# BUDGETING DECISIONS IN TIMBER PROCESSING FIRMS. A CASE OF LOGS & LUMBER LIMITED

By

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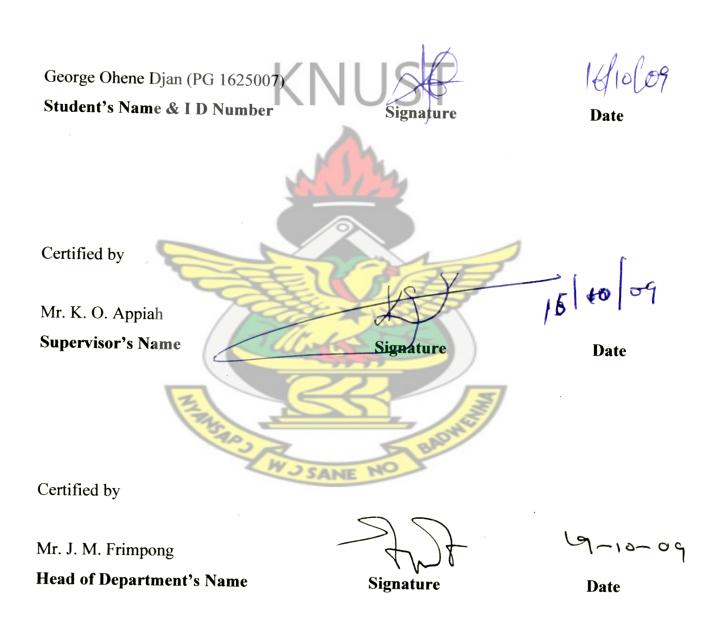
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#### **CERTIFICATION**

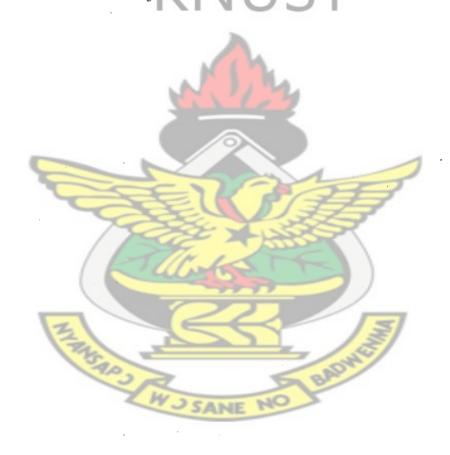
I hereby declare that this submission is my own work towards the MBA programme and that, to the best of my knowledge, it contains no materials previously published by another person nor material which has been accepted for the award of any other degree of the University, except where due acknowledgement has been made in the text.



# **DEDICATION**

I dedicate this work to my wife, Mrs. Harriet Ohene Djan for her countless support during the course of my studies at KNUST, School of Business for the MBA degree.

I also dedicate it to my two daughters, Josephine Ohene-Djan, Abena Boatemaa Ohene-Djan and son, Kwaku Ohene-Djan.



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To God be the glory for the great things he has done. First, I express my profound gratitude to the Almighty God for enriching me with ideas that enable me to complete this Long Essay.

I am also particularly grateful to my supervisor, Mr. K. O. Appiah, lecturer at the School of Business, KNUST, for devoting his time to vet the entire manuscript and offering valuable suggestions.

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#### **ABSTRACT**

The aim to this study is to evaluate the effectiveness of budgeting decisions of Logs and Lumber Ltd. as a control measure and basis of evaluating performance. To help find solutions to the research objectives, questions about the nature of budgeting approach and process, the rational behind the preparation of budgets, the challenges faced by the firm in its budget decisions, the nature of the budgetary control measures in the firm, and the nature and trend of budget variances from 2004 - 2008 were asked. Literature review for the study was carried out to cover the above stated questions. The study type is an exploratory and the research strategy used for the study is case study. research method employed for the study is mixed method as the study used both qualitative and quantitative variables. For the purpose of the study, a sample size of forty-eight (48) was used to obtain data. The main results of the study include; (i) the use of top-to-down and incremental budgeting approaches and absence of budget committee in place. (ii) budgets are prepared for planning, controlling and appraisal of performance. (iii) budgeting challenges includes; setting of unrealistic targets, using budgets as pressure device and budgets not based on research and analysis. (iv) budget reports are prepared on daily basis and (v) consistent reporting of unfavourable operating income variance from 2004 - 2008. It is recommended that, participative budgeting should be employed hence there is the need for management to institute a budget committee. A research should be carried out and based on the findings; zerobased budgets should be prepared to ensure the setting of realistic targets. Management should adopt management by exception with particular emphasis on materiality. This will help management in identifying the causes of budget variance in the firm.

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#### **CHAPTER ONE**

### RESEARCH INTRODUCTION AND CONTEXT

# 1.0 Background of the study

According to Brandon and Drtina (1997, p.514), there are five steps of implementing the strategy that are under management's control. These are, long-range planning, budgeting for operations, measurement, reporting and analysis and corrective action. Budgeting for operations which is the second step translate the company's long-range plan into short-term operating budgets. Budgeting systems are part of the firms accounting system and one such administration planning mechanism. "A principal tool of management planning in organisations is the budgeting process" (Gyasi 2005, p.81).

The actions that follow managerial decisions normally involve several aspects of the business, such as the marketing, production, purchasing and finance functions, and it is important that management should coordinate these various interrelated aspects of decision-making (Drury 2004, p. 589). Budgets normally represent the primary means of communicating agreed-upon objectives throughout the business organisation.

Once adopted, a budget becomes an important basis for evaluating performance. Thus, it promotes efficiency and serves as a deterrent to waste and inefficiency (Weygandt, et al. 1996, pp 1002). The success of the budget process depends on managers' success in setting appropriate targets for which they are held accountable. Just because a plan is set down on paper does not mean the plan will carry itself out. Control is exercised via the budget hence the name budgetary control. Budgetary control is at heart of many

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managers' jobs. The skills of budgetary control are increasingly valued in organisations, and the ability to control a budget is now considered an important attribute for managers. Budgetary control is achieved by comparing actual cost, revenues and performance against the set budget. It is necessary to carry out this comparison in order that managers can, if they need to, take corrective action and make changes to their operational plans as required to keep them on target. Budgeting and budgets means nothing without thorough detailed budgetary control. A deeper understanding of the state of the company is the ultimate goal of all representations in budgeting and budgetary control.

Operational management needs to know the causes of off-standard performance in order to improve operations. Variations between actual and expected results should be systematically and periodically reviewed to determine their cause(s). The knowledge of variances (real result versus budget) aids control, at least if and when these variances are understood well enough. The only criterion for the calculation of a variance is its usefulness. Variances must be calculated immediately after the event and one should act upon them adequately. Care should however be exercised so that individuals are not held responsible for variations that are beyond their control

The production and export of timber and timber products serve as one of the very important fulcrum around which the economy of Ghana thrives, hence, higher performance of the firms in the timber industry is crucial for the achievement of macroeconomic stability for Ghana as a country. The success or not of the timber

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industry depends greatly on the ability of timber companies in Ghana to manage resources both natural and human effectively and efficiently in their operations.

### 1.1 Problem Statement

Plans are pointless unless there is a periodic check on what is being achieved. Problems can arise at any point during the implementation of a plan. Unless a specific check is made during the implementation of plans, they can go unnoticed for so long that they will be impossible to remedy. Control measures should therefore be carefully planned so that they spot-light the problems which are likely to arise out of implementation of plans. Limited resources call for the need to plan and exercise control over their use.

Timber processing firms in Ghana have scarce raw materials to use in their operations. As a result of over reliance and misuse of natural resources by firms in the timber industry, they have contributed to the depletion of vegetation in Ghana leading to environmental degradation. Budgeting decisions serves as a tool to guide management to ensure proper use of resources in Timber processing firms. The aim of this study is to evaluate the budgeting decisions in timber processing firms with particular reference to Logs & Lumber Limited to access the effectiveness of budgeting decisions in controlling operational cost.

#### 1.2 Objectives

The researcher seeks to find solutions to the research questions derived from the problem statement above.

#### 1.2.1 Main Objective

This study is to examine the budgeting decisions at Logs & Lumber Limited as an effective control measure and basis of appraising performance.

### 1.2.2 Specific Objectives

This study is intended:

- (i) To identify the different types of Operational Budgets in use at Logs & Lumber Limited. (accomplished in Pages 47-49)
- (ii) To examine the budgeting approach and process used at Logs & Lumber Limited (accomplished in Pages 50-51)
- (iii) To identify the rational behind preparation and implementation of Budgets at Logs & Lumber Limited. (accomplished in Pages 51-53)
- (iv) To identify the challenges "if any" that exists in budgeting decisions at Logs & Lumber Limited. (accomplished in Pages 53-55)
- (v) To identify budgetary control measures at Logs & Lumber Limited. (accomplished in Page 55)
- (vi) To examine the budgeted and actual income and expenditure of the company from
   2004 2008 (accomplished in Pages 56-63)
- (vii) To make appropriate recommendations to ensure the effectiveness of budgets.(accomplished in Pages 67-71)

### 1.3 Relevance of the Study

Any management control system is only as good as the budgeting it depends on. The budget of Logs and Lumber Limited is a short-term plan coordinating the firm's long-range strategies with the day-to-day activities of responsibility centres.

Managers of Logs and Lumber Limited set the upcoming year's goals in the budget, which then becomes the yardstick for evaluating performance, that is, for assessing the degree to which those goals have been achieved. Since budgeting serves as a control device and as means of appraising employees performance in most organisations, failure to examine the budgeting process and investigate into the causes of budgeting variances, turns to affect the overall management control system of an organisation, hence the need for this study. The study has a practical significance, as it is expected to uncover the causes of budget variances in Logs and Lumber Limited that hampers management's efforts in promoting efficiency in its operations.

It is also expected that the study will be beneficial to the management of Logs and Lumber Limited as the recommendations of the study will help management to improve upon its performance if they are implemented. Lastly, it is expected that the findings of the study will add to the available literature on the subject which will be beneficial to other researchers carrying out a study on the topic.

### 1.4 Scope of the study

The study was conducted using both quantitative and qualitative approaches. The qualitative approach covered the various literatures which are relevant to the study. By

this the researcher relied on books, the internet, KNUST and UEW-Kumasi Libraries. The researcher also used questionnaire and interview to gather relevant information as a qualitative approach. Notwithstanding this, the researcher also used the observation approach to really verify for himself as to how operations are monitored to ensure that actual activities conforms to budgeted activities.

# 1.5 Organisation of the Study

The organisation of the work is presented in the diagram below.

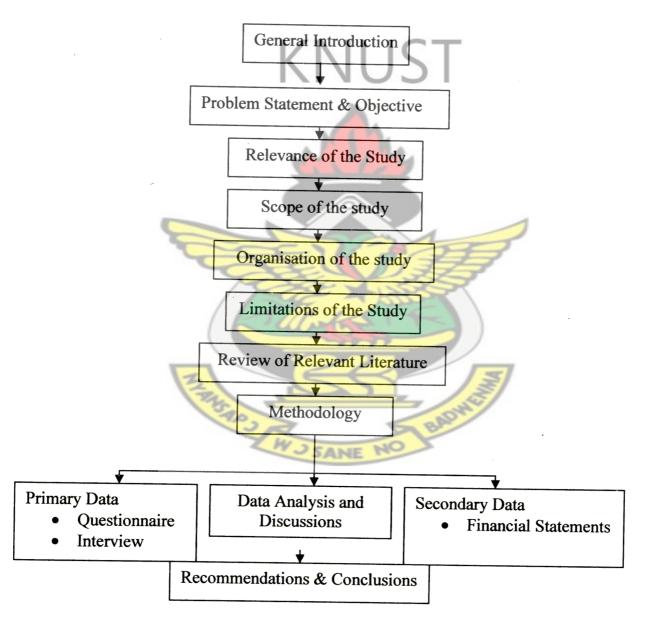


Figure 1.1 Source: Author's Own

# 1.6 Limitations of the Study

The research was initially designed to cover the Timber Processing Firms in the Kumasi Metropolis for data but it was humanly impossible to cover all within the time frame of the study. A comparative study of budgeting decisions in three timber processing firms was also considered but access to information compelled the researcher to limit the study to a particular firm, Logs and Lumber Limited as a case study for timber processing firms.

The management of two firms that the researcher contacted for data failed to respond for the fear of being exposed to their competitors. For instance all the questionnaires sent to Fabi Timbers at Abuakwa, were answered by departmental heads but the Finance Manager failed to make the budgets available to the researcher for the study to be possible. The limitation of the study to a specific Timber Firm makes it difficult to use the findings to make a general conclusion on firms in the industry.

Another constraint the researcher had was the inability to access all the necessary information from the management of Logs & Lumber Limited. For instance, Production budgets in units, Material budgets in quantity and Labour budgets in hours were not accessed; hence no analysis was made on them. Insufficient time at the disposal of the researcher and inadequate funding also posed a challenge to the researcher in his attempt to gather adequate data for the study.

### **CHAPTER TWO**

#### LITERATURE REVIEW

#### 2.0 Introduction

This aspect of the study aims at summarizing the results of the previous studies carried out on the topic closely related to the topic by other researchers. Literature review for the study is carried out to cover the following areas: The overview of budgeting and budgetary control, incremental and zero based budgeting, budgeting and human behaviour, capital budgeting, functional budgets and the master budget, rational behind the preparation and implementation of budgets, budgeting challenges, budgetary control, variance analysis, and summary of the review. The Literature review proceeds accordingly.

# 2.1 Overview of Budgeting and Budgetary Control

"Budget" and "Budgeting" are concepts traceable to the bible days, precisely the days of Joseph in Egypt. It was reported that "nothing was given out of the treasure without a written order". History has it that Joseph budgeted and stored grains which lasted the Egyptians throughout the seven years of famine. Budgets were first introduced in the 1920s as a tool to manage costs and cash flows in large industrial organizations. (Online) available at <a href="http://www.eurojournalsn.com">http://www.eurojournalsn.com</a> (accessed on 29/08/09).

Most organizations have diverse sub-units all working towards a set of organization goals. It is the duty of the various departmental managers to ensure that the action of each of these sub-units is coordinated and controlled in order for their action to be in line with corporate objectives. One of the best ways of co-ordination is by preparing a

detailed plan of action, which will incorporate all the various sub-units relating to a future time period. This plan sets out clearly what is required form each of the sub-units, within the given period of time. A plan must be expressed in monetary and quantitative terms, hence a budget. Budgeting ensure allocation of responsibility, measurement of performance and analysis of variances, and initiation of remedial action, if necessary.

# 2.1.1 Definitions of a Budget

According to Drury (2004, p. 11) a budget is a financial plan for implementing the various decisions that management has made. He added that budgets for all of the various decisions are expressed in terms of cash inflows and outflows, and sales revenue and expenses. A budget is a plan quantified in monetary terms, prepared and approved prior to a defined period of time, usually showing planned income to be generated and/or expenditure to be incurred during the period and the capital to be employed to attain a given objective (Gyasi 2005, p. 81).

