procurement planning helps meet customer requirements

The study sought to examine the contribution of procurement planning to the meeting of customer requirements. Findings to this were as indicated in table 4.1*.*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Table 4.1: Procurement planning helps meet customer requirements | | | | | |
|  | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | Strongly disagree | 31 | 36.0 | 36.0 | 36.0 |
| Disagree | 24 | 27.9 | 27.9 | 64.0 |
| Not sure | 4 | 4.7 | 4.7 | 68.6 |
| Agree | 9 | 10.5 | 10.5 | 79.1 |
| Strongly agree | 18 | 20.9 | 20.9 | 100.0 |
| Total | 86 | 100.0 | 100.0 |  |

*Source: Primary data, 2021*

As seen in Table 4.1, it results indicate that 36.0% strongly disagreed while 27.9% disagreed, generally 63.9% of the respondents disagreed to the statement. This means that KOPGT has not been effective in identifying and consolidating requirement and determining the timeframes for their procurement. It was revealed that on several occasions’ customer requirements have not been delivered as required, this was attributed to poor identification and selection of contractors by the organisation. The inefficiencies in logistics planning are mainly evidenced in the transportation of goods where on average at least 12.4% of the goods are always damaged in transit.

## 4.2.1 KOPGT’s configuration and implementation of the whole logistics function

The study sought to examine the configuration and implementation of the whole logistics function. Findings to this were as indicated in table 4.2*.*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Table 4.2: KOPGT’s configuration and implementation of the whole logistics function | | | | | |
|  | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | Strongly disagree | 2 | 2.3 | 2.3 | 2.3 |
| Disagree | 4 | 4.7 | 4.7 | 7.0 |
| Not sure | 3 | 3.5 | 3.5 | 10.5 |
| Agree | 26 | 30.2 | 30.2 | 40.7 |
| Strongly agree | 51 | 59.3 | 59.3 | 100.0 |
| Total | 86 | 100.0 | 100.0 |  |

*Source: Primary data, 2021*

As seen in Table 4.2, results reveal that 59.3% strongly agreed while 30.2% agreed, 89.5% of the respondents generally agreed to the statement, this means that the organisation implements operations that immediately include the development and maintenance of supply “chain’s function. In an interview session, it was revealed that;

“*KOPGT has an advanced logistics information system which is used to perform many economic activities in breaking down each logistics or operational plan which include timing, costs for implementation and their impact on other business functions within the organisation”.*

This means that the logistic planning provides necessary resources that can ensure achievement of organisational goals and objectives.

## 4.2.3 KOPGT logistics activities are well-thought of in advance

The study sought to examine whether KOPGT’s logistics activities are well-thought of in advance. Findings to this were as indicated in table 4.3*.*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Table 4.3: KOPGT logistics activities are well-thought of in advance | | | | | |
|  | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | Strongly disagree | 10 | 11.6 | 11.6 | 11.6 |
| Disagree | 15 | 17.4 | 17.4 | 29.1 |
| Not sure | 2 | 2.3 | 2.3 | 31.4 |
| Agree | 26 | 30.2 | 30.2 | 61.6 |
| Strongly agree | 33 | 38.4 | 38.4 | 100.0 |
| Total | 86 | 100.0 | 100.0 |  |

*Source: Primary data, 2021*

As seen in Table 4.3, results indicate that 38.4% strongly agreed and 30.2% agreed respectively, this means that 68.6% of the respondents generally agreed. Since majority of the respondents generally agreed it means that KOPGTs logistics management makes sure to plan well ahead in order to eliminate any delays in the supply chain the best they can. It was indicated that management endeavours to carry out efficient logistics planning especially in terms of transportation process. However, it was also added that no matter how well thought off a logistics plan can be, it is impossible to prepare for every possible eventuality, this explains the inconsistencies that have always affected the organisation. This means that management always has contingencies for every element of the logistics plan.

## 4.2.4 KOPGT logistics activities are well-coordinated

The study sought to examine whether KOPGT’s logistics activities are well-coordinated. Findings to this were as indicated in table 4.4*.*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Table 4.4: KOPGT logistics activities are well-coordinated | | | | | |
|  | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | Strongly disagree | 19 | 22.1 | 22.1 | 22.1 |
| Disagree | 36 | 41.9 | 41.9 | 64.0 |
| Not sure | 5 | 5.8 | 5.8 | 69.8 |
| Agree | 16 | 18.6 | 18.6 | 88.4 |
| Strongly agree | 10 | 11.6 | 11.6 | 100.0 |
| Total | 86 | 100.0 | 100.0 |  |

*Source: Primary data, 2021*

As seen in Table 4.4, results indicate that majority of respondents generally disagreed, this was summarised by 22.1% and 41.9% who strongly disagreed and disagreed respectively. The results mean that KOPGT has poor lines of communication and unnecessary coordination with many of its suppliers. It was indicated that this is mainly attributed to the weak procedures and government institutions that govern logistics management within public organisation and as a result the organisation faces significant difficulties in attaining desired performance levels. This means that the organisation does not yet have fully established coordination of transport and logistics infrastructure and services that can facilitate the transport flow between major centres of economic activity.

## 4.2.5 Integration of logistics processes within all supply chain partners

The study sought to examine whether there is integration of logistics processes within all supply chain partners. Findings to this were as indicated in table 4.5*.*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Table 4.5: Integration of logistics processes within all supply chain partners | | | | | |
|  | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | Strongly disagree | 20 | 23.3 | 23.3 | 23.3 |
| Disagree | 19 | 22.1 | 22.1 | 50.0 |
| Not sure | 4 | 4.7 | 4.7 | 54.7 |
| Agree | 20 | 23.3 | 23.3 | 77.9 |
| Strongly agree | 23 | 26.7 | 26.7 | 100.0 |
| Total | 86 | 100.0 | 100.0 |  |

*Source: Primary data, 2021*

As seen in Table 4.5, results indicate that majority of the respondents generally agreed, this was summarised by 23.3% agreed while 26.7% strongly agreed respectively. This can be interpreted to mean that KOPGT has a well-established and successful supply chain partnership. In an interview session, it was revealed that;

“*KOPGT as a client organisation strategically collaborates with its supply chain partners to manage its intra and inter organisation processes. Our management places a great level of strategic importance on logistics integration because it covers a wide range of inter-functional activities between logistics and all organisational departments including marketing, IT department and external supply chain partners”.*

This means that there is dynamic coordinated business process both within and outside the organisational boundaries.

## 4.2.6 KOPGT has increased flow of information to ease the planning process

The study sought to examine whether KOPGT has increased flow of information to ease the planning process. Findings to this were as indicated in table 4.6*.*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Table 4.6: KOPGT has increased flow of information to ease the planning process | | | | | |
|  | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | Strongly disagree | 29 | 33.7 | 33.7 | 33.7 |
| Disagree | 24 | 27.9 | 27.9 | 61.6 |
| Not sure | 9 | 10.5 | 10.5 | 72.1 |
| Agree | 11 | 12.8 | 12.8 | 84.9 |
| Strongly agree | 13 | 15.1 | 15.1 | 100.0 |
| Total | 86 | 100.0 | 100.0 |  |

*Source: Primary data, 2021*

As seen in Table 4.6, results indicate that majority of the respondents that is 33.7% and 27.9% strongly disagree and disagree respectively. Since this was the majority response, it can be interpreted to mean that the logistics planning and chain networks at the organisation are complex and more extended which makes it challenging to have adequate information flow which would strengthen the logistics decision-making methods effectiveness. It was revealed that there is incompetence among employees who have failed to ensure proper information flow throughout the supply chain process; this has affected the quality of goods and lowered productivity levels and competitiveness.

## 4.2.7 Logistics planning aids total operations costs and increases efficiency

The study sought to examine whether logistics planning aids total operations costs and increases efficiency. Findings to this were as indicated in table 4.7

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Table 4.7: Logistics planning aids total operations costs and increases efficiency | | | | | |
|  | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | Strongly disagree | 24 | 27.9 | 27.9 | 27.9 |
| Disagree | 26 | 30.2 | 30.2 | 58.1 |
| Not sure | 12 | 14.0 | 14.0 | 72.1 |
| Agree | 10 | 11.6 | 11.6 | 83.7 |
| Strongly agree | 14 | 16.3 | 16.3 | 100.0 |
| Total | 86 | 100.0 | 100.0 |  |

*Source: Primary data, 2021*

As seen in Table 4.7, results indicate that 30.2% disagreed while 27.9% strongly disagreed, generally 58.1% of the respondents disagreed. This can be interpreted to mean that the organisation minimises on operational costs by enabling it to anticipate change and develop strategies to adapt to those changes. It was revealed that despite the challenges in the organisation’s logistics planning, management ensures developed logistics strategies for specific product lines, geographical regions and customer segments which has enabled them to adapt to market changes impacting the business line while maintaining efficiency across others. This means that KOPGT priorities logistics planning timely delivery and maintaining operational efficiency.

