

**ST.MARY'S UNIVERSITY COLLEGE
BUSINESS FACULTY
DEPARTMENT OF MANAGEMENT**

**AN ASSESSMENT OF FIXED ASSET MANAGEMENT
CASE STUDY ON DEFENCE CONSTRUCTION AND
ENGINEERING ENTERPRISES**

**BY
TSEHAY LAKEW**

**June 2010
SMUC
ADDIS ABABA**

**ANASSESSMENT OF FIXED ASSET MMANAGEMENT
CASE STUDY ON DEFENCE CONSTRUCTION
AND ENGINEERING ENTERPRISE**

**BY
TSEHAY LAKEW**

**A SENIOR ESSAY SUBMITTED TO THE
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DECLARATION

I, the undersigned declare that this senior essay is my original work, prepared under the guidance of Ato Ephrem Admasu . All sources of material used for the manuscript have been duly acknowledged.

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CHAPTER ONE

INTRODUCTION

1.1 BACKGROUND OF THE STUDY

In any organization there must be fixed asset management policy and procedure. The management has to give due attention to the actual implementation of the policy and procedure concerning fixed assets because the major part of the investment in any organization is on fixed assets. If fixed assets are not properly controlled (acquired, valued, maintained and disposed of) it will have a negative impact on the entire organization strategic goals. (Schuman and Brent, 2005:p.66).

Managing fixed assets from acquisition through operations and disposal, should be an integrated and seamless process linking the various life cycle phases. Asset management is often one of the last options to maximize cost savings in a competitive global economy due to its intrinsic complexity, especially in many developing countries. Asset management in the process industry must consider the commissioning, operational and end-of-life phases of physical assets when commencing a design and implementation project. Asset management performance measures should ensure formal, comprehensive, integrated, documented planning, and control methods for the acquisition, use, maintenance, leasing and disposal of physical assets, including energy and utilities. (Schuman and Brent ,2005:p.66).

The care and servicing of maintaining equipment and facilities ensures satisfactory operating condition by providing for systematic inspection, detection, and correction of incipient failures either before they occur or before they develop into major defects (Schuman and Brent, 2005:p.66).

As a result of long time use, all plant or fixed asset except land, lose their capacity to yield services. Therefore the cost of such assets would be transferred to related expense accounts in an orderly manner during their expected useful life and this periodic cost expiration is called depreciation. Depreciation expense is part and parcel of fixed asset. It needs policy and procedure for the depreciation rate (Mitchell, 2002,p.201).

Obsolete materials are those which are not useful to the company for various reasons, such as, changes in design or model, changes in the production processes, or changes in the product-line, scrap and obsolescence must be disposed ([Westing,1976,p.316](#)).

1.2 BACKGROUND OF THE ORGANIZATION

The establishment of an organization that has to satisfy the demand of the Defense in terms of construction is necessary. Hence, information sources indicate that an extensive department was organized since 2001 with a name of Engineering Coordination Main Office. Among the major responsibilities of the main office are:

- the construction of residential Apartments and Living Quarters, Offices, Stores, Depots, Training Centers, Hospitals and.
- Providing Support to the Command Forces in terms of access to Roads Water Supply, Construction, and Military Engineering.

In order to carry out these duties/responsibilities the office has purchased Trucks, Dozers, Loaders, Graders, Mixers and other construction equipments etc and, in addition to operate and service the machinery, a three months basic and middle level training has been given to recruits from the Defense Force.

Since 2001 the Enterprise has undertaken the construction of 11 Military Garrisons, the cost of each being 45 Million birr, in Bate, Elidar, Gambella, Fitcha, pawe, Chilga I & II, Adihageray, Zibangedena, Adwa, Hidegahamus,. As of the mid-2004 in addition to the aforementioned construction works, construction of Military Garrisons, Military Helicopters pads, prisons, office expansion work of training centers, depots stores, residence villages etc. have been undertaken.