A budget is a financial and/or quantitative statement prepared and approved prior to a defined period of time of the policy to be pursued during the period for the purpose of attaining a given objective (CIMA). Weygandt, et al. (1996, p. 1002) defines a budget as a formal written summary or (statement) of management plans for a specified future time period, expressed in financial terms. Horngren et al (2009, p. 2007) defines a budget as the qualitative expression of a proposed plan of action by management for a specific period and an aid to coordinate what needs to be done to implement that plan.

They said, a budget generally includes both financial and non-financial aspects of the plan, and it serves as a blueprint for the company to follow in an upcoming period.

From the above definitions it can be said that a budget is a plan of quantitative and/or financial statement, prepared for defined period of time, prepared to attain given objectives and approved by management.

### 2.1.2 Budgeting Process

Drury (2004, p. 597), has stated that the important stages involved in budgeting are the following;

# (a) Communicating Details of the Budget Policy:

According to him, many decisions affecting the budget year will have been taken previously as part of the long-term planning process which serves as the starting point for the preparation of the annual budget. Top management must therefore communicate the policy effects of the long – term plan to those responsible for preparing the current year's budgets

# (b) Determining the factors that restrict performance:

Drury has stressed that there are key factors that restricts performance in every organisation for a given period of time. He is of the opinion that, prior to the preparation of the budgets it is necessary for top management to determine the factors that restricts performance since these factors determines the point at which the annual budgeting process should begin.

# (c) Preparation of the sales Budget:

According to Drury, the level of a company's operation is determined by its volume of sales and the sales mix, therefore the sales budget is the most important plan in the annual budgeting process. He has emphasized that, the sales budget is the subsidiary budget that is prepared first and possibly the most important operational budget because, if the sales figure is wrong, then practically all the other budgets will be affected especially the master budget.

# (d) Initial Preparation of Budgets:

He is of the opinion that the mangers who are responsible for meeting the budgeted performance should prepare the budget for those areas for which they are responsible. He went on to say that, the preparation of the budget should be a "bottom—up" process, meaning the budget should originate at the lowest levels of management and be refined and coordinated at higher levels.

# (e) Negotiation of Budgets:

Drury has stated that, the managers at the lowest level of management should submit their budgets to their superiors for approval. The superior should then incorporate this budget with other budgets for which he or she is responsible and then submit this budget for approval to his or her superior. At each stage the budget will be negotiated between the budgetees and their superiors, and eventually they will be agreed by both parties, this process helps to implement a participative approach of budgeting.

# (f) Coordination and Review of Budgets:

Drury has stated that, as individual budgets move up the organisation hierarchy in the negotiation process, they must be examined in relation to each other to ascertain whether some budgets are out of balance with other budgets and for that matter need modification so that they will be compatible with other conditions, constraints and plans that are beyond a manager's knowledge or control.

# (g) Final Acceptance of the Budget:

At this stage of budgeting where all the budgets are in harmony with each other, Drury is of the view that the various budgets should be summarized into a master budget consisting of a budgeted profit and loss account, a balance sheet and a cash flow statement. The master budget is then approved and then passed down through the organisation to the appropriate responsible centres. According to him, the approval of the master budget is the authority for the manager of each responsibility centre to carry out the plans contained in each budget.

#### (h) Budget Review

Drury emphasized that; the budget process should not stop after the approval of the budget. Actual results should be compared with the budgeted targets periodically to ascertain differences (variances). These comparisons should normally be made on a monthly basis and a report sent to the appropriate budgetees in the first week of the following months, so that it has the maximum motivational impact.

Brandon and Drtina (1997, p 563) however argued that the preparation of the operating budgets depends on the structure of the organisation and the extent to which a strategic planning programme is in place. According to them, through preparation of long-range plan, top management chooses those programmes, products, and projects that best satisfy it's higher-level, that is corporate-level and business level strategies. They went on to state that, there are many ways firms prepare their budgets. Some or all the steps that may be part of the preparation of budgets include:

- Guidelines: Top management communicates the strategic directions, financial objectives, economic assumptions, and resource constraints to lower levels.
- **First submission:** Operating-unit managers offer an initial plan that includes broadly defined targets and resources.
- Combination and review: Top management evaluates each unit's initial plans and combines them to form a companywide plan.
- Negotiation and revision: Top management negotiates changes to targets and resources with operating-unit managers.
- Detailed plan submission: Operating-unit managers prepare and submit a complete plan based on negotiated changes.
- Approval: Top management combines detailed plans into a companywide plan and continues to revise and renegotiate until final approval is granted.

They concluded that, this ongoing interaction between top management and lower-level managers permit both to satisfy their budget needs.

Horngren et al (2009, p. 208) have stated that a well-managed companies usually cycle through the following budgeting steps during the course of the fiscal year:

- (i) Working together, managers and management accountants plan the performance of the company as a whole and the performance of its subunits. Taking into account past performance and anticipated changes in the future, managers at all levels reach a common understanding on what is expected.
- (ii) Senior managers give subordinate managers a frame of reference, a set of specific financial or non-financial expectations against which actual results will be compared.
- (iii) Management accountants help managers investigate variations from plans, such as an unexpected decline in sales. If necessary, action follows, such as a reduction in price to boost sales or cutting of costs to maintain profitability.
- (iv) Managers and management accountants take into account market feedback, changed conditions, and their own expectations as they begin to make plans for the next period.

The sequence of event in the preparation of the budgets is summarized by Atrill and MacLaney (2002, p. 135) as follows;

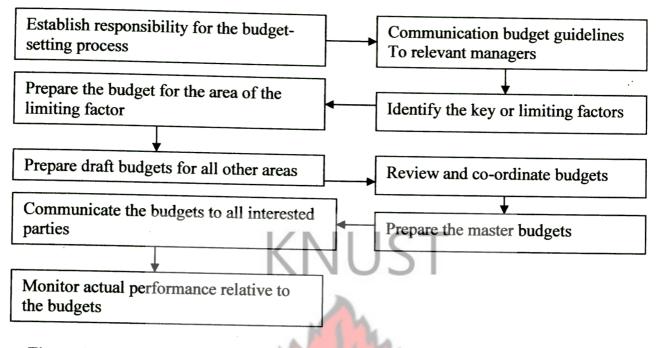


Figure 2.1: Budgeting process

Anthony and Young (1999, p. 19) have said that, the process of arriving at a budget is essentially one of negotiations between responsibility centre managers and their superiors. They said the end product of these negotiations is a statement of the output expected during the budget year and the resources (input) to be used to achieve these output. As such, the agreed-upon budget is a bilateral commitment.

### 2.1.3 Essentials of Effective Budget

In order to be effective management tool, budgets must be based upon a sound organisational structure, research and analysis, and management acceptance of the budget programmes. (Weygandt, et al. 2008, p. 1001)

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According to them effective budgeting depends on an organisational structure in which authority and responsibility over all phases of operations are clearly defined. They have stated that, "a budget based entirely on past performance is ineffective". They are of the view that in today's highly competitive business environment, management must look ahead, or it will fall behind.

They have concluded that, research and analysis lead to careful investigation and informed judgments, therefore budgets based on research and analysis should result in realistic goals that will contribute to the growth and profitability of a company. Weygandt, et al. argued that, the effectiveness of a budget programme is directly related to its acceptance by all levels of management. The acceptance of budgets by division managers, department heads, and supervisors is enhanced when these individuals participate fully in the preparation of the budgets.

# 2.2 Incremental and Zero Based Budgeting

"Incremental budgeting is based on using last year's figures. When using this approach of budgeting, you would base a budget on how last year's budget went with, of course, an adjustment to take things like inflation into account. This approach of preparing budgets is a quick and simple way of putting together a first draft of a budget but if last year's budget was wrong you keep adding to your mistakes. It is also a conservative approach, making the assumption that present objectives are right and that there is a high degree of continuity", drawing up a budget (online) available at <a href="http://www.thefreelibrary.com/Drawing+up+a+budget">http://www.thefreelibrary.com/Drawing+up+a+budget</a> [accessed 08/05/2009].

After a budgeting system has been in operation for sometime, there is a tendency for next year's budget to be justified by reference to the actual levels being achieved at present. If changes are not started in the budget period, it will be difficult for the business to make the progress necessary to achieve longer term objectives. One way of breaking out of this cyclical budgeting problem is to go back to basics and develop the budget from an assumption of no existing resources, which is a zero base. This means all resources will have to be justified and the chosen way of achieving any specific objectives will have to be compared with the alternatives. The obvious problem of the zero-based budgeting process is the massive amount of managerial time needed to carry out the exercise, hence, some companies carry out the full process every five years, but in that year the business can almost grind to a halt, budgetary control (online) available at <a href="http://www.fao.org/decrep/w4343E/W4343e05.htm">http://www.fao.org/decrep/w4343E/W4343e05.htm</a> [accessed 08/05/2009].

Drury (2005, p. 618) describe zero-based budgeting as priority-based budgeting which emerged in the late 1960's as an attempt to overcome the limitations of incremental budgets. He said, the zero-based budgeting approach requires that all activities are justified and prioritized before decisions are taken relating to the amount of resources allocated to each activity. Drury (2005, p. 620) has outlined the benefits of zero-based budgeting over traditional approach of budgeting as follows:

(a) Traditional budgeting tends to extrapolate the past by adding a percentage increase to the current year. Zero-based budgeting avoids the deficiencies of incremental budgeting and represents a move towards the allocation of resources by need or benefit.

- (b) Zero-based budgeting focuses attention on outputs in relation to value for money.
- (c) Zero-based budgeting creates a questioning attitude rather than one that assumes that current practices represents value for money.

Phyrr (1976) cited in Drury 2005, p. 620 has said that, "the zero-based budgeting approach was first applied in Texas Instruments in 1969, and it quickly became one of the fashionable management tools of the 1970's. According to him, there were hundred users in the USA in the early 1970's". He went on to say that, when Jimmy Carter became the president of US, he directed that all federal agencies adopt zero-based budgeting. According to Drury, the popularity of zero based budgeting declined rapidly by 1980's and the reason assigned for this is that, it is too costly and time consuming

# 2.3 Budgeting and Human Behaviour

A budget may have a strong positive influence that inspires a manager to go higher levels of performance. On the other hand, a budget may discourage additional effort and have a negative impact on the morale of a manager. This happens when the manager views the budget as being unfair and unrealistic and as a result become discourage and uncommitted to the budget goals. The risk of having unrealistic budget is generally greater when the budget is developed from top management down to lower management than vice versa (Weygandt, et al. 2008, p. 1002). According to them, "unrealistic budgets can lead to unethical employee behaviour such as cutting corners on the job or distorting internal financial reports".

They are also of the opinion that, a budget should be an important basis for evaluating performance. To them the effect of an evaluation on a manager will be positive when top management tempers criticism with advice and assistance. On the contrary, the response of a manager is likely to be negative when the budget is used exclusively to assess blame. They hold the view that, a budget may be used improperly as a pressure device to force improved performance. Alternatively, it can be used as a positive aid in the achievement of projected goals. They concluded that, a budget can become a friend or a foe to the manager, therefore the human factor is an important aspect of budgeting. When properly used, budgets can be a positive motivating force within a company.

Gyasi (2005, p 87) holds the view that, there exist different goals in every organisation and not all these goals will be in harmony with each other. This conflict in goal as a result of individual and group interests being different from that of the overall organisational interest needs to be recognised. He is of the opinion that, budgets by their nature reflect the thinking and style of top management and as a planning device, there is the danger of imposing budgets on managers and as a control mechanism too, there is the greater danger of exacting greater performance from managers than is humanly possible. Gyasi says "Centrally imposed budgets are likely to lead to conflicts. Managers will be apathetic instead of sympathetic, resentful rather than cooperative, defensive when they should be cost conscious and will induce negative thinking rather than positive thinking".

### 2.4 Capital Budgeting

Lam et al. (2004) have defined capital budgeting as the process of choosing a firm's intermediate (more than two years) and long-term (10 years or more) capital investments (outlays) and capital budget is the firm's set of planned capital expenditures. They have stressed that, Capital budgeting is an important management process that certainly influences the long-run survival and value of a firm, because the amounts involved are so large that managers need to carefully plan and evaluate expenditures for capital assets.

Capital budgets are based on sales forecasts and on the anticipated plants and equipments needed to meet those expected sales. Most firms prepare at least a short-run budget that indicates planned capital outlays for the current and immediate forthcoming periods. Many firms also prepare intermediate and long-term capital budgets. Nermes et al. (2007) and Watson and Head (2007) have stated capital budgeting techniques to include, Payback period, Return on Capital Employed (ROCE), Net Present Value (NPV), Internal Rate of Return (IRR), Comparison of NPV and IRR, Profitability Index and Capital Rationing and Discounting Payback.

Lam et al. (2004) have said that the "formal financial evaluation" is the most popular technique for capital budget evaluation. They have said, the "payback period" is the mostly used investment appraisal technique and for risk appraisal techniques, "shortening payback period" occupied the first position among the techniques in large contracting firms.

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# 2.5 Functional Budgets and the Master Budget

Wood (1998, p.253), Drury (2005, p. 603), Owler (1975, p. 531-354), Gyasi (2005, p. 90) and Lucey (1997, p. 392) have identified the following as types of Functional Budgets:

- Sales Budget
- Production Budget
- Material Usage and Purchase Budget
- ➤ Labour Budget
- Manufacturing Overhead Budget
- ➤ Cost of Goods Sold Budget
- Selling and Distribution Expenses Budget
- Administration Budget
- Budgeted Income Statement
- Cash Budget
- Capital Expenditure Budget
- ➤ Budgeted Balance Sheet

The Sales Budget shows the planned level of sales volume in terms of quantity, mix, and value. It is probable the most difficult operational budget to prepare as it involves a realistic sales forecast. The sales budget is the foundation of all other budgets, since all expenditure is ultimately dependant on the volume of sales.

The Production Budget is expressed in quantitative terms only and is geared to the sales budget. In preparing the production budget, the production manager has to consider, the sales budget, analysis of plant utilization, budgeted stock requirements, and the policy of management as to make a component or buy it from outside. If the production

requirements exceed capacity, the production manager may consider any of the following strategies: Subcontract, plan for overtime, introduce shift work, and hire or buy additional machinery.

The Raw Material Usage Budget shows the estimated quantity of raw materials that would be used to meet the requirements of the production budget. The Material Purchase Budget however indicates the volume and value of raw materials that has to be purchased to meet both production and stocking requirements during the budget period.

The Labour Budget is both quantitative and financial and it is influenced by; production requirements, man-hours available, grades of labour required, wage rates, and the need for incentive. The Cash budget is a cash plan for a defined period of time. It summarises monthly receipts and payments, hence, it highlights monthly surpluses and deficits of actual cash.