## 4.2.8 Supply chain collaboration enhances KOPGT’s competitiveness

The study sought to examine whether supply chain collaboration enhances KOPGT’s competitiveness. Findings to this were as indicated in table 4.8

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Table 4.8: Supply chain collaboration enhances KOPGT’s competitiveness | | | | | |
|  | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | Strongly disagree | 11 | 12.8 | 12.8 | 12.8 |
| Disagree | 15 | 17.4 | 17.4 | 30.2 |
| Not sure | 4 | 4.7 | 4.7 | 34.9 |
| Agree | 28 | 32.6 | 32.6 | 67.4 |
| Strongly agree | 28 | 32.6 | 32.6 | 100.0 |
| Total | 86 | 100.0 | 100.0 |  |

*Source: Primary data, 2021*

As seen in Table 4.8, results indicate that majority of respondents generally agreed, this was summarised by 32.6% who both agreed and strongly agreed. Since this was the majority response, it can be interpreted to mean that KOPGT has proper interactions and connections with its suppliers. Respondents revealed that KOPGT has endeavoured to build proper people management so as to gain the added value that human aspects of business can bring to business operations. It was revealed that proper supplier relationships have ensured to keep things running smoothly and ensure that both KOPGT and suppliers work quickly to resolve issues, continually look for ways to improve operations and help each other to reap benefits from the relationship.

# 4.3 Correlation analysis

In an attempt of determining the relationship between logistics planning and performance at KOPGT, the study was subjected to Pearson’s correlation analysis and results presented in table 4.9

|  |  |  |  |
| --- | --- | --- | --- |
| Table 4.9 Correlations | | | |
|  | | Logistics planning | Performance of KOPGT |
| Logistics planning | Pearson Correlation | 1 | .330\*\* |
| Sig. (2-tailed) |  | .000 |
| N | 86 | 86 |
| Performance of KOPGT | Pearson Correlation | .330\*\* | 1 |
| Sig. (2-tailed) | .000 |  |
| N | 86 | 86 |
| \*\*. Correlation is significant at the 0.01 level (2-tailed). | | | |

As shown in table 4.9 the test revealed that there is a significant relationship between logistics planning and performance, this was represented by (r (86) = .330, P<0.05). This can be interpreted to mean that there is a statistically significant positive correlation between the two variables, meaning that if logistics management is held at a constant zero, performance would increase by a mean value of .330. This means that in order to improve on performance at KOPGT, logistics planning should be increased or improved.

# CHAPTER FIVE

# RECORD KEEPING PRACTICES AND PERFORMANCE OF KOPGT

# 5.1 Introduction

This chapter is about the second objective of the study; to examine how record keeping practices influence the performance of KOPGT. The researcher’s aim is to determine the phenomenon at KOPGT to ascertain whether record keeping practices have improved performance. The results to the statements in this section are summarized as follows.

# 5.2 Descriptive statistics on record keeping practices and performance

In relation to objective two, the descriptive data was presented in form of frequencies and percentages of the collected data.

## 5.2.1 Records management policy ensures effective performance

The study sought to examine whether records management policy ensures effective performance. Findings to this were as indicated in table 5.1

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Table 5.1: Records management policy ensures effective performance | | | | | |
|  | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | Strongly disagree | 12 | 14.0 | 14.0 | 14.0 |
| Disagree | 16 | 18.6 | 18.6 | 32.6 |
| Not sure | 7 | 8.1 | 8.1 | 40.7 |
| Agree | 21 | 24.4 | 24.4 | 65.1 |
| Strongly agree | 30 | 34.9 | 34.9 | 100.0 |
| Total | 86 | 100.0 | 100.0 |  |

*Source: Primary data, 2021*

As seen in Table 5.1, results indicated that 34.9% strongly agreed and 24.4% agreed, generally 59.3% of the respondents agreed. This means that the organisation has a records management policy which is followed to classify information through design, maintenance and applications which allow records managers to perform functions of categorising, tagging, segmenting or grouping of logistics records. It was indicated that through the records management policy the organisation is able to track logistics activities records with an inventory management system because it provides detailed information about the status of the logistics activities within the organisation. This means that KOPGT ensures to have safe records in a way that can enhance decision making and performance.

## 5.2.2 Special attention to the records required for procurement of each product

The study sought to examine whether special attention is given to records for procurement of each product. Findings to this were as indicated in table 5.2

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Table 5.2: Special attention to the records required for procurement of each product | | | | | |
|  | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | Strongly disagree | 22 | 25.6 | 25.6 | 25.6 |
| Disagree | 26 | 30.2 | 30.2 | 55.8 |
| Not sure | 12 | 14.0 | 14.0 | 69.8 |
| Agree | 10 | 11.6 | 11.6 | 81.4 |
| Strongly agree | 16 | 18.6 | 18.6 | 100.0 |
| Total | 86 | 100.0 | 100.0 |  |

*Source: Primary data, 2021*

As seen in Table 5.2, results indicate that majority of the respondents generally disagreed, this was summarised by 30.2% and 25.6% who disagreed and strongly disagreed respectively. This means that managers ensure to have proper records on all documents relevant to the pre-tendering, tendering and contract administration phases in KOPGT. In an interview session, it was expressed that;

“*records department especially the manager has a sole responsibility in ensuring that every event or product is recorded and all records appropriately filed in order to maintain an audit trail of the requirement from the initial receipt of the procurement requisition”.*

This means that KOPGT has a filing system and maintains a compete record on the entire procurement and contract administration processes for each requirement.

## 5.2.3 Logistics managers keeping electronic records of inventories

The study sought to examine whether records management policy ensures effective performance. Findings to this were as indicated in table 5.3

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Table 5.3: Logistics managers keeping electronic records of inventories | | | | | |
|  | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | Strongly disagree | 8 | 9.3 | 9.3 | 9.3 |
| Disagree | 15 | 17.4 | 17.4 | 26.7 |
| Not sure | 12 | 14.0 | 14.0 | 40.7 |
| Agree | 26 | 30.2 | 30.2 | 70.9 |
| Strongly agree | 25 | 29.1 | 29.1 | 100.0 |
| Total | 86 | 100.0 | 100.0 |  |

***Source: Primary data, 2021***

As seen in Table 5.3, results indicate that majority of respondents generally agreed; this was summarised by 30.2% and 29.1% who agreed and strongly agreed respectively. Since this was the majority response, it can be interpreted to mean that the organisation has an automated records management system that has enhanced the safety of its inventory records. It was indicated that KOPGT uses technology of handled scanners and barcode technology to capture data on products. the captured information is then used for a range of processes which include inventory stock management and replenishment. This means that the automated systems in KOPGT are key tools for records safety.

## 5.2.4 There are detailed records for each executive transport in KOPGT

The study sought to examine whether there are detailed records for each executive transport in KOPGT. Findings to this were as indicated in table 5.4

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Table 5.4: There are detailed records for each executive transport in KOPGT | | | | | |
|  | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | Strongly disagree | 26 | 30.2 | 30.2 | 30.2 |
| Disagree | 34 | 39.5 | 39.5 | 69.7 |
| Not sure | 7 | 8.1 | 8.1 | 77.8 |
| Agree | 11 | 12.8 | 12.8 | 90.7 |
| Strongly agree | 8 | 9.3 | 9.3 | 100.0 |
| Total | 86 | 100.0 | 100.0 |  |

*Source: Primary data, 2021*

As seen in Table 5.4, results indicate that 39.5% of the respondents disagreed and 30.2% strongly disagreed respectively. Since this is the majority, it can be interpreted to mean that there are instances of poor documentation and monitoring of vehicle log books. It was revealed that despite the availability and maintenance of a filing system with all documents in relation to logistics, there is inconsistency in updating detailed records for all executive transport and vehicles on a constant level. It was indicated that this inconsistency is explained by the delay or untimely delivery of products to respective customers hence incurring losses and costs for KOPGT.