Organizational changes:

- After 2004, following the organizational restructuring in the Ministry of Defence the activities that were undertaken by the Engineering coordination Main office, namely, the Military Engineering activities, have been transferred to the commands and, along with them, some of the construction equipments were distributed among these commands. Thus the organization span of the enterprise has been limited to the remaining activities. The organization operated as Construction Task Forces Coordination Office and has began to undertake various activities from 2004 up to mid 2005.
- In the mid-2005 the Coordination Office was reorganized as a Development Enterprise bearing the name Defence Construction and Engineering Enterprise. The designing and control works that had hitherto undertaken by the Coordination Office were integrated under the sector of Defence Industry and Infrastructure and the organization was made to work under the supervision of the sector office.
- After an extensive study and experience of similar organizations, the Defence Construction and Engineering Enterprise(DCEE) has been integrated autonomously as a development enterprise under Defence Infrastructure and Construction Department as of April 24/2008.The DCEE is governed by a board of management and the major organizational structure comprises of General Manager, Deputy General Manager, five departments, and 3 service provision sectors ([DCEE E, 2000,p.1-3](#)).

1.3 STATEMENT OF THE PROBLEM

Proper asset management allows organization to keep track of details of each fixed asset, ensuring proper control and preventing misappropriation, carrying out planned maintenance, and enabling strategic decision before disposal. Proper management also keeps track of the correct value of assets, which allows for computation of depreciation and enables the generation of accurate, complete and customized reports required for management decision. *[http://en.wikipedia.org/wiki/Fixed assets](http://en.wikipedia.org/wiki/Fixed_assets). Friday, 8 January 2010 3:00 PM).*

- The material management of Defence Construction and Engineering Enterprise was not gone according to this concept observe form its daily activity studied by the researcher.

1.4 BASIC RESEARCH QUESTIONS

- What is the application of the enterprise in proper practicing of policy and strategy of recording fixed asset looks like?
- What is the enterprise in applying appropriate policy and strategy on depreciation calculation looks like?
- What is the enterprise's practice or preventive maintenance on fixed asset?
- What is the enterprise's practice on revaluation of its Asset?
- What is the experience of asset disposal in the enterprise?

1.5 OBJECTIVES OF THE STUDY

General Objective

The main objective of this study is to investigate the fixed Asset management practice of Defence Construction and Engineering Enterprise.

Specific Objectives they are to:

- To assess the Enterprise's policy, procedure and real practice on record keeping of fixed assets.
- To assess the Enterprise's policy, procedure and real practice on computation of depreciation.
- To assess the Enterprise's policy, procedure and real practice on preventive maintenance of fixed asset.
- To assess the enterprise practice on revelation of fixed asset.
- To identify whether properly disposes it asset.

1.6 SIGNIFICANCE OF THE STUDY

This study will be significant for big organizations like Defense Constriction Engineering Enterprise's (DCEE) because the management has to be concerned about its fixed asset management policy procedure and real practice.

The assumption of the study is:-

- It will try to find out the limitation and of the current fixed asset management system and proposes an alternative system that alleviates the current problem and recommended ways of strengthening the fixed asset management system.
- Generally it paves the way for initiating further studies or can be considered as a cornerstone for other studies.

1.7 SCOPE OF THE STUDY

- The scope of the study covers fixed asset management trend in Defence engineering Construction Enterprise from acquisition to disposition (Life cycle Asset management). This study covers the situation that ranges from 2007-2010. Since I joined the organization in 2007.

1.8 RESEARCH DESIGN AND METHODOLOGY

1.8.1 Research Design

The research design method of this paper is descriptive study. This design is chooses because of the nature of the data that were collected from the respondent and nature of the study title, which needs a descriptive analysis or quantitative approach.

1.8.2 Population and Sampling technique

The population of the study include (as of Jan 2010) concerned departments (Material management Department, Finance Department, Equipment Admin. and maintenance department, Audit and Inspection Service and purchasing service) Number of population is 45. Because of manageable unit of the population and to have a quality data census was used in the following table.

S. N^o	Department	Population	Remark
1	Material management	15	
2	Finance Department	10	
3	Equipment Admin, and maintenance	10	

4	Audit and Inspection service	4	
5	Purchasing service	6	
<i>Total</i>		45	

From secondary source interpretations of primary data, Encyclopedias, textbooks, hand books, magazine, journal, internet and articles was used.

1.8.3. Types of data collection methods

Both primary and secondary data was used. From primary data collection method; original works of research raw data, official opinion, letters, questionnaire, and purchasing requisition forms were used.

From secondary sources interpretations of primary data, Encyclopedias, textbooks, hand books, magazine, journal, Internet and articles were used.

1.8.4 Method of data collection

Data collection method used for this research are questionnaire, and an published document. Open-end and close-ended questionnaire were distributed to employees and management.

For secondary data collection, literature review and the internet were used.