Horngren, et al (2005, p. 209) have stated the steps in developing an operational budget to include; identifying problems and uncertainties, obtaining information, making prediction about the future, making decision by choosing among alternatives and implementing the decision, and evaluating performance and learning. The operational budgets for the various departments are merged together into a single unifying statement of the organisation's expectation for the future period. This statement is known as Master Budget, which consists of budgeted profit and loss account, cash-flow statement, and balance sheet (Drury 2004, p. 11).

Gyasi (2005, p. 90), also defines Master budget as a budget prepared from and summarises the operational budgets. Horngren, et al have stressed that, the working document at the core of budgeting process is called the Master Budget. According to them, the Master Budget expresses management's operating and financial plan for a specific period (usually a fiscal year) and it includes a set of budgeted financial statements. It is the initial plan of what the company intends to accomplish in the budget period. The master budget evolves from both operating and financial decisions made by managers.

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It could be deduce from the explanations given by the various authors that, a master budget is the summary budget incorporating all the departmental or functional budgets which is finally approved, adopted, and employed. It comprises the budgeted trading and profit and loss account, the balance sheet, and cash-flow statement.

# 2.6 Rational Behind the Preparation and Implementation of Budgets

Budgeting is beset with numerous benefits. These have been summed in an article titled "Basic Finance for Marketers" by Agriculture and Consumer Protection Agency, (online) available at <a href="http://www.fao.org/docrep/w4343E/w4343e05.htm">http://www.fao.org/docrep/w4343E/w4343e05.htm</a> [accessed 08/05/2009] as follows:

(i) Budgeting compels management to think about the future which is probably the most important feature of a budgetary planning and control system. Budgets edge management to look ahead, to set up detailed plans for achieving the targets for each

department, operation, and (ideally) each manager, to anticipate and give the organisation purpose and direction.

- (ii) Budgeting promotes co-ordination and communication.
- (iii) Budgeting clearly defines areas of responsibility. It requires managers of budget centre to be more responsible for the achievement of budget targets for the operations under their personal control.
- (iv) Budgeting provides a basis for performance appraisal. It is a yardstick against which actual performance is measured and assessed. Control is provided by comparisons of actual results against budget plan. Departures from budget can then be investigated and the reasons for the differences can be divided into controllable and non-controllable factors.
- (v) Budgeting enables remedial action to be taken as variance emerges.
- (vi) Budgeting motivates employees by participating in the setting of budgets.
- (vii) Budgeting improves the allocation of scarce resources.
- (viii) Budgeting economizes management time by using the management by exception principle.

Raiborn et al (2006, p. 306) have stressed that, budgeting is an important part of an organisation's planning process, because it determines a direction or path chosen from many alternatives. Horngren et al (2009, p. 209) have stated that, budgets are integral part of management control system and when administered thoughtfully by managers, budgets:

(i) Promote coordination and communication among sub units within the company.

- (ii) Provide a framework for judging performance and facilitating learning.
- (iii) Motivate managers and other employees.

According to Atrill and McLaney (2002, p. 132), budgets are seen as having five main benefits to the business organisation. This is set out in the figure below.

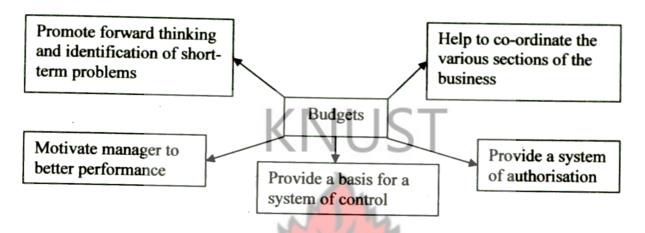


Figure 2.2: Benefits of Budgets to Business Organisations

Hansen and Van der Stedeb (2004) have stated four reasons for which organisations use budgets to include, (i) Operational planning (ii) Performance evaluation (iii) Communication of goals, and (iv) Strategy formulation

# 2.7 Challenges in the Preparation and Implementation of Budgets

Horngren (2009, p. 210) has said, top management want lower-level managers to participate in the budgeting process because lower-level managers have more specialized knowledge and first-hand experience with day-to-day aspects of running the business. Also, participating creates greater commitment and accountability towards the budget among lower-level managers. He is of the view that, this process is time-

consuming. He has stressed that, top management support is critical for obtaining lower-level management's participation in the formulation of budgets and for successful administration of budgets. He concluded by saying that, "budgets should not be administered rigidly as changing conditions usually call for changes in plans. In fact critics of budgeting cite the temptation on the part of managers to administer budgets rigidly as one of the most negative aspect of budgeting".

The challenges of budgeting and budgetary control include the following;

- (a) Budgets can be seen as pressure devices imposed by management, thus resulting in bad labour relations and inaccurate record-keeping.
- (b) Budgets can result in departmental conflict due to disputes over resources allocation and departments blaming each other if targets are not attained.
- (c) It is difficult to reconcile personal / individual and corporate goals.
- (d) Waste may arise as managers adopt the view, "we had better spend it or we will lose it". This is often couple with "empire building" in order to enhance the prestige of a department.
- (e) Managers may overestimate costs so that they will not be blamed in the future should they overspend.
- (f) Budgets are prepared on the assumptions that certain conditions will prevail. Because of future uncertainties, assumed conditions may not prevailed necessitating revision of budgeted targets. The frequent revision of targets will reduce the value of budgets and revisions involved high expenditure too.

(g) The success of budgeting system depends on the coordination among different departments. The performance of one department affects the results of other departments. To overcome the problem of coordination, a budget officer is needed. It is not every entity that can afford to appoint a budget officer and this may result in lack of coordination among different departments resulting in poor performance. Budgetary control, (online) available at <a href="http://www.fao.org/decrep/w4343E/W4343e05.htm">http://www.fao.org/decrep/w4343E/W4343e05.htm</a> [accessed 08/05/2009].

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# 2.8 Budgetary Control

Budgetary control is defined by Institute of Cost and Management Accountants (CIMA) as "the establishment of budgets relating the responsibilities of executives to the requirements of a policy, and the continuous comparison of actual with budgeted results, either to secure by individual action the objective of that policy, or to provide a basis for its revision". Weygandt et al (2008, p. 1040) says "the use of budgets in controlling operations is known as budgetary control". According to them, the centerpiece of budgetary control is the use of budget reports that compare actual results with planned objectives.

They went on to say that, the preparation and use of budget reports is based on the belief that planned objectives lose much of their potential value without some monitoring of progress along the way. They hold the view that, top management requires periodic reports on the progress that department managers are making towards planned annual objectives. Budget reports provide the feedback needed by management

to see whether actual operations are on course. The feedback for a crucial objective, such as having enough cash on hand to pay bills, may be made daily. They stressed that, for other objectives, such as meeting budgeted annual sales and operating expenses, monthly budget reports may suffice. To them, budgetary control involves the following:

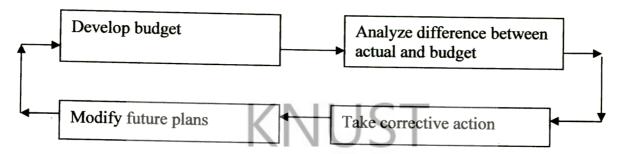


Figure 2.3: Budgetary Control Process

They concluded that, budgetary control works best when a company has a formalized reporting system. The system should, (i) identify the name of the budget report (ii) state the frequency of the report, such as weekly or monthly; (iii) specify the purpose of the report; and (iv) indicate the primary recipient(s) of the report.

Budgeting and control entails a distinct pattern of decisions in an organization which is capable of determining its objectives, purposes or goals, and how these goals are achieved by establishing principal policies and plans. However, the inability to recognize the problem concerned and fixing a boundary off investigation creates an obstacle for the successful implementation of budgeting and control. Budgeting and control (Online) available at <a href="http://www.eurojournalsn.com">http://www.eurojournalsn.com</a> (accessed on 29/08/09).

On revision of budgets Gyasi (2005 p 86), has stated that an approved budget becomes a standard for attaining enterprise objectives, policies and performance evaluation. It should therefore not be changed unless and until the forecasted circumstances upon which the budget was based have changed. Budget revisions should under no circumstance be carried out to hide management inefficiencies.

There are some disadvantages if one fails to control a budget. The Chartered Management Institute bulletin (October 2000), has spelt out the disadvantages to include:

- (i) Frequently over or under spend not achieving what you planned.
- (ii) Lack of up to-date information which would explain why actual results will be at variance with the budget.
- (iii) Demonstrate that your team, department, or work is out of control and that is bad advertisement both for your company and for yourself.

On the other hand, the benefits to be enjoyed from budgetary control include:

- (a) Budgetary control is the only way in which you can monitor an organisation's financial performance.
- (b) Budgetary control allows managers to be clear about their department's financial position.
- (c) Budgetary control gives information on which to base an action.

# 2.9 Variance Analysis and Corrective Actions

Brandon and Drtina (1997, p. 589) have emphasized that, the accounting system compiles and reports actual results and compares them to the budget. They have said it is the responsibility of each manager to interpret differences between actual results and budget estimates in order to correct deficiencies and to eliminate their causes, as well as to learn from budgets whose targets were achieved. With this, they describe a budget as being pivotal in the reporting and analysis and corrective action phases of management control. Using variance analysis, managers can gain some insight into overall results of a department or division and can identify potential problem areas.

"Managers have to use the actual information collected to identify variance from the original budget; both positive and negative. A negative variance means, you have spent more than you planned so the manager need to look hard at the effect this will have on the year's performance and review these plans. A positive variance on the other hand means you have under spent, however, managers shouldn't assume a positive variance as always being a good thing", Drawing up a budget (online) available at <a href="http://www.thefreelibrary.com/controlling+a+budget">http://www.thefreelibrary.com/controlling+a+budget</a> (accessed 05/06/09).

Brandon and Drtina (1997, p. 585) have stated that when a division's budget does not meet corporate expectation, there are three things that can be done. These are summarized as follows:

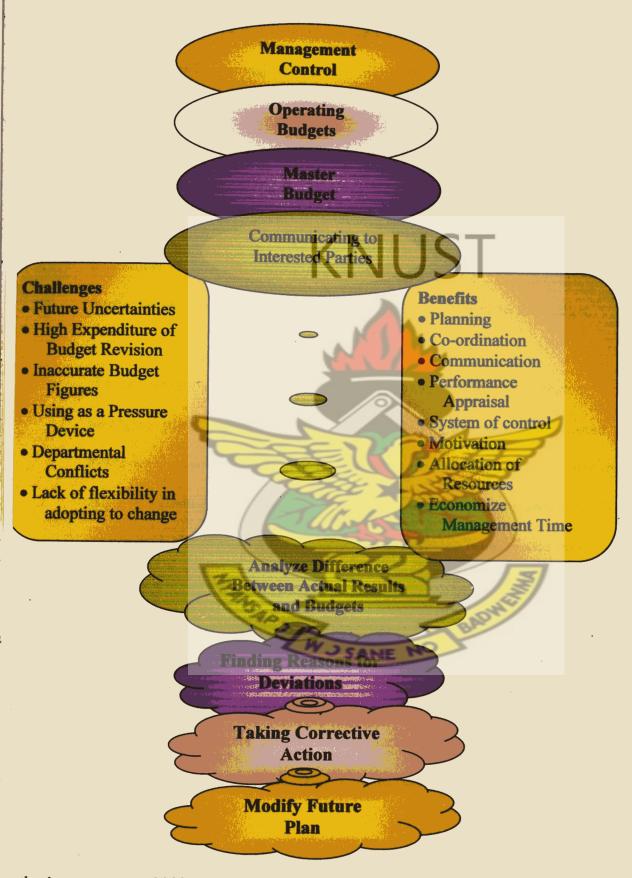
- (1) Managers can change operations by devising better ways to employ resources to deliver outcomes. For instance, they might decide to use different materials or labour, to reconfigure the production process.
- (2) Managers can question the budget model itself as an accurate portrayal of cause-effect relationships. Improvement to the model may be in order to enable them to predict more accurately the division's financial performance.
- (3) Managers may need to reexamine goals and strategies. Perhaps these are unrealistic and need revision.

They concluded that, there are positive corrective actions to be taken after receiving feedback on actual results.



#### 2.10 Conceptual Framework

Figure 2.4



author's own source, 2009

# 2.11 Summary of Literature Review

There are many different facets to a budget and they all relate to management control. The budget enables the firm to convert its long-term strategic plans into short-term targets for each responsibility centre manager. It is also instrumental in coordinating actions among subunits, motivating managers toward achieving profit targets, and providing managers with signals for taking corrective action. The processes involved in budgeting are, establishing responsibility, communicating guidelines to relevant managers, identifying the limiting factors, preparation of draft budgets, review and coordination of budgets, communicating budgets to all interested parties, preparation of master budget, and monitoring actual performance relative to the budget.

To ensure subordinate manager's commitment toward their budget targets, senior managers often use participative budgeting. Regardless of the amount of authority lower-level managers are given to prepare their budgets, senior management must approve targets and ensure that, when all subunits budgets are combined, the firm meets it corporate objectives. As a result of the importance often placed on achieving budget targets, subordinates managers may resort to undesirable behaviour such as creating budget slack or postponing discretionary expenditures to ensure they "make their numbers". The firm can guard against such behaviour by improving communication between levels of management by correctly charging for resources consumed, and by broadening the criteria for evaluating performance. Budgets reports are used for providing periodic feedback consisting of comparisons between targets and actual results.



#### **CHAPTER THREE**

# THE RESEARCH METHODOLOGY AND ORGANISATIONAL PROFILE

#### 3.0 Introduction

The previous chapter provided the introductory and contextual matter of the study and reviewed prior relevant literature, hence placing the research in its right perspective. In this chapter, the researcher presents the research techniques for gathering and processing information. Then follows a description of how the gathering of data and interviews were carried out and analysed. It also discusses the validity of the material and the conclusions that can be made from it. The chapter ends with the profile of the study area.

#### 3.1 Study Type and Strategy

An exploratory study is a valuable means of finding out "what is happening; to seek new insights; to ask questions and to assess phenomena in a new light" (Robson, 2002:59) cited in Saunders et al (2007, p. 133). There are three principal ways of conducting exploratory research, these are; (i) a search of the literature (ii) interviewing "experts" in the subject and (iii) conducting focus group interviews.

The study type was exploratory since the researcher wanted to find out how budgeting decisions at Logs & Lumber Limited assist in controlling operations and measurement of performance. Robson (2002: 178) defines a case study as "a strategy for doing research which involves an empirical investigation of a particular contemporary phenomenon within its real life context using multiple sources of evidence". Yin (2003) also highlights the importance of context, adding that, within a case study, the

boundaries between phenomenon being studied and the context within which it is being studied are not clearly evident' (Both cited in Saunders et al, 2007, p. 139). The research strategy used for the study is case study, as the researcher wanted to gain a rich understanding of the context of the research and the processes being enacted (Morris and Wood, 1991), cited in Saunders et al, 2007, p. 139. Also the strategy was used as it has the ability to generate answers to questions such as "what" budgeting decisions are made in the firm, "why" those decisions and "how" are they made?