## 5.2.5 Effective systematic analysis and control of records

The study sought to examine whether there is effective systematic analysis and control of records. Findings to this were as indicated in table 5.5

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Table 5.5: Effective systematic analysis and control of records | | | | | |
|  | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | Strongly disagree | 7 | 8.1 | 8.1 | 8.1 |
| Disagree | 14 | 16.3 | 16.3 | 24.4 |
| Not sure | 5 | 5.8 | 5.8 | 30.2 |
| Agree | 25 | 29.1 | 29.1 | 59.3 |
| Strongly agree | 35 | 40.7 | 40.7 | 100.0 |
| Total | 86 | 100.0 | 100.0 |  |

*Source: Primary data, 2021*

As seen in Table 5.5, results indicate that majority of the respondents that is 40.7% and 29.1% strongly agreed and agreed respectively. Since this was the majority response, it can be interpreted to mean that KOPGT uses the system to control its records from the creation of the record until the record is archived or destroyed. The respondents revealed that the processing of records includes activities such as significant information about data being processing, data categories, the group of data subjects, the purposes of the processing and the data recipients. This means that records are made available to the stakeholders whenever they are needed.

## 5.2.6 KOPGT has a whole range of activities that properly manage its records

The study sought to examine whether KOPGT has a whole range of activities that properly manage its records. Findings to this were as indicated in table 5.6

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Table 5.6: KOPGT has a whole range of activities that properly manage its records | | | | | |
|  | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | Agree | 32 | 37.2 | 37.2 | 37.2 |
| Strongly agree | 54 | 62.8 | 62.8 | 100.0 |
| Total | 86 | 100.0 | 100.0 |  |

*Source: Primary data, 2021*

As seen in Table 5.6, results indicate that all respondents that is 100% generally agreed, this was summarised by 62.8% and 37.2% who strongly agreed and agreed respectively. This can be interpreted to mean that there are a number of players or departmental skilled people that must record, analyse, manage and use supply chain data at every level. In an interview session, it was revealed that;

“*The records management system enables efficient business processes and workflows, forecasting, inventory management, distribution planning, reporting and ordering plus incorporate routine data management processes in order to effectively manage records”.*

This means that collecting data for managing a logistics management is a separate activity yet involves many activities if an organisation is t effectively manage its records.

## 5.2.7 Records keeping supports KOPGT to make decisions based on evidence

The study sought to examine whether records keeping supports KOPGT to make decisions based on evidence. Findings to this were as indicated in table 5.7

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Table 5.7: Records keeping supports KOPGT to make decisions based on evidence | | | | | |
|  | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | Strongly disagree | 4 | 4.7 | 4.7 | 4.7 |
| Disagree | 9 | 10.5 | 10.5 | 15.1 |
| Agree | 29 | 33.7 | 33.7 | 48.8 |
| Strongly agree | 44 | 51.2 | 51.2 | 100.0 |
| Total | 86 | 100.0 | 100.0 |  |

*Source: Primary data, 2021*

As seen in Table 5.7, results indicate that majority of the respondents generally agreed, this was summarised by 51.2% and 33.7% who strongly agreed and agreed respectively. This means that KOPGT records keeping practices and system produces up-to-date reports. It was revealed that through updated reports, management has been able to make rational decisions that have enabled it to meet the demands However, it was also indicated that there are cases where the systems malfunctions and some activities made at a particular time are not recorded in the system; this means that there is need for management to upgrade on the current system or improve on its maintenance.

## 5.2.8 KOPGT prepares a detailed record transports carried out in a special program

The study sought to examine whether KOPGT prepares a detailed record transports carried out in a special program. Findings to this were as indicated in table 5.8

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Table 5.8: KOPGT prepares a detailed record transports carried out in a special program | | | | | |
|  | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | Strongly disagree | 10 | 11.6 | 11.6 | 11.6 |
| Disagree | 13 | 15.1 | 15.1 | 26.7 |
| Not sure | 2 | 2.3 | 2.3 | 29.1 |
| Agree | 24 | 27.9 | 27.9 | 57.0 |
| Strongly agree | 37 | 43.0 | 43.0 | 100.0 |
| Total | 86 | 100.0 | 100.0 |  |

*Source: Primary data, 2021*

As seen in Table 5.8, results indicate that majority of respondents that is 43.0% and 27.9% generally agreed to the statement, this means that KOPGT logistics managers keep electronic records of inventories to facilitate inventory control and shorten the time required for ordering products since there are detailed records kept for each executive transport in the company. It was revealed that electronic detailed records have facilitated the selection of subsequent transport, comparing the cost of previous transports. It was also indicated that KOPGT has a special program which has a database that allows quick comparison of data from past activities and also provide improved activity and time.

# 5.3 Correlation analysis

In an attempt of determining the relationship between record keeping practices and performance at KOPGT, the study was subjected to Pearson’s correlation analysis and results presented in table 5.9

|  |  |  |  |
| --- | --- | --- | --- |
| Table 5.9 Correlations | | | |
|  | | Record keeping practices | Performance of KOPGT |
| Record keeping practices | Pearson Correlation | 1 | .792\*\* |
| Sig. (2-tailed) |  | .000 |
| N | 86 | 86 |
| Performance of KOPGT | Pearson Correlation | .792\*\* | 1 |
| Sig. (2-tailed) | .000 |  |
| N | 86 | 86 |
| \*\*. Correlation is significant at the 0.01 level (2-tailed). | | | |

As shown in table 5.9 the test revealed that there is a significant relationship between record keeping practices and performance, this was represented by (r (86) = .792, P<0.05). This can be interpreted to mean that there is a statistically significant positive correlation between the two variables, meaning that if logistics management is held at a constant zero, performance would increase by a mean value of .792. This means that in order to improve on performance at KOPGT, record keeping practices should be increased or improved.

# CHAPTER SIX

# PHYSICAL DISTRIBUTIONAND THE PERFORMANCE OF KOPGT

# 6.1 Introduction

This chapter is about the second objective of the study; to assess how physical distribution influences the performance of KOPGT. The researcher’s aim is to determine the phenomenon at KOPGT to ascertain whether physical distribution has improved performance. The results to the statements in this section are summarized as follows.

# 6.2 Descriptive statistics on physical distribution and performance

In relation to objective three, the descriptive data was presented in form of frequencies and percentages of the collected data.

## 6.2.1 Availability of products adds value to KOPGT through physical distribution

The study sought to examine whether Availability of products adds value to KOPGT through physical distribution. Findings to this were as indicated in table 6.1

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Table 6.1: Availability of products adds value to KOPGT through physical distribution | | | | | |
|  | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | Strongly disagree | 7 | 8.1 | 8.1 | 8.1 |
| Disagree | 13 | 15.1 | 15.1 | 23.3 |
| Not sure | 10 | 11.6 | 11.6 | 34.9 |
| Agree | 27 | 31.4 | 31.4 | 66.3 |
| Strongly agree | 29 | 33.7 | 33.7 | 100.0 |
| Total | 86 | 100.0 | 100.0 |  |

*Source: Primary data, 2021*

As seen in Table 6.1, results indicate that majority of respondents that is 33.7% and 31.4% strongly agreed and agreed respectively. This most respondents generally agreed, it can be interpreted to mean that there is effective planning, implementation and physical flow of materials and products from points of origin to points of consumption to meet customer requirements at a profit. This has added value to KOPGT along each step of the supply chain through various activities like superior product design, customer service and efficient delivery. This means that if managed effectively, physical distribution can increase customer satisfaction by ensuring reliable, cost-efficient movement of goods through the supply chain.

## 6.2.2 Physical distribution effectively provides interface with customers

The study sought to examine whether physical distribution effectively provides interface with customers. Findings to this were as indicated in table 6.2

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Table 6.2: Physical distribution effectively provides interface with customers | | | | | |
|  | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | Strongly disagree | 13 | 15.1 | 15.1 | 15.1 |
| Disagree | 12 | 14.0 | 14.0 | 29.1 |
| Not sure | 9 | 10.5 | 10.5 | 39.5 |
| Agree | 30 | 34.9 | 34.9 | 74.4 |
| Strongly agree | 22 | 25.6 | 25.6 | 100.0 |
| Total | 86 | 100.0 | 100.0 |  |

*Source: Primary data, 2021*

As seen in Table 6.2, results indicate that majority of the respondents that is 25.6% and 34.9% strongly agreed and agreed respectively. This can be interpreted to mean that KOPGT has improved on customers experience. In an interview session, it was expressed that;

*“KOPGT has customers in different geographical locations but our physical distribution enables our team to achieve a faster, more efficient last mile delivery and connects us to customers during times of product delivery.*

This means that despite the fact that customers are scattered across locations, interface always happens at the time of delivering the customer products, this has enhanced the customer experience.