1.8.5 Data Analysis

The data collected through the questionnaire was tabulated; analyzed and interpreted in terms of percentages.

1.9 LIMITATION OF THE STUDY

It is anticipated that there were time, budget and other constraints which can affect the study. Furthermore, a few employees might be reluctant to give information. The main problem was finding relevant materials for the study.

1.10 ORGANIZATION OF THE STUDY

The paper has four chapters. Chapter one is the introduction and has sub sections. Chapter two gives a brief description regarding literature review. The third chapter deals with analysis and presentation of the research data. The last chapter is conclusion and recommendation that summarizes the finding and proposes suggestions that would rectify the identified problems.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

This chapter deals with review of the related literature which nature and concepts of Asset Management, (Asset revaluation and proper recording system, calculating depreciation, preventive maintenance and disposition).

2.1 DEFINITION OF ASSET LIFECYCLE MANAGEMENT

Asset Life cycle Management is a systematic process of operating, maintaining, and upgrading physical assets cost-effectively. It combines engineering and mathematical analyses with sound business practice and economic theory. Asset management systems are goal-driven and, like the traditional planning process, include components for data collection, strategy evaluation, program selection, and feedback.

Asset Management is the set of disciplines, Methods, procedures and tools to optimize the whole life Business Impact of costs, performance and risk exposures of the company's physical assets (<http://www.answers.com/topic/fixed-asse> Monda21, December 2009 9:00 AM).

2.2 NATURE AND CONCEPT OF FIXED ASSET MANAGEMENT

Asset management is a complete and structured approach to the long-term management of assets as tools for the efficient and valuable delivery of community benefits. Asset management is a broad term. It can be defined as a process that guides the gaining of assets, along with their use and disposal in order to make the most of the assets and their potential throughout the life of the assets. While doing this, it also manages and maintains any costs and risks associated with the assets (Mitchell, 2002, p.204).

There are many different means of asset management. It often depends on what type of asset is involved. Whatever method you choose, there are many similar things that your asset manager system should entail:

1. Optimize asset use and manage all maintenance efforts involved by making assets as accurate, reliable, and efficient as possible.
2. Reducing the demand for new assets and thus save money by using demand management techniques and maintaining current assets.
3. Uses a form of asset tracking: knowing where the asset is at all times, how much the asset is worth, and how much the asset cost you to begin with. It should also incorporate this throughout the entire life of the asset.

4. Always tries to achieve greater value for money through evaluating the asset options: the cost of maintaining, producing, the use of it, etc.
5. Always provides a report on the value of the assets, along with any costs involved in maintaining the assets (Mitchell, 2002, P. 50).

2.3 WHY ASSET MANAGEMENT IS MORE CRITICALLY IMPORTANT THAN EVER BEFORE?

Why is asset management important? Why is it more important than it has ever been before? What's new about it? What is different? Why do we need to focus on it?

Because of a rapid period of change. Change is around all over the world in political system, in economic system, in institutional relationships, in technology, in public attitudes, in customers' expectations. To not falling behind of others we need to be a part of change; and became a leader.

Asset management draws on the principles of engineering, business management, and economics and makes use of the latest computer aided technology. It provides tools for decision-making and can create a framework for short-and long-term planning (Kelly, 1997, p. 52).

2.4 IDENTIFICATION OF A FIXED ASSET (RECORDING), AND REVALUATION

Successful asset management needs effective asset evaluation and renewal strategies and procedures and developing associated documentation.

Effective asset evaluation and renewal will allow having an intimate knowledge of:

- a) Asset it has under its control;
- b) The location of the asset;
- c) The value of the asset;
- d) The conditions and the performance of these assets;
- e) The approximate residual life of these assets; and

- f) Prioritized projections of asset replacement or rehabilitation costs
(http://en.wikipedia.org/wiki/Fixed_Assets_Register. Wednesday 30, 2009 10:20 AM).

2.4.1 Developing Asset Register

An asset register includes information on asset description, location, conditions, residual life and asset current cost, depreciation and value. Asset register are useful to a wide range of personnel. These include financial managers, engineers, maintenance managers and staff. The level of details contained in the registers was 1 vary to suit the required user group
(http://en.wikipedia.org/wiki/Fixed_Assets_Register. Friday, 8 January 2010 3:30 PM).

2.4.2 Definition of Revaluation of Fixed Asset

In finance, a revaluation of fixed assets is a technique that may be required to accurately describe the true value of the capital goods a business owns.