#### 3.2 Research Method

When doing research there are two ways of gathering and processing the data: quantitative and qualitative research. Quantitative research is commonly used for statistical purposes where there is a lot of measurable data present. The nature of the data is easily validated and can be presented numerically (Merriam, 1992). In contrast, (Merriam, 1992, p 3-8), said that, qualitative research could be described as research for "soft data, which means that data is not easily presented in diagrams and figures and answers the questions "how?" and "why?" rather than "how many?"

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Qualitative research has the following features:

- Qualitative research should be systematically and rigorously conducted
- Qualitative research should involve critical self –scrutiny
- The research should produce social explanation which are general in some way or which have wider resonance
- The research should produce social explanation to intellectual puzzles.

The research choice used for the study is mixed method research as the study employed both qualitative and quantitative variables. Although different data collection techniques such as interviews, observation, documentary analysis and administration of questionnaires were used, interviews were used at the exploratory stage, in order for the researcher to get a feel for the key issues before using a questionnaire to collect explanatory data. This gave the researcher confidence in addressing the most important issues in the study.

# 3.3 The Study Population and Sample Size

The population for the study consists of the entire management and staff of Logs & Lumber Limited made up of the various departmental heads and workers. For the purpose of the study, a sample size of forty-eight (48) was used to obtain data and this was made up of six (6) Heads of departments and forty-two (42) members of staff. The Heads of departments responded to questionnaires while other employees were interviewed.

#### 3.4 Sampling

Employees of the firm were interviewed using purposive sampling technique. According to Saunders et al (2007, p.230) purposive sampling method is used in a case study which allows the researcher to select cases that best enables him to answer research questions and to meet his objective. Stratified random sampling was used on subordinate employees in the firm to eliminate or reduce bias on the study. Stratified random sampling is where a researcher divides the study population into two or more relevant and significant strata based on one or a number of attributes (Saunders et al

(2007, p.221). It allows the population chosen to be more representative. Management and staff were briefed about the purpose of the study and were assured of confidentiality of the responses. They were also informed to choose to answer or and to stop interview at their convenience. Responses were written or checked on the questionnaire as deemed appropriate. Clearance was sort out where inconsistency was found and corrections effected.

# 3.5 Data Collection Techniques and Tools

There are two ways to gather data: from primary or secondary source. Primary data is the data especially gathered for a specific purpose by the researcher. Secondary data is when the material has been gathered by others and thus might have been influenced by them. (Saunders et al., 2007, p.322). The study made use of primary and secondary data. The questionnaire, interview and record review techniques were employed. Management of the firm (Heads of departments) responded to questionnaires while subordinate employees were interviewed using structured interview questions.

#### 3.5.1 Primary Data

Primary data is the first hand information gotten for a research work. It could be gathered through an interview or records written and kept by people involved in, or who bear witness to an event. A conversational strategy can be adopted within an interview guide approach or combination of a guide approach with a standardized format by specifying certain key questions exactly as they must be asked while leaving other items as topics to be explored at the interviewer's discretion. The rational for collecting primary data is to have in dept knowledge of budgeting decisions at Logs & Lumber

Limited. According to Yin (2003:83) cited in Saunders et al., (2007, p.139) 'evidence from case studies can come from six sources, namely documents, archival records, interviews, direct observations, participant observations and physical artifacts'. In an exploratory study, in-depth interview can be very helpful to 'find out what is happening and to seek new insights' (Robson, 2002:59) cited in Saunders et al., (2007, p.313).

Questionnaires and Interviews were used to collect primary data for the study. Although, some employees were reluctant to respond to questions, this did not affect the data collected greatly as majority of workers were ready to respond to questions. All interviews were done face-to-face and they took between 10-15 minutes each. A lot of information received from interviewees was used to do the discussions and analysis in chapter four.

#### 3.5.2 Secondary Data

According to (Ghauri and Gronhaug, 2005) cited in (Saunders et al., 2007:257-259), the advantages of using the secondary source of data is that resource is saved especially time and money. Secondly, the researcher is able to analyse far and larger data sets. More so, one has the opportunity to think about theoretical aspirations and substantiate issues as there is more time to analyse and interpret data. A literature search 'is a systematic search of one or more databases for material on a specific subject' (Saunders et al., 2007:74). The secondary data for the study is made up of the functional and master budgets of Logs & Lumber Limited.

#### 3.6 Data Handling

To check for accuracy and completeness of data and ensure quality, questionnaires and interview guide were numbered serially. On daily basis, completed questionnaires and interview guides were checked thoroughly.

# 3.7 Data Analysis and Statistical Procedure

The analysis of data was done at the end of the data collection. The responses were grouped and categorized on the basis of information provided. Discussions of data were done in accordance with research questions that were generated as a result of the research objectives. Quantitative data such as the operational and master budgets (see appendices on pages 71) have been analysed to determine variances and their causes in chapter four. The analysis was done manually and transferred onto the computer.

#### 3.8 Discussions on Credibility

It is important that the material used in any report is trustworthy and relevant to the subject at hand. The reader must have the possibility to review sources and methodology in order to draw the necessary conclusions; this is done by an appraisal of the reliability and validity.

#### 3.8.1 Reliability

Reliability tells how trustworthy a study is. It is how sure and exact we measure what we measure regardless of what we intend to measure. Most of the secondary data used for the study was chosen in order to accomplish a theoretical foundation on how to write this Long essay. The interviews conducted were all done in the same way without

any pressing time schedule. Interviews were finished when the researcher found that all questions were answered satisfactory and the discussions had ended in a natural way and not due to lack of time. Therefore, the researcher feels that all interviewed persons had the same possibility to answer the questions and hold a dialogue. The Heads of Departments were also given ample time to provide answers to the questionnaire, hence, the researcher holds the view that, frank and accurate answers were given.

#### 3.8.2 Validity

Validity is described as how well a study measures what it is supposed to measure. It is often divided into internal and external validity. Internal validity describes the level of accuracy or how well the study mirror reality. The results of the study are based on the data collected from Log & Lumber Limited and as a result the conclusions drawn bear relation to reality. The internal validity should therefore be considered trustworthy for the study. The external validity shows how well the results of the study can be generalized into a wider context. Since the study deals with a specific case, it is difficult to draw conclusions from some of the findings for the wider perspective.

#### 3.9 Organisational Profile

### 3.9.1 Historical Background

LOGS & LUMBER LTD. was incorporated as a private limited liability company on June 17, 1967 and commenced business on July 10, 1967. It was a sawmill firm purchased from Messrs Anglo African Timbers. The Directors initiated the installation of Veneer and Plywood Mills, which were completed in 1972. The expansion

programme continues up to now where the company became the leading producer and exporter of wood products in Ghana. The company producers the following products;

- I. Lumber
- II. Rotary Cut Veneer / Plywood
- III. Sliced Veneer
- IV. Finger jointing, Mouldings and Lamination.

#### 3.9.2 Location

The headquarters of the company is in Kumasi on the Lake Road Industrial Area in the Ashanti Region of Ghana. It also has shipping offices in Takoradi in the Western Region of Ghana. The headquarters, which also houses the production units, is sited on a land of about ten (10) hectares.

#### 3.9.3 Directors

A three-member Board of Directors runs the company and is responsible for the long term planning and management of the company. The Board is made up of:

- a) William John Bitar (Owner and Shareholder / Director)
- b) Avedis Jeghalian (Managing Director / Director)
- c) Frank Addo (Director)

William John Bitar is presently holding 100% shares. The company has an employee population of 1420. The Managing Director, Mr. Avedis Jeghalian, is responsible for the day to day running of the company. The Board meets quarterly to review and

discuss policy, administrative and managerial issues pertaining to the running of the company.

# 3.9.4 Organisational Structure

The apex of the management structure is occupied by the Managing Director and the following line managers work under him; (i) General Manager (ii) Forest Cocoordinator / Transport Manager (iii) General Production Manager and (iv) Chief Engineer. The specific job schedules of the divisional heads are detailed below:

#### General Manager

(i) In charge of general administration, personnel and financial management of the company

- (ii) Managing budgets and ensuring effective budgetary control system
- (iii) Preparation of monthly, quarterly and annual financial reports for the Board of Directors
- (iv) Provide advice on all financial and administrative matters.

#### **General Production Manager**

- (i) Responsible for production planning
- (ii) Scheduling and execution of all sales contracts
- (iii) Coordinating activities at all levels of production

#### 3.9.5 Departments in the Firm

These include; i Forestry ii Account iii Administration iv Personnel

v Production vi Transport vii Imports viii Exports / Sales

# 3.9.6 External Auditors

The external auditors of the company are Messrs Pannel Kerr Forster, Chartered Accountants

#### 3.9.7 Annual Sales

Average annual turnover of GH¢20,000,000

**Table 3.1:** CONCESSIONS OF THE FIRM

CONCESSION	AREA KM²	DISTANCE FROM
		KUMASI
Pra Anum Forest Reserve	48.41	130 km
Esukwakwa Forest Reserve	62.44	150 km
Nkrabea Forest Reserve	100.20	128 km
Aboniyere Forest Reserve	41.20	122 km
Bonsambepo Forest Reserve	48.00	148 km
Sui 'A' Forest Reserve	104.53	1 <b>80 km</b>
Sui 'B' Forest Reserve	37	220 km
Bia Tributaries North F/R	59.57	330 km
Mafia 'B' Off Forest Reserve	171.00	280 km
Trans Bia Off Reserve	197.07	380 km
Bia Tawya Forest Reserve	410	300 km
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#### CHAPTER FOUR

## DATA ANALYSIS AND DISCUSSIONS

#### 4.0 Introduction

The previous chapters of the study addressed the contextual, theoretical and descriptive aspects of the research. The focus of this chapter is to analyse the responses to questionnaires and interviews, and data collected on the field in order to understand their parts and to discover their trends. The chapter also examines the findings in accordance with the objectives of the research.

Qualitative data is thoroughly discussed in relation to the objectives of the study which answers the research questions, while quantitative data being the budgeted and actual financial statements have been analysed to determine the variances and their possible cause(s). The analyses and discussions of the field data collected have been presented as follows:

- 4.1 Background analysis of respondents; their sex, age group, and educational backgrounds.
- 4.2 Types of budgets, budgeting approach and process in use at Logs and Lumber Limited as stated in the literature review (2.5, 2.2, and 2.1.2).
- 4.3 The benefits of budgeting to the firm as stated in the literature review (2.6).
- 4.4 The challenges encounter by Logs and Lumber Limited in the preparation of budgets as stated in the literature review (2.7).
- 4.5 Budgetary control measures at Logs and Lumber Limited as stated in the literature review (2.8).

4.6 Comparison of actual results with the budgeted income and expenditure of Logs and Lumber Limited for the year 2004 - 2008 as stated in the literature review (2.9).

The analysis and discussions of the study proceeds as stated:

# 4.1 Background Analysis of Respondents.

Table 4.1: Classification of Respondents According to Sex.

	Frequency	Percentage
MALE	41	85.4%
FEMALE	7	14.6%
TOTAL	48	100%

From Table 4.1, it is noted that the total number of respondents to interviews and questionnaires was Forty-eight (48). This is made up of Six (6) departmental heads who responded to questionnaires out of eight (8) contacted by the researcher and Forty-two (42) subordinate employees interviewed instead of the Sixty (60) employees targeted initially. The respondents form 70.6% of the target population.

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Table 4.2 Classification of Respondents According to Age group

Age Range (Years)	Frequency	Percentage
21 – 30	22	45.8%
31 – 40	13	27.1%
41 – 50	8	16.7%
51 – <del>60</del>	3	6.3%
Above 60	2	4.1%
TOTAL	<b>48</b>	100%
	N.	

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From Table 4.2 above, 45.8% of respondents aged from 21 to 30 years, 27.1% aged from 31 to 40 years, 16.7% aged from 41 to 50 years, 6.3% aged from 51 to 60 years and 4.1% aged above 60 years. 89.6% of the respondents were found to be in the age range of 11 – 50 years which falls within the active labour force while 10.4% of the respondents were found in the age range of 51 and above which is with in the less active

group of labour force. This is a clear indication that, most of the workers in the firm fall within the active labour force and for that matter a generalization could be made from the analysis that most workers in the timber industry in Ghana are aged between twenty to forty years.

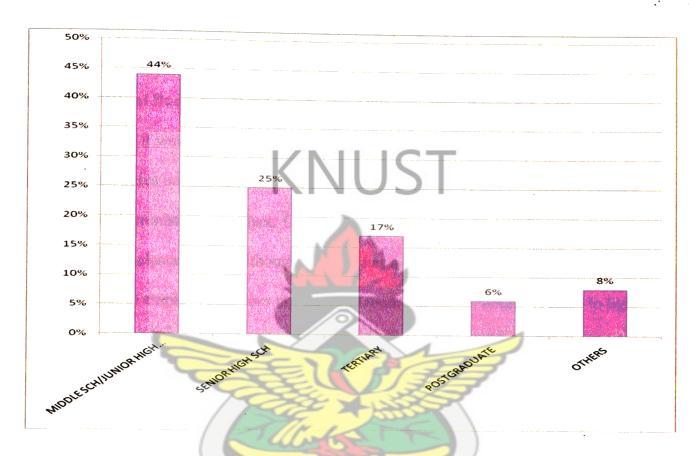


Figure 4.1: Educational Qualifications of Respondents in Percentages

Source: Author's Field Survey, 2009.

Respondents' educational backgrounds were categorized as Middle/Junior High School certificate holders, Senior High School certificate holders, Tertiary, Postgraduate and others which allowed respondents to specify their educational level as shown in figure 4.1 below. 44% of the respondents were forming the highest response rate were Middle/Junior High School certificate holders, 25% of respondents were Senior High School certificate holders while 17% were holders of tertiary education certificates,

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which include Polytechnics and University graduates. 6% of the respondents have attained their postgraduate degrees and 8% formed others which were specifically DBS and ACCA/ICA holders.

4.2 Types of budgets, budgeting approach and process in use at Logs and Lumber Limited as stated in the literature review (2.5, 2.2, and 2.1.2).