## 6.2.3 The roles of logistics service firms are included in the decision process

The study sought to examine whether the roles of logistics service firms are included in the decision process. Findings to this were as indicated in table 6.3

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Table 6.3: The roles of logistics service firms are included in the decision process | | | | | |
|  | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | Not sure | 6 | 7.0 | 7.0 | 7.0 |
| Agree | 29 | 33.7 | 33.7 | 40.7 |
| Strongly agree | 51 | 59.3 | 59.3 | 100.0 |
| Total | 86 | 100.0 | 100.0 |  |

*Source: Primary data, 2021*

As seen in Table 6.3, result indicates that majority of respondents that is 59.3% and 33.7% strongly agreed and agreed respectively to the statement. This means that KOPGT’s decision process includes logistics service firms due to dominant elements within the supply chain. It was revealed that the organisations ensure to have accurate delivery of products and raw materials especially for long distances and this calls for overall operation and success by including logistics service firms; this creates a highly responsive and reliable physical distribution system which facilitates marketing efforts and actually helps to generate more revenue for the organisation.

## 6.2.4 There is accurate delivery of products and raw materials

The study sought to examine whether there is accurate delivery of products and raw materials. Findings to this were as indicated in table 6.4

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Table 6.4: There is accurate delivery of products and raw materials | | | | | |
|  | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | Strongly disagree | 26 | 30.2 | 30.2 | 30.2 |
| Disagree | 24 | 27.9 | 27.9 | 58.1 |
| Not sure | 5 | 5.8 | 5.8 | 6.3 |
| Agree | 17 | 19.8 | 19.8 | 83.7 |
| Strongly agree | 14 | 16.3 | 16.3 | 100.0 |
| Total | 86 | 100.0 | 100.0 |  |

*Source: Primary data, 2021*

As seen in Table 6.4, it is indicated that 27.9% disagreed and 30.2% strongly disagreed respectively, this can be interpreted to mean that the organisations face a number of challenges during delivery and transportation of raw materials in long distances. It was revealed that some of the common challenges faced are delays, unclear order status or damaged goods in transit which has caused unwanted and unpleasant situations for KOPGT with its customers. It was revealed that the major issue of delay in delivering products is due to slow and poor flow of information; the most common is having the trucks change directions recorded on the map because of poor flow of information.

## 6.2.5 Highly responsive and reliable physical distribution system

The study sought to examine whether there is highly responsive and reliable physical distribution system. Findings to this were as indicated in table 6.5

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Table 6.5: Highly responsive and reliable physical distribution system | | | | | |
|  | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | Strongly disagree | 14 | 16.3 | 16.3 | 16.3 |
| Disagree | 11 | 12.8 | 12.8 | 29.1 |
| Not sure | 11 | 12.8 | 12.8 | 41.9 |
| Agree | 26 | 30.2 | 30.2 | 72.1 |
| Strongly agree | 24 | 27.9 | 27.9 | 100.0 |
| Total | 86 | 100.0 | 100.0 |  |

*Source: Primary data, 2021*

As seen in Table 6.5, results in Table 6.5 indicate majority of respondents generally disagreed; this was summarised by 30.2% and 27.9% who agreed and strongly agreed respectively. This can be interpreted to mean that KOPGT’s physical distribution properly facilitates the transportation mode that the organisation adequately and regularly depends on to enhance marketing efforts. In an interview session it was revealed that;

*“Physical distribution is an important marketing function descri­bing the marketing activities relating to the flow of raw materials from the suppliers to the factory and the movement of finished goods from the end of production line to the final consumer or user”.*

This means that the organisation’s physical distribution takes keen interest in marketing decisions and ultimately increase customer satisfaction.

Physical distribution has helps minimize out-of-stock occurrences through more accurate inventory placement.

## 6.2.6 Physical distribution helps minimize out-of-stock occurrences

The study sought to examine whether physical distribution helps minimize out-of-stock occurrences. Findings to this were as indicated in table 6.6

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Table 6.6: Physical distribution helps minimize out-of-stock occurrences | | | | | |
|  | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | Strongly disagree | 10 | 11.6 | 11.6 | 11.6 |
| Disagree | 13 | 15.1 | 15.1 | 26.7 |
| Not sure | 7 | 8.1 | 8.1 | 34.9 |
| Agree | 27 | 31.4 | 31.4 | 66.3 |
| Strongly agree | 29 | 33.7 | 33.7 | 100.0 |
| Total | 86 | 100.0 | 100.0 |  |

*Source: Primary data, 2021*

As seen in Table 6.6, it is indicated that 33.7% strongly agreed and 31.4% agreed, since this is the majority, it can be interpreted to mean that physical distribution at KOPGT helps to minimise inventory levels and keeps most of the inventory in constant circulation. It was revealed that the physical distribution and availability of products is an important aspect in the supply chain management process at KOPGT; the physical distribution helps in controlling the physical flows of products from the point of production to the point of sales; this means that the objective of an efficient market logistics is getting the right goods to the right places at the right time for the least cost.

## 6.2.7 Physical distribution is the biggest influence on time delivery of products

The study sought to examine whether physical distribution is the biggest influence on time delivery of products. Findings to this were as indicated in table 6.7

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Table 6.7: Physical distribution is the biggest influence on time delivery of products | | | | | |
|  | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | Strongly disagree | 24 | 27.9 | 27.9 | 27.9 |
| Disagree | 26 | 30.2 | 30.2 | 58.1 |
| Not sure | 12 | 14.0 | 14.0 | 72.1 |
| Agree | 10 | 11.6 | 11.6 | 83.7 |
| Strongly agree | 14 | 16.3 | 16.3 | 100.0 |
| Total | 86 | 100.0 | 100.0 |  |

*Source: Primary data, 2021*

As seen in Table 6.7, results indicate that 30.2% disagreed while 27.9% strongly disagreed, generally 58.1% of the respondents disagreed. This can be interpreted to mean that KOPGT’s physical distribution is not effective in ensuring that delivery of goods is on time, the right quantity and always in the right place; in KOPGT it was indicated that one major contributor to delays in delivery of products is material handling where there are inefficiencies in arranging and controlling activities for plants, warehouses and transportation; as a result there is improper selection of equipment to physically handle products and minimise losses from breakage, spoilage and theft hence leading to delay in delivery of products to customers.

# 6.3 Correlation analysis

In an attempt of determining the relationship between logistics planning and performance at KOPGT, the study was subjected to Pearson’s correlation analysis and results presented in table 6.8

|  |  |  |  |
| --- | --- | --- | --- |
| Table 6.8 Correlations | | | |
|  | | Physical distribution | Performance of KOPGT |
| Physical distribution | Pearson Correlation | 1 | .150\*\* |
| Sig. (2-tailed) |  | .000 |
| N | 86 | 86 |
| Performance of KOPGT | Pearson Correlation | .150\*\* | 1 |
| Sig. (2-tailed) | .000 |  |
| N | 86 | 86 |
| \*\*. Correlation is significant at the 0.01 level (2-tailed). | | | |

As shown in table 6.8 the test revealed that there is a significant relationship between physical distribution and performance, this was represented by (r (86) = .150, P<0.05). This can be interpreted to mean that there is a statistically significant positive correlation between the two variables, meaning that if logistics management is held at a constant zero, performance would increase by a mean value of .150. This means that in order to improve on performance at KOPGT, physical distribution should be increased or improved.

# CHAPTER SEVEN

# TOWARDS HARMONISING LOGISTICS MANAGEMENT AND PERFORMANCE

# 7.1 Introduction

This chapter sets out to link study findings to the literature review by discussing the findings in relationship with literature review, and then suggest a way forward. Implications are, deduced, from the findings, discussed and interpreted basing on the research hypotheses of the study.