Fixed assets are held by an enterprise for the purpose of producing goods or rendering services, as opposed to being held for resale in the normal course of business (Anthony,2001, p.243).

2.4.3 Reasons for revaluation

The purpose of a revaluation is to bring into the books the fair market value of fixed assets. This may be helpful in order to decide whether to invest in another business. If a company wants to sell one of its assets, it is revalued in preparation for sales negotiations.

It is common to see companies revaluing their fixed assets. The purposes are varied:

- To show the true rate of return on capital employed.
- To conserve adequate funds in the business for replacement of fixed assets at the end of their useful lives. Provision for depreciation based on historic cost was show inflated profits and lead to payment of excessive dividends.
- To show the fair market value of assets which have considerably appreciated since their purchase such as land and buildings?
- To negotiate fair price for the assets of the company before merger with or acquisition by another company.
- To enable proper internal reconstruction, and external reconstruction.

- To issue shares to existing shareholders (rights issue) or for an external issue of shares (public issue of shares).
- To get fair market value of assets, in case of sale and leaseback transaction.
- When the Enterprise intends to take a loan from banks/financial institutions by mortgaging its fixed assets. Proper revaluation of assets would enable the company to get a higher amount of loan.
- Sale of an individual asset or group of assets.

In financial firms revaluation reserves are required for regulatory reasons. They are included when calculating a firm's funds to give a fairer view of resources. Only a portion of the firm's total funds (usually about 20%) can be loaned or in the hands of any one counterparty at any one time (Large Exposure Regulations) (Anthony, 2001, p.250).

2.4.4 Points to be considered before revaluation is undertaken

Before commencing an asset register (and related data capture) it is necessary to assess what information is required from the register, by whom, and to what level of details at what time. (Now, every year or every 5 year or every 10 years time) The outcome of this assessment was help to determine the degree of integration, now and in the future, with:

- financial management system;
- maintenance management system;
- geographical information system (GIS)

From this information, an implementation plan can be produced for cost effective development of an asset register.

An asset register will include:

- a unique asset identification number;
- asset location/description;
- basic dimensions;
- material;

- year constructed;
- importance level of asset
- useful life
- Condition rating
- residual life
- current cost
- accumulated depreciation
- Written-down current cost; and annual depreciation: (Schuman, 2000, p.570).

2.5 DEPRECIATION

Depreciation is a term used in accounting, economics and finance to spread the cost of an asset over the span of several years.

In simple words we can say that depreciation is the reduction in the value of an asset due to usage, passage of time, wear and tear, technological outdateding or obsolescence, depletion or other such factors (Marilyn, 2001,p.66.).

The use of depreciation affects the financial statements and in some countries the taxes of companies and individuals. The recording of depreciation was cause an expense to be recognized, thereby lowering stated profits on the income statement, while the net value of the asset (the portion of the historical cost of the asset that remains to provide future value to the company) was decline on the balance sheet. Depreciation reported for accounting and tax purposes may differ substantially(http://en.wikipedia.org/wiki/Fixed_assets. *Wednesday, 13 January 2010 2:30 PM*).

2.5.1 Accounting

A company needs to report depreciation accurately in its financial statements in order to achieve two main objectives: 1) to match its expenses with the income generated by means of those expenses, and 2) to ensure that the asset values in the balance sheet are not overstated. http://en.wikipedia.org/wiki/Fixed_assets. *Friday ,8 January 2010 3:00 PM*).

2.5 PREVENTIVE MAINTENANCE

2.6.1 What is Preventive Maintenance?

Preventive maintenance is a schedule of planned maintenance actions aimed at the prevention of breakdowns and failures. The primary goal of preventive maintenance is to prevent the failure of equipment before it actually occurs. It is designed to preserve and enhance equipment reliability by replacing worn components before they actually fail. Preventive maintenance activities include equipment checks, partial or complete overhauls at specified periods, oil changes, lubrication and so on. In addition, workers can record equipment deterioration so they know to replace or repair worn parts before they cause system failure. (John, 2002, p.196).

2.6.2 Determining Preventive Replacement Time

The set of disciplines, methods, procedures & tools to optimize the whole life business impact of costs, performance and risk exposures (associated with the availability, efficiency, quality, longevity and regulatory/ safety/environmental compliance) of the Enterprise physical assets (Terry, 2007, p.18).