# 4.2.1 Functional Budgets and the Master Budget of Logs and Lumber Ltd.

From the study it was revealed that the budgets that are prepared by Logs and Lumber Ltd. include; Sales budget, Production budget, Material usage budget, Overhead budget, Selling and Administration budget, Cash budget, budgeted Profit and Loss Statement, and budgeted Balance Sheet. Although the firm has a labour force of over thousand two hundred (1,200) employees, it does not prepare labour budgets in hours. It came to light that, in preparing the various functional budgets the factors listed below each budget are considered:

#### (i) Sales Budget

- Production budget
- Previous sales budget
- Actual sales for the current year, and
- Nature of market competition, both local and foreign

#### (ii) Production Budget

- Sales Budget
- Plant capacity
- Budgeted material requirements
- Production cost per unit of product, and
- Policy of management

# (iii) Material Usage Budget

- Storage facilities available
- Production Budget
- Opening and closing stock of raw materials
- Normal process loss
- Availability of funds, and
- Expected future supply conditions

#### (iv) Cash Budget

- Sales projection
- Cash expenditure, and
- Expected cash receipts





The structure of the master budget of Logs and Lumber Ltd. is summarized in the Figure below.

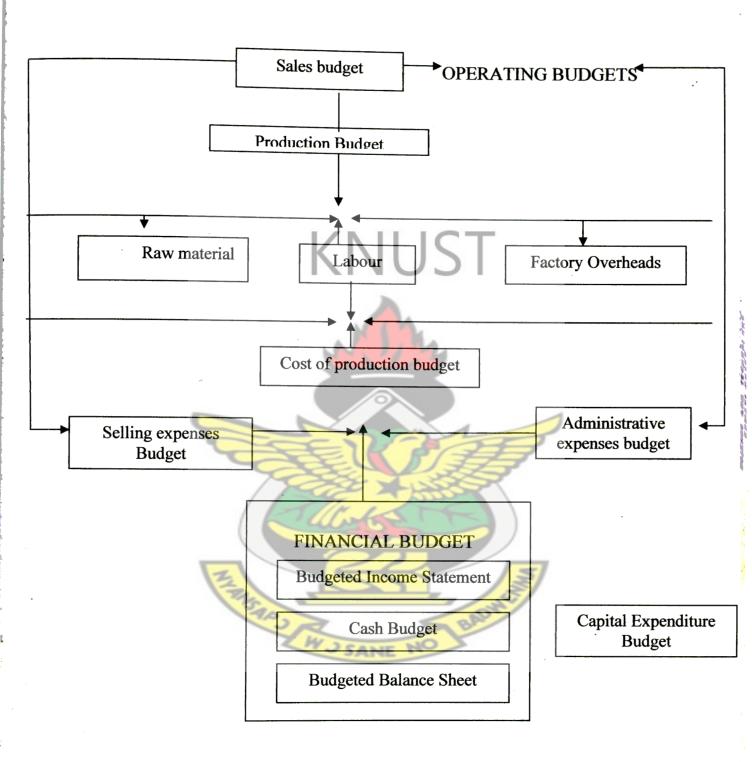


Figure 4.2: The Master Budget of Logs and Lumber Ltd.

# 4.2.2 Incremental and Zero-based Budgeting

The study revealed that all the departments in the firm do not prepare their budgets without reference to the budget of the previous year. This is an indication that, zero based budgeting is not in use in the firm. All functional budgets are prepared by adding a percentage to the previous year's budget estimates or actual results. An investigation into why the firm has adopted that particular approach revealed that, management sees the zero based budgeting as time consuming and this confirms what is stated in by Drury in page 19 of chapter two.

#### 4.2.3 Budgeting Process at Logs and Lumber Ltd.

Discussions with both departmental managers and subordinate workers revealed that, the company uses both top-to-bottom and bottom-to-top approaches of budgeting. This is because; top management in consultation with departmental heads sets specific revenue and cost targets for responsibility centres in the firm. After top management discussions, the specific percentages to be added to previous years' budgets or actual results attained are communicated to operational managers and budgets for the year are prepared at the departmental levels and submitted to the General Manager for approval and preparation of the master budget.

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As stated by Drury (2004, p. 597) in page 10 of chapter two, the General Manager in consultation with the operational managers determines factors such as sales demand, production capacity and plant capacity that restricts performance, before coming out with the current year's budgets. The study revealed that, the sales budget is prepared

first before other operational budgets are prepared as stated by Drury. The study also showed that, there is no budget committee in place in the firm. The General Manager is responsible for initiating the preparation of budgets in the firm. He acts as the budget controller in coordinating all aspects of budgeting in the firm. The specific duties of the General Manager in budgeting programmes in Logs and Lumber Ltd. include;

- 1) Advises all departmental managers on all aspects of budgeting
- 2) Carries out any initial preparatory work towards budgeting
- 3) Assists operational managers in the preparation of their departmental budget
- 4) Examines departmental budgets
- 5) Approval of departmental budgets
- 6) Responsible for any budgetary revision

# 4.3 The benefits of budgeting to Logs and Lumber Ltd. as stated in the literature review (2.6)

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It came out of the study that, budgets are used by the management of Logs and Lumber Ltd. as a tool for planning, controlling of operations, and evaluation and appraisal of performance. The evaluation and appraisal of performance takes place in some sections of the production department, especially in the slice division and the marketing division. Both senior management and lower level works in those sections of the firm are rewarded in terms of bonus payment anytime they meet their weekly targets.

Budgets serve as a means for refining financial expectations at every operating level in the firm. The strategic plan of the firm is prepared by only the top level management and the budgets in the firm are prepared based on the strategic plan.

As stated by Raiborn et al. (2006, p. 306) stated in page 24 budgeting enables operational managers at Logs and Lumber Ltd. plan ahead and to formalize their future goals on a recurring basis. 87% of respondents stressed that, budgets in place (set targets) motivate them to aspire to higher performance. The production manager and 72% of employees in that department, who responded to interviews, said the weekly target set for them in their department serves as a control measure on their operations.

Almost all departmental managers who responded to questionnaires said, budgets have a strong positive influence that inspires them as managers to higher level of performance. On the part of employees, 85% of interviewees said, they see budgets in place as something that put pressure on them to perform. This is an indication that, budgets are used as pressure device on employees in the firm.

The General Manager acting as the coordinator during budget preparations helps to promote coordination of activities in the various departments. As a result of that, communication among responsibility centres is also enhanced. For instance, it came to light that, the production department that has little or no communication with the sales department is able to have access to sales forecasts in order to plan its needs of human resources, plant and machinery and raw materials. This attests to what Horngren et al.

(2009, p. 209) said in page 24 that, budgets promote coordination and communication among sub units within the company.

Apart from the benefits discussed above, the study also revealed that, Logs and Lumber Ltd. prepares budgets for the following reasons;

- a. To guide managers and supervisors to achieve organisational objectives
- To help evaluate departmental performance, as actual performance is always compared with budgeted performance
- c. To serve as guidelines for management decisions when unforeseeable or unexpected conditions affect the operations of the firm
- d. To improve on the allocation of resources.

# 4.4 The challenges encounter in budgeting decisions at Logs and Lumber Limited as stated in the literature review (2.7).

The study revealed that, although departmental heads are inspired to a higher level of performance by the budgets in place, subordinate employees sees budgeting as a means of putting pressure on them to perform. A critical look at the production budget of the firm indicates that, unrealistic targets are set and this may be attributed to the fact that, budgets are developed from top management down to lower management than vice versa, as stated by Weygandt et al. 2002, p. 1002 in page 18.

Another challenge identified is the fact that, some of the estimates made in the budgets are inaccurate predictions hence, resulting in unfavourable variances. The absence of budget committee in place also posses a challenge to the firm in its budgeting decisions,

this is because, the absence of budget committee makes it difficult to reconcile all divergent views and also places limitations on the contribution of operational managers in budget preparation. The study also showed that, human factor plays a significant role in budgeting decisions in Logs and Lumber Ltd. One of such factor was negative attitude to work resulting in poor handling of materials leading to wastage. Another human factor identified as a challenge was personal interest. Rewards are given when targets are achieved but top management sometimes sees the need to impose a budget on middle managers who are responsible for its implementation. Such imposed budgets usually lead to conflict and hence, targets are sometimes not achieved.

Weygandt et al. (2208, p. 1001) stated in pages 15 and 16 have said that, for a budget to be an effective management tool, it must be based upon a sound organisational structure, research and analysis, and management acceptance of budget programmes. The study revealed that, there is a clearly defined organizational chart showing in details the position, authority and responsibility of each executive and the activities for which they are responsible, which is a prerequisite for budgeting.

It must however be noted that, budgets in the firm are based entirely on past performance, indicating that, research and analysis which helps in determine the feasibility of new products, operating techniques and market potential of territories is lacking. This conclusion is based on the fact that, the firm has adopted incremental budgeting which has resulted in unfavourable operating income variance year after year as shown in Figure 4.8 in page 62. The investigations revealed that, the involvement of

workers in general in budgeting decisions in the firm is limited; hence their commitment to budget implementation is as indicated by the interviews conducted.

# 4.5 Budgetary control measures in Logs and Lumber Limited as stated in the literature review (2.8).

As a way of making sure that budget targets are achieved, budget reports that provide the feedback needed by management to ascertain whether actual operations are on course are prepared by Logs and Lumber Limited. On the basis of budget reports, the management of the firm analyse the difference between actual and planned results. The study revealed that, the company prepares these reports on daily basis indicating that, the emphasis on control and frequency of report was high and monitoring of budgets is an on-going process.

It also came to light that, the budgetary reporting system in the firm is as a result of the following reasons; (i) to prevent deviations from plan (ii) to monitor the firm's financial performance (iii) as a basis of revising the budget in place (iv) To find out the cause(s) of deviation from plan, and (v) to appraise the performance of employees

The study also showed that, management of Logs and Lumber Ltd. encourages its staff to help achieve budget targets by holding seminars and workshops for them to upgrade their knowledge in their respective area of operation. The payment of bonus to managers and workers who achieve their targets in the production and marketing sections is also a measure adopted to achieve budget targets by management.

# 4.6 Comparison of actual results with the budgeted income and expenditure of Logs and Lumber Limited for the year 2004 – 2008 as stated in the literature review (2.9).

The last column of the tables below shows line-by-line in Ghana cedis variances between actual results and the budget estimates. Each variance is designated either "F" for favourable, meaning actual data turned out to be more than the budget estimate and "U" for unfavourable, meaning the budget estimate is more than the actual result for all income items. In the case of cost and expenditure items, each variance is designated "F" for favourable when actual cost or expenditure is less than the budgeted estimate and "U" for unfavourable if the actual cost or expenditure is greater than the budget estimate.

Table 4.3:

Profit Variance Analysis Based on Original Profit Plan for the Year Ending December 31, 2004 found at page 74 (Appendix I).

	Actual Results		Budget	Variance	
	GH¢	7-2	GH¢	7	GH¢
Export Sales	10,001,346	S.	9,676,101		325,245 F
Local Sales	310,676	A 777.	<b>18</b> 9,961		210,715 <b>F</b>
Sales Revenue	10,312,022	100%	9,866,062	100%	445,960 <b>F</b>
Cost of Production	6,727,523	65.2%	4,847,357	49.1%	1,880,166 U
Gross Margin	3,584, <mark>499</mark>	34.8%	5,018,705	50.9%	1,434,206 U
Selling Expenses (Export)	1,048,577	10.2%	942,624	9.6%	105,953 U
Administration Expenses	1,185,965	11.5%	1,161,444	11.8%	24,521 U
Overhead Expenses (H. O)	455,800	4.4%	648,864	6.6%	193,064 F
Total Expenses	2,690,342	26.1%	2,752,932	27.9%	62,590 <b>F</b>
Operating Income Before					
Other Income and Tax	894,157	8.7%	2,265,772	23%	1,371,616 U

Looking at the variance column of Table 4.3 above, it revealed that operating income (income before interest and taxes) is GH¢ 1,371,616 U. It is unfavourable because actual income results were below the budget target. In terms of percentage, the actual operating income declined by 14.3%, that is, 23% – 8.7%. The major cause is cost of production, which resulted in a GH¢1,880,166 U variance. Although, sales revenue resulted in GH¢445,960 F variance, the difference as compared to GH¢1,880,166 U variance reported by cost of sales was very huge, hence, leading to GH¢ 1,434,206 U variance reported by the gross margin. The difference between actual and budgeted selling expenses and administration expenses shows that, both of these expenses budgets were overspent, contributing to the decline in the actual operating income.

Table 4.4:

Profit Variance Analysis Based on Original Profit Plan for the Year Ending December 31, 2005 found at page 76 (Appendix II).

~	Actual Results	R	Budget	7	Variance
	GH¢	Y	GH¢		GH¢
Export Sales	15,237,007		20,613,000		5,375,993 U
Local Sales	170,593		<u>80,399</u>		90,194 <b>F</b>
Sales Revenue	15,407,600	100%	20,693,399	100%	5,285,799 U
Cost of Production	11,041,250	71.1%	9,908,074	47.9%	_1,133,176 U
Gross Margin	4,366,350	28.3%	10,785,325	52.1%	6,418,975 U
Selling Expenses (Export)	997,157	6.5%	1,918,352	9.3%	921,195 <b>F</b>
Administration Expenses	2,202,575	14.3%	1,721,444	8.3%	481,131 U
Overhead Expenses (H. O)	673,289	4.4%	1,064,450	5.1%	391,161 <b>F</b>
Total Expenses	3,873,021	25.1%	4,704,246	22.7%	831,225 <b>F</b>
Operating Income Before					
Other Income and Tax	493,329	3.2%	6,081,079	29.4%	5,587,750 U

A critical study of the analysis in Table 4.4 above, revealed an unfavourable variance of GH¢5,587,750 for the operating income before interest and taxes. There is an increase of GH¢4,216,134 U in the operating income variance reported in the year 2005 as compared that of the year 2004. This has come about because, the actual cost of production for the year 2005 increased to 71.7% of the sales revenue for the year.

Another cause of the huge unfavourable variance is due to the fact that, the company's export sales for the year reported an adverse variance of GH¢5,375,993 as compared with the favourable variance of GH¢325,245 reported in the year 2004.

The difference between actual and budgeted selling expenses and overhead expenses shows that, both of these expenses were under spent, yet the operating income variance was unfavorable as the gross margin reported a huge variance of GH¢6,418,975 U. Considering the selling and administration expenses, the company perform better in terms of managing these expenses, as the total expenses variance of GH¢831,225 was revealed.

Table 4.5:

Profit Variance Analysis Based on Original Profit Plan for the Year Ending December 31, 2006 found at page 78 (Appendix III).