# 7.2 Hypothesis testing

To test study hypothesis H0that: There is no significant relationship between logistics management and performance of KOPGT, multivariate tests and analyses were done to establish the multicollinear relationship that exist among all logistics management constructs studied that is., logistics planning, record keeping practices, and physical distribution and their impact on performance in Kalangala Oil Palm Growers Trust. Tests carried out included: multiple regression analysis, and analysis of variance and results were as indicated in tables7.1, 7.2, and 7.3.

## 7.2.2 Regression analysis

A linear regression analysis was performed so as to assess the strength of the relationship between logistics management constructs of: logistics planning, record keeping practices, and physical distribution and performance. The result obtained is presented in the model summary table 7.1.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Table7.1: Model Summary | | | | |
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
| 1 | .845a | .715 | .712 | .72152 |
| a. Predictors: (Constant), Logistics management | | | | |

From table 7.1, it can be drawn that the multiple correlation coefficient (R) using all predictors that is, logistics planning, record keeping practices, and physical distribution simultaneously, is 0.845 and adjusted R square is 0.712. This implies a strong positive relationship between logistics management and performance given r = 0.845 and that, a 71.2% variance or change in performance of KOPGT can be predicted by a value change in the three predictors. The remaining 28.8% variance in performance of KOPGT is explained by other factors which were not the focus of this study.

## 7.2.2 Analysis of variance (ANOVA) results

ANOVA analysis was performed to test the equivalent hypothesis that there is a significant relationship between logistics management and performance of KOPGT. The results are summarized in table 7.2.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Table 7.2: ANOVAa | | | | | | |
| Model | | Sum of Squares | df | Mean Square | F | Sig. |
| 1 | Regression | 129.016 | 1 | 129.016 | 27.825 | .000b |
| Residual | 51.539 | 85 | .521 |  |  |
| Total | 180.555 | 86 |  |  |  |
| a. Dependent Variable: Performance | | | | | | |
| b. Predictors: (Constant), Logistics management | | | | | | |

The ANOVA table 7.2 shows that F = 27.825 and the value of sig is 0.000 i.e., **p** = 0.000 < 0.05. This means that the combination of logistics planning, record keeping practices and physical distribution gives a strong and positive statistical prediction of performance levels in KOPGT.

## 7.2.3 Standardized coefficients

**Multiple regression to establish standardized regression coefficients by the study were** necessary to compare the effect that different predictor variables of: logistics planning, record keeping practices, and physical distribution have on the response variable-performance in KOPGT. This facilitated the determination of which predictor variable of logistics management has the greatest effect on performance in KOPGT. Results were as indicated in table 7.3.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Table 7.3: Coefficients | | | | | | |
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| B | Std. Error | Beta |
| 1 | (Constant) | -1.460 | .551 |  | -2.650 | .011 |
| Logistics planning | .053 | .177 | .330 | 2.321 | .000 |
| Record keeping practices | .848 | .138 | .792 | 6.149 | .000 |
| Physical distribution | .362 | .178 | .150 | 2.034 | .047 |
| a. Dependent Variable: Performance of KOPGTs | | | | | | |

Table 7.3 further indicates a positive influence of the predictor variables on performance in KOPGT. In other words, performance in KOPGTis positively influenced by logistics planning elements with β =.041, t = 2.321, p=.000<0.01; record keeping practices with β =.792, t = 0.6.149, p = .000 < 0.01; and physical distribution with β = .150, t = 2.034, p = .001<0.01. These three factors positively affect performance in KOPGT. It was further revealed that record keeping practices has the greatest impact on performance in KOPGT given a higher Beta value of β = .792 compared to those of physical distribution and logistics planning.

In conclusion, the critical value which was the cut-off value or boundary beyond which the null hypothesis H0 is retained is 0.01. Since the sig. values of multiple regressions and ANOVA results were all less than 0.05 (**p**=0.01), this led to the rejection of the null hypothesis that there is no significant relationship between logistics management and performance of KOPGT.

# 7.3 Logistics planning and performance of KOPGT

The results showed that 63.9% of the respondents generally disagreed to the statement that procurement planning helps KOPGT to meet its customers’ requirement, 89.5% of the respondents generally agreed to the statement that KOPGT has appropriate configuration and implementation of the whole logistics function, 68.6% of the respondents generally agreed that KOPGT logistics activities are well-thought of in advance, 22.1% and 41.9% strongly disagreed and disagreed respectively that KOPGT logistics activities are well-coordinated and facilitate the achievement of the overall goals,23.3% agreed while 26.7% strongly agreed that there is effective integration of logistics processes within all supply chain partners of KOPGT, 33.7% and 27.9% strongly disagree and disagreed to the statement that KOPGT has increased flow of information to ease the planning process and 32.6% both agreed and strongly agreed that collaboration among all supply chain players has enhanced KOPGT’s competitiveness.

Logistics is one part of supply chain management practices that impact competitive advantage and overall organizational performance. Supply chain management practices are a set of activities undertaken in an organization to promote effective management of its supply chain. A well-managed logistics practices are expected to improve supply chain performance through cost, quality, delivery dependability, time to market, and product innovation (Fernie, &Mckinnon, 2011). The study also found out that companies have not been effective in identifying and consolidating requirement and determining the timeframes for their procurement.

Logistics became a very important sector for the international sustainability of the companies. If a logistic company works with high performance, it will create a competitive advantage for both the company and country (Akdoğan&Durak, 2016). The idea of logistics and supply chain management is an interaction of different processes and functions within a firm’s network for the purpose of cost reduction and customer satisfaction. The current study revealed that management can have well-established and successful supply chain partnerships, logistics planning and chain networks at the organisation are complex and more extended which makes it challenging to have adequate information flow.

Logistics is a multi-dimensional practice. It is a process of planning, implementing, and controlling the efficient and effective flow and storage of goods and related information. At the same time logistics deal with selection and arrangement of vehicles for transportation of materials and finished goods, and handling/holding of inventory in warehouse/storage until needed for production/consumption. An effective logistics practices shorten procurement time; minimize stock maintenance costs and shipment cost and time, offer secured and reliable services (Onay& Kara, 2017). The components of logistics are so broad but based on its relevance and research objective only six broad factors affecting logistics practices covered in this study including road network, inventory management, facility locations, transportation cost, mode of transportation, and waiting/lead time. The study findings revealed that the organisation minimises on operational costs by enabling it to anticipate change and develop strategies to adapt to those changes have proper interactions and connections with its suppliers

For improved supply chain performance, the need for availability of a road network is a key. Road network system is one of the most important infrastructures in any country as it provides the means to move people and goods. Road network design includes defining the routes and allocating the available resources and its performance evaluated by network reliability (Safeer, 2014).A road network system shows the standard of roads, connectivity, accessibility, linkages and movement; and poor road network connectivity will make supply chain management uncertain by disruption of transportation that create customer dissatisfaction, low customer responsiveness and low on time delivery (Parmar & Shah, 2016). The study found out that it can be challengingto be effective in identifying and consolidating requirement and determining the timeframes for their procurement, the organisation implements operations that immediately include the development and maintenance of supply “chain’s function

# 7.4 Record keeping practices and performance of KOPGT

The results showed that generally 59.3% of the respondents agreed that KOPGT has an established records management policy which ensures effective performance, 30.2% and 25.6% disagreed and strongly disagreed to the statement that logistics managers pay special attention to the records required for procurement according to each product, 30.2% and 29.1% agreed and strongly agreed that logistics managers keeping electronic records of inventories to facilitate inventory control, 39.5% of the respondents disagreed and 30.2% strongly disagreed to the statement that there are detailed records for each executive transport in KOPGT, 40.7% and 29.1% strongly agreed and agreed that there is effective systematic analysis and control of records from their creation through processing, 62.8% and 37.2% who strongly agreed and agreed that KOPGT has a whole range of activities that properly manage its records, 51.2% and 33.7% who strongly agreed and agreed that Records keeping supports KOPGT to make decisions based on evidence and 43.0% and 27.9% generally agreed to the statement that KOPGT prepares a detailed record of any transport carried out in a special program or electronically.

The findings are in line with Abdulrahman (2015) who asserts that records play various roles in organizational administration because administrators and managers use them on routine basis to carry out various administrative roles such as decision making. Recorded information helps in enlightening and educating organizational managers and administrators on matters relevant to the organization. Records can also help in strategic plans and successful implementation of organizational processes. They can also serve as sources of research for information that can be used as evidence. Timely access of recorded information is essential for decision-making, planning, and organizational control.