If the component has an increasing failure rate, then a carefully designed preventive maintenance program is beneficial to system availability. Otherwise, the costs of preventive maintenance might actually outweigh the benefits. The objective of a good preventive maintenance program is to either minimize the overall costs (or downtime, etc.) or meet a reliability objective. In order to achieve this, an appropriate interval (time) for scheduled maintenance must be determined. One way to do that is to use the optimum age replacement model, as presented next.

The model adheres to :

- The component is exhibiting behavior associated with a wear-out mode. That is, the failure rate of the component is increasing with time.
- The cost for planned replacements is significantly less than the cost for unplanned replacements.

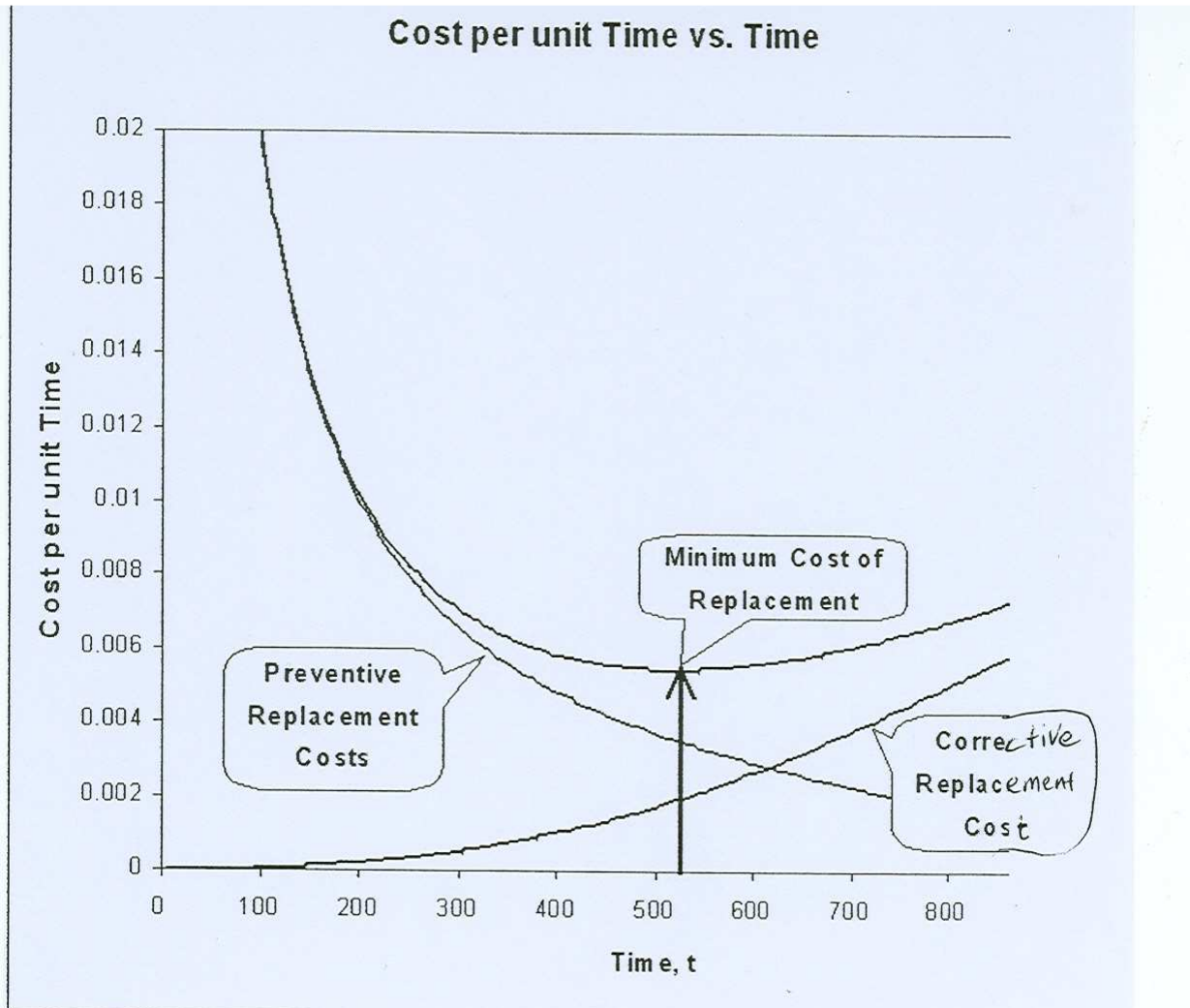


Figure 1: Cost curve for preventive and corrective replacement.