	Actual Results Budg		Budget		Variance
	GH¢		GH¢		GH¢
Export Sales	16,431,601		18,201,666		1,770,062 U
Local Sales	284,549		184,001		100,548 F
Sales Revenue	16,716,150	100%	18,385,667	100%	1,669,517 U
Cost of Production	11,161,785	66.8%	8,456,104	46%	2,705,681 U
Gross Margin	5,554,365	32.2%	9,929,563	54%	4,375,198 U
Selling Expenses (Export)	1,014,554	6.1%	741,349	4.0%	273,205 U
Administration Expenses	2,210,17 <b>7</b>	13.2%	2,381,578	13%	171,401 <b>F</b>
Overhead Expenses (H. O)	779,916	4.7%	726,965	4.0%	52,951 U
Total Expenses	4,004,647	24%	3,849,892	21%	154,755 U
	W.	13	1		
Operating Income Before		<u></u>			
Other Income and Tax	1,549,718	9.3%	6,079,671	33.1%	4,529,953 U

The analysis in Table 4.5 revealed that, the actual operating income for the year increased to 9.3% as compared to the 3.2% reported in the preceding year, hence a reduction in the unfavourable operating income variance to GH¢4,529,953 in the year 2006. The reduction in the unfavourable operating income variance is due to the fact that, the company managed to reduce its actual cost of production from 71.7% in the year 2005 to 66.8% in the year 2006. The improvement in the performance of the company for the year 2006 as compared to the year 2005 is also due to the favourable variance of GH¢171,401 reported for administration expenses in the year 2006 as compared to the GH¢481,131U for the year 2005. A reduction in the export sales

variance from GH¢5,375,993U to GH¢1,770,062U for the year and increased in the local sales variance from GH¢90,194F in the year 2005 to 100,548F in the year 2006 have contributed to the improvement in performance in 2006 as compared to 2005.

Table 4.6:

Profit Variance Analysis Based on Original Profit Plan for the Year Ending December 31, 2007 found at page 80 (Appendix IV).

	Actual Results		Budget		Variance
	GH¢	ET 10	GH¢		GH¢
Export Sales	19,732,043	IU:	18,744,728		987,315 <b>F</b>
Local Sales	323,044		300,000		23,044 <b>F</b>
Sales Revenue	20,055,088	100%	19,044,728	100%	1,010,360 <b>F</b>
Cost of Production	10,548,820	52.6%	7,413,677	39%	3,135,143 U
Gross Margin	9,506,268	47.4%	11,631,051	61%	2,124,783 U
Selling Expenses (Export)	993,848	5.0%	788,983	4.1%	204,865 U
Administration Expenses	2,669,422	13.3%	2,432,907	12.8%	236,515 U
Overhead Expenses (H. O)	939,094	4.7%	<b>670,9</b> 91	3.5%	<u>268,103 U</u>
Total Expenses	4,602,364	23%	3,892,881	20.4%	<b>709,483</b> U
	- Comment	-			•
Operating Income Before	12	2	13	7	
Other Income and Tax	4,903,904	24.5%	7,738,169	40.6%	<b>2,834,266</b> U
	TO S	<	OND.		

Table 4.6 above revealed that, the firm reported a positive sales revenue variance of GH¢1,010,360. This was achieved because for the year 2007, both export sales and local sales reported positive variances of GH¢987,315 and GH¢23,044 respectively. This achievement has contributed to reducing the operating income variance form GH¢4,529,953U in the year 2006 to GH¢2,834,266U in the year 2007. Although, all

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expenses reported unfavourable variances in the year 2007, the huge favourable variance achieved for sales revenue has contributed to an increase in the actual operating income, hence, the reduction in the unfavourable operating income variance.

Table 4.7:

Profit Variance Analysis Based on Original Profit Plan for the Year Ending December 31, 2008 found at page 82 (Appendix V).

	Actual Results		Budget		Variance
	GH¢		GH¢		GH¢
Export Sales	26,152,272	H	23,911,803		2,240,469 F
Local Sales	348,187	U.	442,740		94,553 U
Sales Revenue	26,500,459	100%	24,354,544	100%	2,145,916 <b>F</b>
Cost of Production	14,434,851	54.5%	5,485,057	22.5%	8,949,794 U
Gross Margin	12,065,608	45.5%	18,869,486	77.5%	6,803,878 U
Selling Expenses (Export)	1,215,502	4.6%	1,146,273	4.7%	69,229 U
Administration Expenses	3,643,135	13.7%	2,576,900	10.6%	1,066,235 U
Overhead Expenses (H. O)	901,184	3.4%	799,819	3.3%	101,365 U
Total Expenses	5,759,821	21.7%	4,522,992	18.6%	1,236,829 U
	Milled	1	8		
Operating Income Before		337			
Other Income and Tax	6,305,787	23.8%	14,346,494	<b>7</b> 59%	8,040,707 U
12	4		154		

From Table 4.7 above, although sales revenue reported GH¢2,145,916 F variance, the operating income for the year showed a huge variance of GH¢8,040,707 U, which is more than twice that of the variance reported in the year 2007. The major cause is the cost of production which resulted in a GH¢8,949,794 U variance. A critical look at the analysis revealed that, the actual cost of production for the year exceeded twice the budgeted figure. Another cause is due to the fact that, all expenses, that is, selling,

administration and overhead costs, reported unfavourable variance of GH¢1,236,829 indicating that, they were either under budgeted or overspent.

Table 4.8:

Comparative Analysis of Profit Variance Based on Original Profit Plan for the period 2004 - 2008

	2004	2005	2006	2007	2008
	Variance	Variance	Variance	Variance	Variance
	GH¢	GH¢	GH¢	GH¢	GH¢
Export Sales	325,245 <b>F</b>	5,3 <b>7</b> 5,9 <b>9</b> 3U	1,770,062U	987,315 <b>F</b>	2,240,469 <b>F</b>
Local Sales	210,715 <b>F</b>	90,194 <b>F</b>	100,548 <b>F</b>	23,044 <b>F</b>	94,553 U
Sales Revenue	445,960 <b>F</b>	5,285,799U	1,669,517U	1,010,360 <b>F</b>	2,145,916 <b>F</b>
Cost of Production	1,880,166U	1,133,17 <b>6U</b>	2,705,681U	3,135,143 <b>U</b>	8,949,794U
Gross Margin	1,434,206U	6,418,975U	4,375,198U	2,124,783 <b>U</b>	6,803,878U
Selling Expenses	105,953 U	921,195 F	273,205U	204,865 <b>U</b>	69,229U
Administration Exp.	24,521 U	481,131 U	171,401 <b>F</b>	236,515U	1,066,235U
Overhead Exp.	193, <mark>064 F</mark>	391,161 <b>F</b>	52,951U	<b>268</b> ,103 <b>U</b>	101,365U
Total Expenses	62,590 <b>F</b>	831,225 F	154,755U	709,483 <b>U</b>	1,236,829U
Operating Income	1,371,616 <b>U</b>	5,587,750U	4,529,953U	2,834,266 <b>U</b>	8,040,707U
	Z	Z			

The analysis in Table 4.8 above revealed that, there has been improvement in export sales from the year 2007 as the analysis indicated a favourable variance of GH¢ 987,315 and GH¢2,240,469 for the year 2007 and 2008 respectively. The sales revenue of the company in the local market for the first four years (2004, 2005, 2006 and 2007) reported positive variances with the exception of GH¢94,553 U reported in the year 2008. The performance of the firm in both export and local sales has contributed to the

favourable sales revenue for the last two years. The management of cost of production for the five year period has not been efficient as all the years reported negative variances with amount increasing year after year from the year 2005. The increase in the cost of production is not as a result of increase in corresponding sales revenue, this could be seen from the analysis in Table 4.8 below as sales revenue rather decreased in 2006 and 2007.

In the area of operating expenses, either the company has had difficulties in controlling them or they are under budgeted, hence resulting in unfavourable variances in the last three years. The difficulty in controlling both cost of production and operating expenses on the part of management has resulted in the unfavourable operating income variances reported for all the five years.



#### CHAPTER FIVE

## SUMMARY OF FINDINGS, RECOMMENDATIONS, AND CONCLUSIONS

#### 5.0 Introduction

This chapter sets out to round off the study with a summery of work done, provision of appropriate recommendation and conclusions.

#### 5.1 Summery of Findings

## 5.1.1 Summery of Findings on budgeting process at Logs and Lumber Ltd.

Although the firm adopts both top-to-down and down-to-top approaches of budgeting, the process of budgeting is more of a top-to-down as operational managers have to consult senior management before setting budget targets.

The cyclical budgeting problem faced by the firm in terms of reporting unfavourable operating income variance year after year is partly due to the incremental budgeting approach adopted by the company.

It also came out of the study that, the firm has no budget committee in place and as a result, the functions of a budget committee are completely performed by the General Manager. This promotes a situation where by every part of the firm is represented in the contributions to budgeting decisions.

### 5.1.2 Summery of Findings on why budgets are prepared at Logs and Lumber Ltd.

It came out of the study that, budgets are used by the management of Logs and Lumber Ltd. as a tool for planning, controlling of operations, and evaluation and appraisal of performance. The use of budgets to evaluate and appraise the performance of employees is not carried out through out the firm, but it is limited to the production and

sales departments where bonuses are paid to both managers and workers for achieving budget targets. Budgeting also serves as a tool for planning in the firm as budgets depends on the strategic plan of the firm. Budgeting also helps in motivating operational managers as well as subordinate employees in the production and sales departments to higher levels of performance. This cannot be said of employees in other departments as they are not rewarded for achieving budget targets.

The existence of budgeting and budgetary control in Logs and Lumber Ltd. has contributed to promotion of coordination of activities of the departments leading to enhancement of communication among the various sections of the firm. It must however be emphasized that, coordination and communication can be effectively promoted in Logs and Lumber Ltd. if management sets up a budget committee to handle its budgeting decisions.

## 5.1.3 Summery of Findings on challenges encounter in budgeting decisions at Logs and Lumber Ltd.

The study revealed that, unrealistic targets are set, especially the production budget, and this may be attributed to the fact that budgets are developed from top management down to lower level management than vice versa. The absence of a budget committee makes it difficult to reconcile divergent views and also limits the contributions of all interested parties, hence, leading to the frequent reporting of unfavourable variances in operating income. Using the achievement of budget targets as a condition for rewarding managers and employees in the production department means budgets are used as pressure device on managers and employees in the production department and this has

contributed to the unfavourable operating income variances reported from by the five years income statement analysis. The failure of management to produce a budget based on research rather than limiting itself to incremental budgeting was seen as a challenge to the firm in its budgeting decisions.

## 5.1.4 Summery of Findings on budgetary control system at Logs and Lumber Ltd.

The study revealed that, Logs and Lumber Ltd. uses five parts as a means of promoting effective cost control system through its budgeting decisions. These are; (i) preparation of budgets (ii) communicating budgets to all concerned (iii) having an accounting system that records all actual cost (iv) preparing statements that compares actual costs and revenue with budgets, showing variances and, (iv) taking appropriate actions based on the analysis of variance.

The study also, showed that budget reports prepared by the firm are done on daily basis. This provides evidence that, the emphasis on control and frequency of reporting in the firm is very high and monitoring of budgets is also an on-going process. Also, as a measure to achieve budget targets, seminars and workshops are organised for staff to upgrade their knowledge in their field of operation.

# 5.1.5 Summery of Findings on variance analysis of the Income and Expenditure Statements from 2004 to 2008.

Variances revealed are historic, since what they show has happened already and no amount of analysis and discussions can alter them. It must however be noted that, they can be used to influence managerial action in future periods.

An investigation into the analysis of the income and expenditure statements, indicated that, although management of the firm has a reporting system that enables them to compare actual results with budgets, they have failed to carry out effective investigation into their causes, hence the negative variances reported by operating income from 2004 to 2008. The study showed that, the management of cost of production for the five year period has not been efficient as all the years reported negative variances with amount increasing year after year from the year 2005. The increase in the cost of production is not as a result of increase in corresponding sales revenue, this could be seen from the analysis, as sales revenue rather decreased in 2006 and 2007.

The study also revealed that, in the area of operating expenses, either the company has had difficulties in controlling them or they are under budgeted, hence resulting in unfavourable variances in the last three years. The difficulty in controlling both cost of production and operating expenses on the part of management has resulted in the unfavourable operating income variances reported for all the five years.

#### 5.2 Recommendations

### 5.2.1 Recommendations on budgeting process at Logs and Lumber Ltd.

Researchers have found that participative budgeting improves communication and motivation among managers and employees at all levels. The process of sharing information up, down, and across the organization structure helps managers and employees understand their role in achieving corporate goals. Also, when budget changes are necessary, universal participation helps further companywide

understanding of and commitment to the change. It is therefore recommended that, the management of Logs and Lumber Ltd. should adopt more participative budgeting by lower level managers and employees. Also, given the dynamic markets company face today, the firm should practice less top-down budgeting approach and use more participative budgeting by lower-level managers, who best understand consumers' needs. For the participative approach to be effective, it is recommended that the culture of the firm must support it and managers and employees together must have a positive attitude toward company goals. In addition, employees must perceive their participation as real, as lower managers will become resentful if they think their input is merely a mechanical exercise. Departments must also believe that, the results of participative budgeting are fair as stated by Drury, 2004, p. 587.

There is the need for management to go back to the basis and develop budgets from an assumption of no existing resources (that is Zero-based), this means, all resources will have to be justified and the chosen way of achieving any specific objectives will have to be compared with the alternatives. Zero-based budgeting is a cost-benefit approach whereby it is assumed that the cost allowance for an item is zero, and will remain so until the manager responsible justifies the existence of cost item and the benefits the expenditure brings. The adaptation of this approach by the management of Logs and Lumber Ltd. will help develop a questioning attitude whereby each cost item and its level has to be justified in relation to the way it helps to meet objectives and how the expenditure benefits the organisation.

The management of Logs and Lumber Ltd. stand to benefit from zero-based budgeting in the following ways if it is adopted and carried out properly.

- The approach would result in a more efficient allocation of resources to activities and departments
- (2) It focuses attention on value for money and makes explicit the relationship between the input of resources and the output of benefits
- (3) It develops a questioning attitude and makes it easier to identify inefficient, obsolete or less cost effective operations.
- (4) The zero-based budgeting process leads to greater staff and management knowledge of the operations and activities of the organisation and can increase motivation.
- (5) It is a systematic way of challenging the status quo and obliges the firm to examine alternative activities and existing cost behaviour patterns and expenditure levels.

It is also recommended that, the management of the firm should put in place a budget committee consisting of senior members and representatives for every section of the firm. This will help promote effective coordination and setting of realistic targets.

# 5.2.2 Recommendations on challenges encountered in budgeting decisions at Logs and Lumber Ltd.

The management of Logs and Lumber Ltd. should consider extending its policy of rewarding managers and workers in the production and sales departments for meeting their budget targets to other departments to serve as a motivational factor through out the firm. The management should however be careful not to administer budgets rigidly but rather make the necessary changes to budgets when the need arises.

## 5.2.3 Recommendations on budgetary control system at Logs and Lumber Ltd.

Although the five steps adopted by the firm in promoting effective cost control system through its budgetary decisions is appropriate, a critical look at the steps to correct any deficiency is required. It is therefore recommended that, financial statements comparing actual costs and revenue with budgets should disclose the reasons for the variances reported and based on the reasons provided, appropriate actions are taken.

Also, communicating budgets to all concerned is not enough; it should go with agreeing with them as well. This will help promote participation in budgeting decisions leading to acceptance on the part of all who are responsible for implementing budgets.