In both conventional and digital organizations, records stored in either electronic or physical form continue to be viewed as essential documents for administrative documentation. Records provide support for all activities carried out within organizations. Without proper records management, organizations cannot provide the necessary information and support, which in turn may lead to the loss of critical information in institutions. Proper records management practices are essential for an organization’s administration and the smooth running of the operations. Records management involves the incorporation of various practices aimed at proper information management (Aronsson, 2018).

Effectual maintenance of corporate information enables fast, reliable and accurate access or retrieval of records. It also ensures that redundant information is timely damaged and that important historic records are efficiently protected. Systematic records management enables organizations to; identify the records that they have, increase effectiveness and efficiency, support decision making, achieve business targets and objectives, meet regulatory and legislative requirements, protect the clients’, employees’, and stakeholders’ interests, and be accountable. Consequently, records are critical legal and historical tools that are necessary for the effective running of an organization (Awino, 2018). The study found out that through the records management policy the organisation is able to track logistics activities records with an inventory management system because it provides detailed information about the status of the logistics activities

# 7.5 Physical distribution and performance of KOPGT

The results show that 33.7% and 31.4% strongly agreed and agreed that availability of products has added value to KOPGT through physical distribution, 25.6% and 34.9% strongly agreed and agreed that physical distribution has effectively provided interface to KOPGT with its customers, is 59.3% and 33.7% strongly agreed and agreed that the roles of logistics service firms are included in the decision process for distribution channel, 27.9% disagreed and 30.2% strongly disagreed to the statement that there is accurate delivery of products and raw materials especially over long distances, 33.7% strongly agreed and 31.4% agreed that physical distribution helps minimize out-of-stock occurrences through more accurate inventory placement, generally 58.1% of the respondents disagreed to the statement that physical distribution is often one of the biggest influences on a KOPGT’s ability to successfully deliver products on time.

The understanding and practicing of physical distribution management has become an essential prerequisite for staying competitive in the global race and for enhancing profitably (Moberg, 2012).Council of Logistics Management (CLM) defines physical distribution management as “the systemic, strategic coordination of the traditional business functions and tactics across these businesses functions within a particular organization and across businesses within the supply chain for the purposes of improving the long-term performance of the individual organizations and the supply chain as a whole. It was revealed that there is effective planning, implementation and physical flow of materials and products from points of origin to points of consumption to meet customer requirements at a profit.

According to Havalder and Cavale (2017) physical distribution creates value of benefit that has an impact on the company's market share, total costs and profitability. Moreover, many scholars have been recommended that physical distribution play significant role for the enhancement of market share if and onlyif efficient. The study revealed that management’s decision process includes logistics service firms due to dominant elements within the supply chain, the organisations face a number of challenges during delivery and transportation of raw materials in long distances.

Physical distribution is the set of activities concerned with efficient movement of finished goods from the end of the production operation to the consumer. Physical distribution takes place within numerous wholesaling and retailing distribution channels, and includes such important decision areas as customer service, inventory control, materials handling, protective packaging, order processing, transportation, warehouse site selection, and warehousing. Physical distribution is part of a larger process called "distribution," which includes wholesale and retail marketing, as well the physical movement of product. It was revealed that management’s physical distribution properly facilitates the transportation mode that the organisation adequately and regularly depends on to enhance marketing efforts.

# CHAPTER EIGHT

# SUMMARY, CONCLUSION AND RECOMMENDATIONS

# 8.1 Introduction

This chapter comprises of the summary of findings, conclusion and recommendation of the study according to the study objectives. The study is about logistics management and performance. The recommendations are on a basis of the findings and relates to advice and the interventions that the researcher feels should be brought to the attention of KOPGT to improve performance. The study ends by presenting the areas that the researcher considers vital for further studies

# 8.2 Summary

The findings of the study were based on three research objectives namely; i) to examine how logistics planning influences the performance of KOPGT, ii) to examine how record keeping practices influence the performance of KOPGT and iii) to assess how physical distribution influences the performance of KOPGT

## 8.2.1 Logistics planning and the performance of KOPGT

Results revealed that KOPGT has not been effective in identifying and consolidating requirement and determining the timeframes for their procurement, the organisation implements operations that immediately include the development and maintenance of supply “chain’s function, KOPGTs logistics management makes sure to plan well ahead in order to eliminate any delays in the supply chain the best they can, KOPGT has poor lines of communication and unnecessary coordination with many of its suppliers, KOPGT has a well-established and successful supply chain partnership, logistics planning and chain networks at the organisation are complex and more extended which makes it challenging to have adequate information flow, the organisation minimises on operational costs by enabling it to anticipate change and develop strategies to adapt to those changes and KOPGT has proper interactions and connections with its suppliers.

## 8.2.2 Record keeping practices and performance of KOPGT

The results also indicated that through the records management policy the organisation is able to track logistics activities records with an inventory management system because it provides detailed information about the status of the logistics activities, managers ensure to have proper records on all documents relevant to the pre-tendering, tendering and contract administration phases in KOPGT, the organisation has an automated records management system that has enhanced the safety of its inventory records, there are instances of poor documentation and monitoring of vehicle log books, KOPGT uses the system to control its records from the creation of the record until the record is archived or destroyed, there are a number of players or departmental skilled people that must record, analyse, manage and use supply chain data at every level, KOPGT records keeping practices and system produces up-to-date reports and KOPGT logistics managers keep electronic records of inventories to facilitate inventory control and shorten the time required for ordering products since there are detailed records kept for each executive transport in the company.

## 8.2.3 Physical distribution and performance of KOPGT

Results also showed that there is effective planning, implementation and physical flow of materials and products from points of origin to points of consumption to meet customer requirements at a profit, KOPGT has improved on customers experience, KOPGT’s decision process includes logistics service firms due to dominant elements within the supply chain, the organisations face a number of challenges during delivery and transportation of raw materials in long distances, KOPGT’s physical distribution properly facilitates the transportation mode that the organisation adequately and regularly depends on to enhance marketing efforts, KOPGT helps to minimise inventory levels and keeps most of the inventory in constant circulation and one major contributor to delays in delivery of products is material handling where there are inefficiencies in arranging and controlling activities for plants, warehouses and transportation.

# 8.3 Conclusion

The study concludes that there are variations among the level of implementation of logistics management practices. Hence the extent of implementation is concluded to base largely on the desired outcomes or the managements' preferences. The study also found out that there are challenges that limit the effectiveness of the implementation process. The study thus concludes that for the implementation to be successful these challenges have to be addressed.

The study further found out that there exists a strong positive relationship logistics management and performance at KOPGT. The study thus concludes that increase in the logistics management operations would result in enhanced operational performance. This is because it results in increased speed and flexibility of transactions and knowledge transfer allow for more efficient coordination, and eventually higher profits.

# 8.4 Recommendations

The study established that implementing effective logistics management practices led to incurring of additional costs. The study thus recommends that proper budgetary considerations and plans to be considered before undertaking any process.

The study also recommends that logistics information system be given adequate attention as this strategy is vital to timely customer feedback, information sharing and storage in the organization.

The organisation can work closely with transport companies and stakeholders for fast delivery of raw material from farmers to the factory.

The company should give due attention in proper implementation logistics activities for efficient delivery of transportation, better warehouse management and inventory management

# 8.5 Suggestions for further research

Despite the study being able to address the research questions, few areas are yet to be addressed, requiring further research. To begin with, the study suggests that further studies to be conducted on how challenges faced under logistics management may be addressed. Also, the study only concentrated on KOPGT as the case study which may not be an equal representation or provide adequate information on all government agricultural development programmes. The study thus recommends that further studies be undertaken on other firms to enable comparison.

Further research should also be conducted using a different approach in determination of the impact that logistics management has on performance. This could be through using other variables other than those used by the study. This will ensure generalization of the results and fully establishing the phenomenon that exists. Future research could also be conducted using the longitudinal study designs in order to provide a better assessment of how the study variables improve over time.

# REFERENCES

Abdulrahman, J. (2015): Strategic Logistics Management (4th ed.). Boston: McGraw-Hill. Weaser, Companies Turning to Outsourcing for Logistics Needs. Philippines: Computer world

Ahrne, V. (2016): supply chain management: concepts and cases. PHV learning private limited New Delhi.