Figure 1 shows the Cost per Unit Time vs. Time plot. In this figure, it can be seen that the corrective replacement costs increase as the replacement interval increases. In other words, the less often you perform a PM action, the higher your corrective costs was. Obviously, the longer we let a component operate, its failure rate increases to a point that it is more likely to fail, thus requiring more corrective actions. The opposite is true for the preventive replacement costs. The longer you wait to perform a preventive maintenance (PM), the less the costs; while if you do PM too often, the higher the costs. If we combine both costs, we can see that there is an optimum point that minimizes the costs. In other words, one must strike a balance between the risk (costs) associated with a failure while maximizing the time between preventive maintenance (PM) actions (John: 2002, p.196.).

2.7 DISPOSAL DEFINITION

Disposal is removal of an item from the organization, from one working unit to other or total disposing un functional items in a safe place.

2.7.1 Surplus and obsolete materials

The efficient management of surplus and obsolete materials is a financial as well as a social concern of the industrial firm (J.H, W, 1976, p.317).

Several terms are used to distinguish the classes of disposable materials commonly comprehended under the broad term scrap (J.H, W,(1976), p.318).

Surpluses are defined as those materials which are in excess of a firm's operational requirements. Typically originate from three primary sources:

- 1) Scrap and waste
- 2) Surplus, obsolete, or damaged stocks and
- 3) Surplus, obsolete or damaged equipment (Donald, 1966, p.602).

2.8 THE ROLE OF THE MATERIALS MANAGEMENT AND THE PURCHASING

The materials cycle is not complete until all surplus materials are disposed of in the most productive manner. Consequently, in firms with a materials management department, the investment recovery function often reports to the firm's materials manager (Donald, 1966, p.603).

2.9 WHY IS THIS ODD RESPONSIBILITY ASSIGNED TO PURCHASING?

Usually, no other department in the firm is as well qualified to perform the task. The professional and managerial skills required for a successful disposal operation are also required to do a good job of buying. No other department of a firm is as concerned with or as informed about materials, their markets, and related operating practices as the purchasing department (Wasting, 1976, p.320).

2.10 DISPOSING OF SURPLUS PROFITABLY

When material is declared surplus, the materials management, purchasing or investment recovery unit, as appropriate, is informed. Following this action, disposal is made by one of seven methods.

1. Use within the firm
2. Return to the supplier
3. Direct sale to another firm
4. Sale to a dealer or broker
5. Sale to employees
6. Donations to educational institutions or others (charity).
7. Some combination of the preceding methods (Donald, 1966, p. 618).

2.10.1 Managing and disposing of hazardous materials

There is dramatic shift underway in how Enterprise see the environment and how they are responding to new environmental challenges. These trends are irreversible and their message is clear. Enterprise that ignore the environmental do so at the risk of their own survival. (Donald, 1976, p.320).

CHAPTER THREE

DATA PRESENTATION ANALYSIS AND INTERPRETATION

This part the paper deals with presentation analysis and interpretation of data in two parts.

The first part deals with characteristics of respondents in terms sex, age, educational level, work experience and respondents working unit, The second parts deal with in presenting analyzing and interpretation of Asset management policy, procedure and real practice of the organization.

The researcher tried to gather information from primary source preparing questioners by distributing to the respondents and analyzed , interpreted in terms of percentage.

3.1 Background characteristics of participant respondents

Table: 1 General characteristic of the participant's respondents

General characteristics		Number of respondents	%
Gender	male	20	52.6
	female	18	47.03

	<i>Total</i>	38	100
Educational status	certificate	-	-
	diploma	11	28.94
	Degree/BA/BSC	23	60.5
	Above degree	4	10.5
	<i>Total</i>	38	100
Department	Material Management	11	28.94
	Finance Department	9	23.68
	Equipment Administration and Maintenance	8	21.05
	Audit and Inspection Service	4	10.52
	Purchasing Service	6	15.7
	<i>Total</i>	38	100
	Work experience	0-5 years	10
6-10 years		8	28
> 10years		20	51
<i>Total</i>		38	100

Sources: questionnaire,2010.

According to the above table the participant respondents are characterized by their Gender, Educational status, Department and Work Experience.