# 5.2.4 Recommendations on variance analysis of the Income and Expenditure Statements from 2004 to 2008.

To help avert the consistent reporting of unfavourable variances for the past four years, it is recommended that, management by exception should be practice by top management of the firm. This approach will enable top management to focus on problem areas that need attention. Weygandt et al. (2008, p. 1049) has said that, for the management by exception approach to be effective, there must be some guidelines for identifying an exception. These guidelines are materiality and controllability of the item. They help management not to investigate every budget difference but the most important once. Materiality is usually expressed as a percentage difference from budget.

The management of Logs and Lumber Ltd. should therefore adopt the materiality approach as a way of practicing effective management by exception. The management should set a percentage of five (5%) for important items like cost of production and 10% for other items. This means that, all differences either over or under budget by the specified percentages need to be investigated. Hence, there is the need to investigate costs over budget to determine why they were not controlled. In contrast, cost under budget merit investigations to determine whether costs critical to the profitability of a department are being curtailed.

## 5.2.5 Recommendations for further studies

It is recommended that, further studies related to the topic should cover the analysis of all the operational budgets especially the material usage budget to enable a meaningful judgment to be made on how controlling of operations affects the usage of raw materials. Also, a study should be carried out to cover more firms in the industry to help access how budgeting and budgetary control contributes to efficient use natural resources (forest) being the main source of raw materials to the firm in the timber industry.

#### 5.3 Conclusions

Budgeting and budgetary control measures of Logs and Lumber Ltd. aims at assisting management in controlling cost of operations and also as a basis of evaluating performance of employees. The absence of budget committee in the firm has made the preparation of budgets less participative, hence contributing to the setting of unrealistic targets.

The use of incremental budgeting has contributed to the persistent reporting of unfavourable operating income variance; therefore, there is the need for the management to prepare zero-based budgets based on research findings and analysis.

The consistent reporting of unfavourable operating income variance from 2004 to 2008 as indicated in the analysis in chapter four, could be attributed to the failure on the part of management to carry out effective investigations in the their causes and difficulty in managing the cost of production.



#### REFERNCES

- Akintoye, J. R. (2008) <u>Budgeting and Budgetary Control for Improved Performance: A consideration for selected Food and Beverages Companies in Nigeria</u>, European Journal of Economics and Administration Sciences, ISSN 1450-2275 Issue 12.
- Anthony, R. N. and Young, D. W. (1999) <u>Management Control in Non Profit</u> <u>Organisations</u> (6<sup>th</sup> edn), USA, R.R. Donnelley & Sons Company.
- Atrill, P. and McLaney, E. (2002) <u>Management Accounting for Non-Specialists</u> (3<sup>rd</sup> edn), England, Ashford Colour Press Ltd., Gosport.
- Brandon, H. C. and Drtina, E. R. (1997) <u>Management Accounting Strategy and Control</u>, USA, R.R. Donnelley & Sons Company.
- Drury, C. (2004) Management and Cost Accounting (6<sup>th</sup> edn), Singapore, Seng Lee Press.
- Fisher, J. G., Peffer, S. A. and Sprinkle, G. B. (2003) <u>Budget-Based Contract Levels</u>, and Group Performance. Journal of Management Accounting research (15): p 51-74
- Gyasi, K. (2005) <u>Management Accounting</u>, Accra, Excellent Publishing and Printing, (EPP) Books Services.
- Hansen, S. C. and Van der Stedeb, W. A.(2004) <u>Multiple facets of budgeting: an exploratory analysis</u>, Management Accounting Research, Vol. 15, p. 415-439
- Hermes, N. Smid, P., Yao, L. (2007) <u>Capital budgeting practices: A comparative study of the Netherlands and China</u>, International Business Review Vol. 16, p. 630-654
- Hilton, R. W., Maher, M. W. and Selto, F. H. (2000) <u>Cost Management, Strategies for Business Decisions</u>, USA, Von Hoffmann Press, Inc.
- Horngren, T. C., Datar, M. S., Foster, G., Rajan, V. M. and Ittner, C. (2009) <u>Cost Accounting: A Managerial Emphasis</u> (13<sup>th</sup> edn), USA, Quebecor World Color / Versailles.
- Lam, K. C., Wang, D., Lam, M.C.K. (2004) <u>The capital budgeting evaluation practices of Building Contractors in Hong Kong</u>, International Journal of Project Management Vol. 25, p. 824-834.
- Lucey, T. (1997) Costing, London, Ashford Colour Press, Gosport, Hant.
- Merriam, S. B. (1992) <u>Qualitative Research and Case Study Application in Education</u>, Sam Francisco, Jossey-Bass Publishers.

Owler L.W. J. and Brawn, J. L. (1978) <u>Weldon Cost Accounting and Costing Methods</u>, Great Britain, the Chaucer Press Ltd., Vungay, Suffolk.

Raiborn, C. A., Kinney, M. R., and Prather-Kinsey, J. (2006) <u>Cost Accounting</u> (6<sup>th</sup> edn), Singapore, Seng Lee Press.

Saunders, M., Lewis, P. and Thornhill, A. (2007) <u>Research Methods for Business Students</u> (4<sup>th</sup> edn), Spain, Mateu Cromo, Artes Graficas.

Watson, D. and Head, A. (2007) <u>Corporate Finance: Principles & Practice</u> (4<sup>th</sup> edn), England, Financial Times Prentice Hall imprint.

Weygandt, J. J., Kieso, E. D. and Kell, G. W. (1996) <u>Accounting Principles</u> (4<sup>th</sup> edn) USA, Von Hoffmann Press.

Weygandt, J. J., Kieso, E. D. and Kimmel, D. P. (2008) <u>Accounting Principles</u> (8<sup>th</sup> edn) USA, Von Hoffmann Press.

Wood, F. and Sandster, A. (1998) <u>A-Level Accounting</u>. Financial times, Pitman Publishing.

Jacobs, J. (2003) <u>Budgeting and Budgetary Control</u>, (Online) Available at <a href="http://papers.ssrn.eom/so13/paper.cfm?">http://papers.ssrn.eom/so13/paper.cfm?</a> [accessed 10/06/09]

Controlling a budget (2005) Chartered Management Institute: Checklist: Small Business (Free Online Library) Available at <a href="http://www.thefreelibrary.com/contrlling+a+budget-a0141751363">http://www.thefreelibrary.com/contrlling+a+budget-a0141751363</a> [accessed 05/06/09]

Controlling a budget (2005) Chartered Management Institute: Checklist: Managing Information and Finance (Online) Available at <a href="http://goliath.ecnext.com/com2/gi">http://goliath.ecnext.com/com2/gi</a> [accessed 05/06/09]

Basic Finance for Marketers: Budgetary Control (2005) Agriculture and Consumer Protection Agency (Online) Available at <a href="http://www.fao.org/docrep/w4343E/w434">http://www.fao.org/docrep/w4343E/w434</a> [accessed 08/05/09]

<u>Drawing up a budget</u> (2005) Chartered Management Institute, (Online) Available at <a href="http://www.thefreelibrary.com/Drawing+up+a+budget">http://www.thefreelibrary.com/Drawing+up+a+budget</a> [accessed 08/05/09]

European Journal of Economics, Finance and Administration Sciences. ISSN 1450-2275 Issue 12 (2008): (Online) Available at <a href="http://www.eurojournalsn.com">http://www.eurojournalsn.com</a> [accessed on 29/08/09]

#### APPENDIX I

## LOGS & LUMBER LIMITED

## INCOME STATEMENT

EVDODT CALEG	Actual	Budget	Variance
EXPORT SALES Lumber	GH¢	GH¢	$GH\phi$
	2,773,808	2,847,867	(74,059)
Plywood Sliced Veneer	252,701	387,200	(134,499)
	4,862,371	4,251,434	610,937
Rotary Veneer	614,458	767,700	(153,242)
Mouldings	1,498,008	1,421,900	76,108
Finger Joints Lamination	-	-	-
	-	-	-
Total LOCAL SALES	10,001,346	9,676,101	325,245
Lumber	K Milli	ST	
Plywood	39,575	43,243	(3,668)
Sliced Veneer	161,792	96,903	64,889
	73,964	19,586	54,378
Rotary Veneer T & G	12.522	16670	-
Block board	13,532	16,679	(3,147)
Scrap	3,621	8,528	(4.907)
•	15,066	4,572	10,494
Plywood Rejects	3,126	450	2,676
Total	310,676	189,961	210,715
Total Sales	10,312,022	9,866,062	445,960
PRODUCTION COST		25	
Cost of Logs Consumed	1.760.064	1 200 0 10	(2.60.11.5)
LLL Mill	1,569,964	1,200,849	(369,115)
JCM Mill	281,465	80,685	(200,780)
Sliced Veneer	1,902,867	1,052,997	(849,870)
Rotary Veneer	718,069	447,706	(270,363)
Total Cost of Logs Consumed	4,472,365	2, <mark>782,2</mark> 37	(1,690,128)
SAWMILL DIVISION	2 5	BADY	
LLL - Mill	568,491	488,203	(80,288)
JCM - Mill	83,725	31,439	(52,286)
Mouldings/FJ	188,721	155,333	(33,388)
Total Sawmill Division	840,937	674,975	(165,962)
PLYMILL DIVISION			
Sliced Veneer	497,275	385,963	(111,312)
Rotary Veneer	184,025	206,149	(22,124)
Plywood	189,642	209,691	20,049
<b>Total Veneer Division</b>	870,942	801,803	(69,139)
<b>Total Production Costs</b>	6,184,244	4,259,015	(1,925,229)

Engineering Division	543,279	588,342	45,063
<b>Total Manufacturing Costs</b>	6,727,523	4,847,357	(1,880,166)
Gross Profit	3,584,499	5,018,705	(1,434,206)
EXPENSES			
Administration	1,185,965	1,161,444	(24.521)
Head Office	455,800	648,864	(24,521) 193,064
Export Sales	1,048,577	942,624	(105,953)
Total Expenses	2,690,342	2,752,932	<b>62,590</b>
	_,;;;;;=	2,702,702	02,000
Net Profit Before Other			
Incomes	894,157	2,265,773	(1,371,616)
Investment Income	IZK II 14		(1,5 / 1,010)
Profit(-)/Loss on Exchange	516,754	\ _	((516,754)
Profit(-)/Loss Asset Disposal	(34,006)	<i>J</i>	34,006
Logging Division Recovery from			,
Logs	. A	-	-
Profit(-)/Loss	(0)	809,533	809,533
Net Profit before Taxation	411,409	1,456,240	(1,044,831)
Corporate Taxation	19		-
Income Tax		40,600	40,600
National Reconstruction Levy	ENT	1,600	1,600
Total Tax	E U	42,200	42,200
Net Profit after Taxation	411,409	1,414,040	(1,002,631)
	Miles		
3		1	

#### **APPENDIX II**

## LOGS & LUMBER LIMITED

### INCOME STATEMENT

EMBORE	Actual	Budget	Variance
EXPORT SALES	GH¢	$GH \mathfrak{e}$	GH¢ .
Lumber	3,984,594	4,512,000	(527,406)
Plywood	312,255	-	312,255
Sliced Veneer	7,494,615	11,040,000	(3,545,385)
Rotary Veneer	721,968	-	721,968
Mouldings	2,400,917	3,360,000	959,083
Finger Joints	-	_	-
Lamination	322,658	1,701,000	(1,378,342)
Total	15,237,007	20,613,000	(5,375,993)
LOCAL SALES	K  V   V		
Lumber	19,859	8,741	11,118
Plywood	76,325	46,364	29,961
Sliced Veneer	<b>29,</b> 513	16,986	12,527
Rotary Veneer	NO CONTRACTOR OF THE PARTY OF T	· •	-
T & G	2,080	2,806	(726)
Block board	504	739	(235)
Scrap	42,312	4,125	38,187
Plywood Rejects		638	(638)
Total	170,593	80,399	90194
Total Sales	15,407,600	20,693,399	(5,285,799)
PRODUCTION COST	3	1	
Cost of Logs Consumed	THE WAY	2	
LLL Mill	2,163,182	2,182,339	19,157
JCM Mill	400,230	439,964	39,734
Sliced Veneer	2,922,433	2,663,946	(258,487)
Rotary Veneer	1,249,829	1,122,279	(127,550)
Total Cost of Logs Consumed	6,735,674	6,408,528	(327,146)
40		DADA	, , ,
SAWMILL DIVISION	200	D.	
LLL - Mill	897,645	780,510	(117,135)
JCM - Mill	180,140	137,190	(42,950)
Mouldings/FJ	362,260	330,277	(31,983)
Total Sawmill Division	1,440,045	1,247,977	(192,068)
			,
PLYMILL DIVISION			
Sliced Veneer	895,350	670,575	(224,775)
Rotary Veneer	336,832	233,620	(103,212)
Plywood	244,823	167,997	(76,826)
Total Veneer Division	1,477,005	1,072,192	(404,813)
Total Production Costs	9,652,724	8,728,697	(924,027)
Total Production Costs	),00 <b>2</b> ,72	0,,20,007	(>= 1,0=1)

<b>Engineering Division</b>	1,388,526	1,179,377	(209,149)
<b>Total Manufacturing Costs</b>	11,041,250	9,908,074	(1,133,176)
Gross Profit	4,366,350	10,785,325	(6,418,975)
EXPENSES			
Administration	2,202,575	1,721,444	(481,131)
Head Office	673,289	1,064,450	391,161
Export Sales	997,157	1,918,352	921,195
Total Expenses	3,873,021	4,704,246	831,225
N A D CO D CO	,	, , ,	,
Net Profit Before Other Incomes	100.000	< 004 0 <b>-</b> 0	(= === ===)
Investment Income	493,329	6,081,079	(5,587,750)
Profit(-)/Loss on Exchange	(6,075)	CT -	6,075
Profit(-)/Loss Asset Disposal	7 <b>8</b> 5,504 (3,500)	) -	(785,504)
Logging Division Recovery from	(5,300)		3,500
Logs		_	
Profit(-)/Loss	NO MA	2,946,418	2,946,418
	W. Jun	2,540,410	2,540,410
Net Profit before Taxation	(282,600)	3,134,661	(3,417,261)
Corporate Taxation			-
Income Tax			-
National Reconstruction Levy	ENT	211	-
Net Profit after Taxation	(282,600)	3,134,661	(3,417,261)
1		. 13	