Akdoğan, K. &Durak, S. (2016): An Assessment of the Effect of Logistics Management Practices on Operational Efficiency at Mumias Sugar Company Limited, Kenya. International Journal of Economics, Commerce and Management United Kingdom, 3 (6), 1134-1156

Alberto, E. (2015): Key challenges for the Chinese Logistics industry. Logistics management, 44(2), 64-68.

Aronsson, R. (2018): Success factors and cost management strategies for logistics outsourcing. Journal of Management and Marketing Research, 7, 117.

Awino, T. (2018): The Impact of Logistics Performance on Organizational Performance in a Supply Chain Context. An International Journal Supply Chain Management, 13 317327

Balakrishnan, E. (2019): Supply chain strategy: The logistics of supply chain management. NewYork:McGraw- Hill.

Bamwesigye, P. (2015): Theeffect of logistics management on organisational performance of manufacturing companies basing on Kakira Sugar Works

Bourke, L. and Zhang, M. (2018): Logistics flexibility and its impact on customer satisfaction. The International Journal of Logistics Management, 16 (1), 71–95.

Boute, O. (2018): Reverse logistics capabilities and firm performance: the mediating role of business strategy. International Journal of Logistics Research and Applications, 19 (3), 1–19

Bowersox, J and Emberson, C (2017): Supply chain management: theory, practice and future challenges. International Journal of Operations and Production Management

Çanci, S. (2017): Improving Distribution Service Performance through Effective Production and Logistics Integration. Journal of Business Logistics, 33 (4), 309–323

Caridi, N. and Konrad, P. (2014): An Efficiency/Effectiveness Approach to Logistics Performance. Journal of Business Logistics, 12 (1), 33–62.

Chase, K and Mentzer, T. (2018): Logistics and supply chain process integration as a source of competitive advantage: An empirical analysis. The International Journal of Logistics Management, 25 (2), 289–314.

Cheroue, B. (2018): Collaboration within the Supply Chain: Perception for the Automotive Industry in Morocco. International Journal of Academic Research in Accounting, Finance and Management Sciences, 3 (3), 211–220

Christopher, M. (2017): Supply Chain Integration and Operational Performance: Moderating role of Organizational Culture. International Journal of Academic Research in Business and Social Sciences

Cooper, L., Keller, S., and Ozmert, J. (2013): The Effects of Logistics Capabilities and Strategy on Firm Performance. Journal of Business Logistics, 21 (2), 47–68

Coyle, O. and Langley, Y. (2017): Measuring and Selling the Value of Logistics. The International Journal of Logistics Management, 11 (1), 1–16.

Delfman, N. & Gehring, U. (2018): Implementation and management framework for supply chain flexibility. Journal of Enterprise Information Management, 19 (3), 303–319.

Dolven, K. (2017): Implementation and management framework for supply chain flexibility. Journal of Enterprise Information Management, 19 (3), 303–319.

Fekadu, C. (2017): Analysing the Impact of Supply Chain Management Practices on Organizational Performance through Competitive Priorities (Case Study: Iran Pumps Company). International Journal of Academic Research in Accounting, Finance and Management Sciences

Fernie, E. &Mckinnon, G. (2011): Access Factors Affecting Supply Chain Efficiency of Medical Supplies in public Health Centres in Uganda: A Case Study of Public Health Centres in Elgeyo Marakwet Count.

Flowmaster, W. (2010): Building competitive enterprises through supply chain management. Journal of Enterprise Information Management, 21 (4), 341–344.

Frazelle, U. (2019): Logistics Performance: Efficiency, Effectiveness, and Differentiation. Journal of Business Logistics, 31 (1), 43–62.

Fugate, Y. and Esper, U (2019): Logistics learning capability: sustaining the competitive advantage gained through logistics leverage. Journal of Business Logistics, 28 (2), 57

Fugate, R. Mentzer, W. and Stank, L. (2010): Green supply chain management practices: impact on performance. Supply Chain Management: An International Journal, 17(3), 290-305.

Goldsby, A and Raju, B (2017): Supply management orientation and its effect on buyer/supplier performance: some insights from automobile industry in India. *Great Lakes Herald*, *2*(1), 20-35

Gravier, S. (2017): Logistics and supply chain practices in India”, Vision – The Journal of Business Perspective, Vol. 10 No. 3, pp. 69-79.

Green, O. (2019): Analysis of Linkages between Logistics Information Systems and Logistics Performance Management under Uncertainty: European Journal of Business and Management 4(9).

Havalder, P. and Cavale, M. (2017): Effects of logistics management practices on organization performance in Kenya: A case of Rift Valley Bottlers Limited in Uasingishu County. International Journal of Social Sciences and Entrepreneurship, 1 (12).

Hayfa, V. and Zgaya, M. (2017): Reverse logistics capabilities and firm performance: the mediating role of business strategy. International Journal of Logistics Research and Applications, 19 (3), 1–19

Hesse, O. and Rodrigue, I. (2018): The role of just-in-time-in supply chain management”, The International Journal of Logistics Management, Vol. 11 No. 1, pp. 89-98

Ittmenn, I & King, S. (2010): Supply chain flexibility: an empirical study”, Journal of Supply Chain Management: A Global View of Purchasing and Supply, Vol. 35 No. 3, pp. 16-23.

Janat, L. (2019): A framework for evaluating third-party logistics”, Communications of the ACM, Vol. 48 No. 1, pp. 89-94.

Juma, S. (2020): Theinfluence of logistics management practices on the logistics performance of humanitarian organisations in Uganda

Kasilingam, T. (2018): Supply chain management: a strategic perspective”, International Journal of Operations and Production Management, Vol. 22No. 6, pp. 614-31

Kenyon, R. (2017): Supply chain management: practices, concerns, and performance issues”, Journal of Supply Chain Management, Vol. 38 No. 1, pp. 42-53

Kompula, U. (2018): Performance benefits of supply chain logistical integration”, Transportation Journal, Vol. 41 Nos 2/3, pp. 32-46.

Lambert, K. and Stock, I. (2018): A strategic framework for supply chain-oriented logistics”, Journal of Business Logistics, Vol. 26 No. 2, pp. 27-45

Laosirihongthong, L. &Dangayach, E. (2015): A study on decision factors andthird-party selection criterion of logistics outsourcing: an exploratory study of direct selling industry”, The Journalof American Academy of Business, Cambridge, Vol. 9 No. 2, Spp. 331-7.

Lareau, S. (2017): The relationship between marketing performance, logistics performance and company performance for retail companies”, International Review of Retail, Distribution and Consumer Research, Vol. 16 No. 2, pp. 277-96.

Lin, Q. (2016): Logistics service providers in Internet supply chains”, California Management Review, Vol. 48 No. 4, pp. 84-108.

Mamad, H. &Chahdi, R. (2019): The characteristics of high performing supply chains”, International Journal of Technology Management, Vol. 23 Nos 1-3, pp. 60-73

Mukolwe, E. (2015): Supply chain integration: customer value through collaborative closeness versus operational excellence”, Journal of Marketing: Theory and Practice, Vol. 6 No. 4, pp. 104-20.

Narasimhan, L.& Das, (2017): The role of transportation capabilities in international supply chain management”, Transportation Journal, Vol. 36 No. 3, pp. 5-17.

Nyaberi, F. and Mwangangi, D. (2018): Does supply chain management strategy mediate the association between market orientation and organizational performance?”, Supply Chain Management: An International Journal, Vol. 11 No. 5, pp. 407-14.

Obewo, B. (2016): Theimpact of logistics management on organisational performance of Mukwano Group of Companies

Onay, P. & Kara, G. (2017): Does supply chain management strategy mediate the association between market orientation and organizational performance?”, Supply Chain Management: An International Journal, Vol. 11 No. 5, pp. 407-14.

Palevich, N. (2017): Developing optimism to improve performance: an approach for the manufacturing sector”, Industrial Management& Data Systems, Vol. 104 No. 2, pp. 106-14

Parmar, F. & Shah, E. (2016): Empirical research on supply chain management: a critical review and recommendations”, International Journal of Production Research, Vol. 40 No. 17, pp. 4415-30.

Safeer, C. (2014): Supply chain performance in transport logistics: an assessment by service providers”, International Journal of Logistics: Research and Applications, Vol. 6 No. 3, pp. 152

Springinklee, M. &Wallenburg, Z. (2018): Supply chain management: implementation issues and research opportunities”, The International Journal of Logistics Management, Vol. 9 No. 2, pp. 1-19

Srinivasan, O. (2016): Logistics versus supply chain management: an international survey”, International Journal of Logistics: Research and Applications, Vol. 7 No. 1, pp. 17-31.

Ssemanda, A. (2019): Influencing factors on the innovation in logistics technologies for logistics service providers in Taiwan”, The Journal of American Academy of Business, Vol. 9 No. 2, pp. 257-63.

Stank, R. (2015): The Impact of Purchasing and Supply Management Activities on Corporate Success,"

Stern, M. and El-Ansory, (2017): Management or Physical Distribution Cost." Proceedings of l111enw1ion11IPhysical Distrih111io11 Co11/"ere11ce. Tokyo. p. 9

Vijayaraghavan, G. & Raju, D. (2018): Supply Chain Management: Implementation and Research Opportunities." The International Journalof Logistics Management. v. 9, n. 2. p. 1-19.

Waiganjo, L. andGatobu, E. (2017): Improving Distribution Service Performance through Effective Production and Logistics Integration. Journal of Business Logistics, 33(4), 309-323

Waiganjo, K. andGatobu, W. (2018): The Role of Transportation in Logistics Chain. Proceedings of the Eastern Asia Society for Transportation Studies, 5, 1657-1672.

Wilson, S. (2018): Role of Supply Chain Practices on Customer Satisfaction. International Journal of Academic Research in Business and Social Sciences, 4(10), 140.

# APPENDIX A: SELF ADMINISTERED QUESTIONNAIRE

Dear Sir/Madam,

I am **Kyogula Roy**, a student of Master of Procurement and Logistics Management of Nkumba University conducting research on: ***“logistics management and the performance of agricultural development programmes for government in Uganda using Kalangala Oil Palm Growers Trust (KOPGT)as A Case Study”.*** You have been identified as a resourceful person in providing information sought by the study. I request for your cooperation in responding to the statements contained in this questionnaire. Any information provided by you will be treated with utmost confidentiality and used for only academic purposes.

**Guidelines**

For **Section A**, kindly tick in the box that corresponds with your appropriate opinion/response or where appropriate, fill in the spaces provided.

For **Sections B, C, D**, and **E**, tick in the appropriate box that corresponds with the ranking of your levels of disagreement or agreement with the statements based on the Likert Scale given as:

**SECTION A: BACKGROUND INFORMATION**

1. Gender

|  |  |
| --- | --- |
| Male | Female |
|  |  |

2. Age (in years)

|  |  |  |  |
| --- | --- | --- | --- |
| 20-30 | 31-40 | 41-50 | Above 50 |
|  |  |  |  |

3. Period of service at Kalangala Oil Palm Growers Trust (in years)

|  |  |  |  |
| --- | --- | --- | --- |
| Below 2 years | 2 - 5 | 6-10 | Above 10 |
|  |  |  |  |

1. Highest level of education

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Certificate | Diploma | Bachelor’s degree | Master’s degree | If others, specify |
|  |  |  |  |  |

5- Length of work period with Kalangala Oil Palm Growers Trust

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 0-3 | 4-7 | 8-11 | 12-15 | Over 15 |
|  |  |  |  |  |

For section B, C, D, and E read the statement provided and indicate your most honest level of agreement to the statement using the scale of 1-5 where;

1=Strongly Disagree

2=Disagree

3=Neutral

4=Agree

5=Strongly Agree

**SECTION B: Logistics planning and the performance of KOPGT**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **No.** | **Statement** | **1** | **2** | **3** | **4** | **5** |
| 1. | Procurement planning helps KOPGT to meet its customers’ requirement. |  |  |  |  |  |
| 2. | The company has appropriate configuration and implementation of the whole logistics function. |  |  |  |  |  |
| 3. | KOPGT logistics activities are well-thought of in advance |  |  |  |  |  |
| 4. | KOPGT logistics activities are well-coordinated and facilitate the achievement of the overall goals. |  |  |  |  |  |
| 5. | There is effective integration of logistics processes within all supply chain partners of KOPGT. |  |  |  |  |  |
| 6. | KOPGT has increased flow of information to ease the planning process. |  |  |  |  |  |
| 7. | Logistics planning provides KOPGT with the total operations costs and increases the efficiency. |  |  |  |  |  |
| 8. | Collaboration among all supply chain players has enhanced KOPGT’s competitiveness. |  |  |  |  |  |

**SECTION C: Records keeping practices and the performance of KOPGT**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **No.** | **Statement** | **1** | **2** | **3** | **4** | **5** |
| 1. | KOPGT has an established records management policy which ensures effective performance. |  |  |  |  |  |
| 2. | Logistics managers pay special attention to the records required for procurement according to each product. |  |  |  |  |  |
| 3. | Logistics managers keeping electronic records of inventories to facilitate inventory control. |  |  |  |  |  |
| 4. | There are detailed records for each executive transport in KOPGT. |  |  |  |  |  |
| 5. | There is effective systematic analysis and control of records from their creation through processing. |  |  |  |  |  |
| 6. | KOPGT has a whole range of activities that properly manage its records. |  |  |  |  |  |
| 7. | Records keeping supports KOPGT to make decisions based on evidence. |  |  |  |  |  |
| 8. | KOPGT prepares a detailed record of any transport carried out in a special program or electronically. |  |  |  |  |  |

**SECTION D: Physical distribution and the performance of KOPGT**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **No.** | **Statement** | **1** | **2** | **3** | **4** | **5** |
| 1. | Availability of products has added value to KOPGT through physical distribution. |  |  |  |  |  |
| 2. | Physical distribution has effectively provided interface to KOPGT with its customers. |  |  |  |  |  |
| 3. | The roles of logistics service firms are included in the decision process for distribution channel. |  |  |  |  |  |
| 4. | There is accurate delivery of products and raw materials especially over long distances. |  |  |  |  |  |
| 5. | KOPGT has a highly responsive and reliable physical distribution system which facilitates marketing efforts. |  |  |  |  |  |
| 6. | Physical distribution has helped to minimize out-of-stock occurrences through more accurate inventory placement. |  |  |  |  |  |
| 7. | Physical distribution is often one of the biggest influences on a KOPGT’s ability to successfully deliver products on time. |  |  |  |  |  |
| 8. | Physical distribution helps determine how efficiently firms are meeting their customer's or agreed deadlines. |  |  |  |  |  |

**SECTION E: Performance of KOPGT**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **No.** | **Statement** | **1** | **2** | **3** | **4** | **5** |
| 1. | There are improved production levels in KOPGT. |  |  |  |  |  |
| 2. | KOPGT has ensured end user satisfaction. |  |  |  |  |  |
| 3. | The organisation has achieved increased revenue. |  |  |  |  |  |
| 4. | Logistics management has ensured increased levels of efficiency. |  |  |  |  |  |
| 5. | The organisation has achieved better effectiveness. |  |  |  |  |  |
| 6. | The organisation has achieved much revenue growth. |  |  |  |  |  |
| 7. | There are improved levels of infrastructure development in KOPGT. |  |  |  |  |  |
| 8. | The organisation has created better jobs for its employees. |  |  |  |  |  |

# APPENDIX B: INTERVIEW GUIDE

**Section A: Logistics planning and the performance of KOPGT**

1. Does procurement planning help KOPGT to meet its customers’ requirement?
2. Are KOPGT logistics activities well-coordinated and facilitate the achievement of the overall goals?
3. Is there effective integration of logistics processes within all supply chain partners of KOPGT?

**Section B: Records keeping practices and the performance of KOPGT**

1. Does KOPGT have an established records management policy which ensures effective performance?
2. Do logistics managers keep electronic records of inventories to facilitate inventory control?
3. Does KOPGT have a whole range of activities that properly manage its records?

**Section C: Physical distribution and the performance of KOPGT**

1. The availability of products has added value to KOPGT through physical distribution?
2. Are the roles of logistics service firms re included in the decision process for distribution channel?
3. Is there a highly responsive and reliable physical distribution system which facilitates marketing efforts?

# APPENDIX C: DOCUMENT REVIEW CHECKLIST

* Logistics performance reports.
* Outsourcing evaluation reports.
* Customer complaints records.
* Farmers’ sales records.
* KOPGT strategic plan.
* KOPGT performance reports.