#### APPENDIX III

## LOGS & LUMBER LIMITED

## INCOME STATEMENT

EXPORT SALES	Actual	Budget	Variance
Lumber	GH¢	GH¢	GH¢
Plywood	4,019,604	5,008,300	(988,696)
Sliced Veneer	104,572 9,088,214	34,521	70,051
Rotary Veneer	, ,	8,821,200	267,014
Mouldings	66,491	32,745	33,746
Finger Joints	2,556,330	3,580,400	(1,024,070)
Lamination	596,390	724,500	(129 110)
Total	16,431,601	,	(128,110)
LOCAL SALES	K 10,431,001	_18,201,666	(1,770,065)
Lumber	33,429	19,986	13,443
Plywood	270	76,966	(76,696)
Sliced Veneer	199,323	29,702	169,621
Rotary Veneer	6,050	-	6,050
T & G	1,209	2,094	(885)
Block board		507	(507)
Scrap	44,268	54,746	(10,478)
Plywood Rejects		_	-
Total	284,549	184,001	100,548
Total Sales	16,716,150	18,385,667	(1,669,517)
PRODUCTION COST		4	, , , ,
Cost of Logs Consumed	CC + 777	2	
LLL Mill	2,661,999	1,296,338	(1,365,661)
JCM Mill	546,869	244,488	(302,381)
Sliced Veneer	3,611,266	1,827,711	(1,783,555)
Rotary Veneer	19,934	<b>777,72</b> 2	757,788
<b>Total Cost of Logs Consumed</b>	6,840,068	4,146,259	(2,693,809)
CAMMINI DIVICIONI	R S	BADY	
SAWMILL DIVISION LLL - Mill	886,249	899,232	12,983
JCM - Mill	167,250	145,675	(21,575)
	479,600	349,374	(130,226)
Mouldings/FJ	1,533,099	1,394,281	(138,818)
Total Sawmill Division	1,333,077	1,374,201	(130,010)
PLYMILL DIVISION			
Sliced Veneer	1,306,021	911,834	(394,187)
Rotary Veneer	64,910	286,935	222,025
Plywood	31,598	271,336	239,738
<b>Total Veneer Division</b>	1,402,529	1,470,105	67,576
<b>Total Production Costs</b>	9,775,696	7,010,645	(2,765,051)

Engineering Division	1,386,089	1,445,459	59,370
<b>Total Manufacturing Costs</b>	11,161,785	8,456,104	(2,705,681)
Gross Profit EXPENSES	5,554,365	9,929,563	(4,375,198)
Administration Head Office	2,210,177	2,381,578	171,401
Export Sales	779,916	726,965	(52,951)
Total Expenses	1,014,554	741,349	(273,205)
Total Expenses	4,004,647	3,849,892	(154,755)
Net Profit Before Other			
Incomes	1,549,718	6,079,671	(4,529,953)
Investment Income	(7,920)	-	7,920
Profit(-)/Loss on Exchange	25,105		(25,105)
Profit(-)/Loss Asset Disposal	(116,600)	)   .	116,600
Logging Division Recovery from			
Logs		-	•
Profit(-)/Loss	(44,894)	3,590,854	3,635,748
Net Profit before Taxation	1,694,027	2 499 917	(704 700)
Corporate Taxation	1,094,027	2,488,817	(794,790)
Income Tax		,	
National Reconstruction Levy		1	
Net Profit after Taxation	1,694,027	2,488,817	(794,790)
75	22		, , ,
	Moderation		
3		3	

### APPENDIX IV

## LOGS & LUMBER LIMITED

## INCOME STATEMENT

EXPORT SALES	<b>Actual</b> GH¢	Budget	Variance
Lumber	6,401,368	GH¢ 4,626,107	GH¢
Plywood	0,401,308	4,020,107	1,775,261
Sliced Veneer	9,868,001	9,954,021	(86,021)
Rotary Veneer	7,606,001	9,934,021	(80,021)
Mouldings	1,530,277	1,242,022	288,255
Finger Joints	492,079	1,400,578	(908,499)
Lamination	1,440,319	1,522,000	(81,681)
Total	19,732,043	18,744,728	987,315
LOCAL SALES	N KITTI	7, 11,120	70,4010
Lumber	23,640	45,260	(21,620)
Plywood	_	-	-
Sliced Veneer	214,176	254,740	(40,564)
Rotary Veneer	NC N	· •	-
T & G	N. 112	-	-
Block board	2	_	-
Scrap	85,228		85,228
Plywood Rejects		,	-
Total	323,044	300,000	23,044
Total Sales	20,055,088	19,044,728	1,010,360
PRODUCTION COST		4	
Cost of Logs Consumed	CC - 1777	2	
LLL Mill	2,655,066	1,928,139	(726,927)
JCM Mill	562,073	427,285	(134,788)
Sliced Veneer	2,147,081	1,448,577	(698,504)
Rotary Veneer		\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	-
Total Cost of Logs Consumed	5,364,219	<b>3,804,0</b> 01	(1,560,218)
403	> <	BAD	
SAWMILL DIVISION	WASANE NO		
LLL - Mill	1,085,189	720,107	(365,081)
JCM - Mill	186,163	170,667	(15,496)
Mouldings/FJ	617,209	591,988	(25,222)
<b>Total Sawmill Division</b>	1,888,560	1,482,762	(405,799)
PLYMILL DIVISION	1 590 476	1 124 052	(456 422)
Sliced Veneer	1,580,476	1,124,053	(456,423)
Rotary Veneer	-	-	-
Plywood  To the Name Pinisian	1,580,476	1,124,053	(456,423)
Total Veneer Division			
<b>Total Production Costs</b>	8,833,256	6,410,816	(2,422,440)

Engineering Division	1,715,564	1,002,862	(712,703)
<b>Total Manufacturing Costs</b>	10,548,820	7,413,677	(3,135,143)
Gross Profit EXPENSES	9,506,268	11,631, 051	(2,124,783)
Administration	2,669,422	2,432,907	(236,515)
Head Office	939,094	670,991	(268,103)
Export Sales	993,848	788,983	(204,864)
Total Expenses	4,602,364	3,892,881	709,483
Net Profit Before Other			
Incomes	4,903,904	7,738,169	(2,834,266)
Investment Income	(11,084)	7,730,107	11,084
Profit(-)/Loss on Exchange	(73,167)	CT .	73,167
Profit(-)/Loss Asset Disposal	(145,376)	) I .	145,376
Logging Division Recovery from	(**************************************		
Logs	A	-	
Profit(-)/Loss	6	1,915,928	1,915,922
Net Profit before Taxation	5,133,525	5,822,241	(688,716)
Corporate Taxation			-
Income Tax		_	-
National Reconstruction Levy		1	-
Net Profit after Taxation	5,133,525	5,822,241	(688,716)
WHE ARS	WU SANE NO	BADWE	

#### APPENDIX V

## LOGS & LUMBER LIMITED INCOME STATEMENT

EVDODT CAL DO	Actual	Budget	Variance
EXPORT SALES Lumber	GH¢	GH¢	GH¢
Plywood	8,326,594	7,393,346	933,248
Sliced Veneer	-	-	-
	12,358,678	11,911,726	446,951
Rotary Veneer	-	-	-
Mouldings	2,654,327	2,207,770	446,557
Finger Joints	1,106,923	697,007	409,916
Lamination	1,705,751	1,701,954	3,797
Total	26,152,272	23,911,803	2,240,469
LOCAL SALES	KINILIS		
Lumber	5,130	32,425	(27,295)
Plywood		-	-
Sliced Veneer	174,502	293,764	(119,262)
Rotary Veneer	, Maria	-	-
T&G	W. 112	-	-
Block board		-	-
Scrap	168,555	116,551	52,004
Plywood Rejects			-
Total	348,187	442,740	(94,553)
Total Sales	26,500,459	24,354,544	2,145,916
PRODUCTION COST	250		
Cost of Logs Consumed	1 THE	2	
LLL Mill	3,936,300	-	(3,936,300)
JCM Mill	877,791		(877,791)
Sliced Veneer	2,821,395	//	(2,821,395)
Rotary Veneer		1 3 -	-
Total Cost of Logs Consumed	7,635,486	55/ -	(7,635,486)
403	2 5	BADY	
SAWMILL DIVISION	WJ SANEL NO	1 205 054	. (40,022)
LLL - Mill	1,354,986	1,305,954	(49,032)
JCM - Mill	249,980	256,467	6,487
Mouldings/FJ	754,543	581,215	(173,328)
<b>Total Sawmill Division</b>	2,359,509	2,143,635	(215,873)
PLYMILL DIVISION			
Sliced Veneer	2,049,350	1,747,812	(301,539)
	2,017,550		-
Rotary Veneer	-	_	-
Plywood Tatal Vancor Division	2,049,350	1,747,812	(301,539)
Total Veneer Division	, ,	3,891,447	(8,152,899)
<b>Total Production Costs</b>	12,044,346	3,071,44/	(0,132,077)

<b>Engineering Division</b>	2,390,506	1,593,610	(796,896)
<b>Total Manufacturing Costs</b>	14,434,851	5,485,057	(8,949,794)
Gross Profit EXPENSES	12,065,608	18,869,486	(6,803,878)
Administration	3,643,135	2,576,900	(1,066,235)
Head Office	901,184	799,819	(101,365)
Export Sales	1,215,502	1,146,273	(69,229)
Total Expenses	5,759,821	4,522,992	(1,236,829)
	, ,		( ) , , ,
Net Profit Before Other			
Incomes	6,305,787	14,346,494	(8,040,707)
Investment Income	(15,465)	-	15,465
Profit(-)/Loss on Exchange	778,852		(778,852)
Profit(-)/Loss Asset Disposal	(5,106)		5,106
Logging Division Recovery from	(-,)		2,4233
Logs	<u> </u>	_	-
Profit(-)/Loss	(19,199)	6,455,308	6,474,507
	Marin		
Net Profit before Taxation	5,566,705	7,891,186	2,324,481
Corporate Taxation		-	-
Income Tax			-
National Reconstruction Levy			-
Net Profit after Taxation	5,566,705	7,891,186	2,324,481
	Clarks The second	3	

#### APPENDIX VI

#### **QUESTIONNAIRE**

The researcher is a student of Kwame Nkrumah University of Science and Technology, School of Business pursing Master of Business Administration in Accounting. He is researching into the topic "Budgeting Decisions in Manufacturing Firms: A Case of Logs and Lumber Limited".

The purpose of the study is to evaluate the budgeting system at Logs and Lumber Limited. The questions are designed to gather information (data) on the above mentioned topic and the information provided will be treated confidentially. The researcher will therefore be grateful if you could please take time off your busy schedule to answer the following questions. Please tick where appropriate. Thank you.

A.	C	OMPANY PROFILE:
		Name of Company
	2.	Year of Establishment.
	3.	Ownership
	4.	Nature of Business
	5.	Names of Departments (Subunits) in the Firm:
		(i)
		(ii)
		(iii)
		(iv)
		(v)
		(vi)
	6.	Number of Employees.
	7.	Annual Turnover
	8.	Mission Statement
	0.	
		***************************************

	I ERSONAL DATA		
9	. Department	•••••	
C.	BUDGETING		
	1. Do you prepare budgets in yo	our Organisation?	
	Yes: No:		
	2. If yes, what is the maximum	length of the budget?	
	Yearly Half Yearly	Quarterly Monthly Weekly	
	3. Which of the following budg	ets are prepared in your Organisation?	
	Sales Budget	Overhead Budget	
	Production Budget	Selling and Distribution Expenses Budget	
	Material Usage Budget	Administration Expenses Budget	
	Material Purchase Budget	Cost of Goods Sold Budget	
	Cash Budget	Budgeted Profit and Loss Account	
	Labour Budget	Budgeted Balance Sheet	
	14. What budgeting approach d	o you use in your firm?	
	Top-to-bottom approach		
	Bottom-to-top approach		
	15. Do you consider budgeting Yes:	as a means of planning for your Organisation?	
	16. How do budgets assist mana	gement in controlling operations?	
	i)		
	ii)		
	iii)		
	iv)		

17.	Which of the following do you consider as reasons for preparing budgets in
	your organisation?
	(i) For controlling cost and resources
	(ii) For co-ordination
	(iii) To motivate managers and employees
	(iv) To promote communication
	(v) As a performance appraisal
	(vi) To improve on the allocation of resources
	(vii) To economize management time
	(viii) Others (If any)
18.	Which of these key factors do you consider when preparing your budget?
	(i) Shortage of skilled labour
	(ii) Sales Demand
	(iii) Number of Customers
	(iv) Production Capacity
	(a) Others (Please resiff)
	(v) Others (Please specify)
19.	Does your department play any role in the preparation of budgets in other
	departments? Yes: No:
20.	If yes what role does your department play?
	i)
i	i)
21. V	Which of the following do you consider as being essential for effective budgeting
i	n your firm?
	Sound Organisational Structure
	Research and Analysis
	Management Acceptance

22. Do budgets have a strong positive influence that inspires you as a manager to
higher levels of performance? Yes: No:
23. If yes, in what ways?
i)
ii)
iii)
24. Does a budget in place sometimes discourages additional effort and have a
negative impact on your morale as a manager? Yes: No:
25. If yes, in what ways?
i)
ii) iii)
26. Are you rewarded for meeting your budget target? Yes: No:
27. If yes, in what form
C. BUDGETARY CONTROL
28. Do you assess your budget in the course of the budget period? Yes: No:
29. If yes, is it in the form of preparation of budget reports? Yes: No:
30. What is the emphasis on control in the reports and the frequency of the report?
i) Daily ii) Weekly iii) Monthly iv) Quarterly
31. Which of these do you consider as reasons for your budgetary reporting system?
(i) To prevent deviations from plan
(ii) As a basis of marising the hydroxtic mbox
(ii) As a basis of revising the budget in place
(iii) To find the cause(s) of deviation from plan
(iv) To appraise the performance of Managers
(v) Others (Please specify)
32. What measures do you take to achieve budget targets?
i)
ii)

33. Which these human factor(s) affect(s) your budgeting decisions?		
i) Personal interest ii) Negative work attitude		
iii) Political influence iv) None of them		
v) Others (Please specify)		
34. Do you use committee system in your budgeting process? Yes: No:		
35. If yes, how is it done?		
i)		
ii)		
KNUST		
D REQUISITION:		
Kindly provide me with the following additional information:		
1. A brief history of the company.		
2. Copies of the budget and actual results for your department for the following years;		
2004, 2005, 2006, 2007 and 2008		
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SANE NO		

#### **APPENDIX VII**

#### STRUCTURED INTERVIEW QUESTIONS

- 1. Sex (Male / Female)
- 2. Age Range, 21-30 years, 31-40 years, 41-50 years, 51-60 years, above 60 years
- 3. In what department do you operate?
- 4. What is your job title?
- 5. Are you given targets to achieve in your work?
- 6. If yes, is the target set on daily, weekly, monthly or annual basis?
- 7. Are you involved in the target setting?
- 8. How do you feel if you are able to achieve the target set for you?
- 9. Do you see the target set as a positive influence on your performance?
- 10. If yes, in what way(s)?
- 11. Do you see the target set as a negative influence?
- 12. Are you given any reward if you are able to meet your target?
- 13. Do you do overtime in your department?
- 14. If yes, why do you think management engage you in overtime work?
- 15. Are you aware that your department prepares a budget?
- 16. Are you consulted in the budget preparation?

THANK YOU