Based on this concerning to the first criteria which is sex characteristics out of the total 38 respondents 20(52.6%) of them are males. But, 18(47.3%) of the remaining ones are females. This implies that the dominant gender of the department are males.

With regard to the educational status of the respondents 11(29%) of the respondents holds diploma, 23(60.5%) of the other respondents 1st degree holders the remaining 4(10.5%) of the respondents holder above 1st degree educational status this implies that the organizations employee educational status can help for the efficient management of its fixed assets due to their educational standard.

The participant respondents are also characterized by their department which they have engaged. Based on this out of the total 38 participant respondents 11(28.9) of are from Material management department 9(23.6) of the of the ones are from Finance department apart from this 8(21.05%) of the other ones are from Equipment Administration and Maintenance, 4(10.52%) of the participant respondents are from Audit and Inspection service the remaining 6(15.78%) of the other ones are from Purchasing service. This indicate that as the majority of the respondents are form Material management the respondents are expected to have reliable information about the fixed asset management concept work experience of the respondents also taken as a one general characteristics for the participant respondents based on this put of the total 38 respondents 10(21.10) of them have a work experience from 0-5 years 8(28%) of the other ones have a work experience that ranges from 6-10 years so (51%) of the other ones have a work experience ranges >10 years this indicates that as a work experience increases from time to time the work efficiency for that specific task may be inverse. Based on this as the majority of the respondents have >10 years of work experience if may be sense for the good effectiveness of the fixed asset management.

3.2 Analysis on the proper application of policy and procedures on the different activities of material management in the enterprise

Table: 2 Application of policy and procedures on the department of the organization

Material management	Existence of proper application of procedures and policy
----------------------------	---

activities	yes		No		No idea		Total	
	No of respondent	%	No of respondent	%	No of respondent	%	No of respondent	%
Asset recording practice	5	15.16	30	78.94	3	7.89	38	100
Calculating depreciation practice	35	92.10	3	7.9	0	-	38	100
Asset revaluation practice	2	5.28	30	78.94	6	15.79	38	100
Preventive maintenance of asset practice	10	26.31	20	52.63	8	21.05	38	100
Disposal of material practice	15	39.47	18	47.36	5	15.6	38	100

Sources: questionnaire,2010.

Table 1: the existence of proper application of procedures and policies in the different activities of the enterprise.

According to the above table the respondents respond their idea on the proper application of policy and procedures in the different material management activities of the enterprise. Based on this concerning to the first activity that is asset recording practice, out of the total 38 respondents 5(13.6%) of them agree with existence of proper application of policy and procedures in recording the asset of the enterprise but, 30(78.94%) of the respondents did not agree with the implementation of the policies and strategies in the activity and the remaining 3(7.89%) of the respondents responds their nothing know how about the implementation of the policy and procedures. This indicates that as the majority of the respondents did not agree with the proper implementation of the policy and strategies the enterprise material management directs simply by traditional experience of the employees and this is the one obstacle for the efficient performance of the department. In addition to this it implies asset recording policies and procedures of the enterprise simply documented as shelf document and are not practiced properly.

With regard to the second activity that is calculating depreciation practice out of the total 38 respondents 35 (92.10%) of the respondents agree with the existence of proper implementation of the enterprise policy and strategy. But, 3(7.9 %) of the respondents did

not agree with its implementation this implies that as majority 35 (92.10%) of the respondents agree with the existence of proper application policies and procedures in calculating depreciation the enterprise can properly calculate its depreciated products and can easily control and evaluate the activity based on the policy and procedures.

Concerning to the third activity that is asset revaluation practice out of the total 38 respondents 2 (5.26%) of them agree with the implementations of the policy and procedures. But, 30 (78%) of the respondents did not agree with the implementation the policies and procedures in the asset revaluation practice of the Material management practice. The remaining 6(15.79%) of the respondents response their less know how about the idea this implies that asset revaluation practices are not practiced based on the policies and procedures of the enterprise or the policies and procedures are implanted in a poor level.

With regarded to the fourth activity that is preventive maintenance once asset practice 10(26.31%) of the respondents agree with the proper implementation of policies and strategies in preventive maintenance of asset practice. But, 20(52.63%) did not agree with the stated idea. The remaining 8(21.5) of the respondents responds their non know how about the idea this indicates that the preventive maintenance of asset practice in the enterprise is not guide by the policies and procedures of the material management of the enterprise. This on the other hand implies the preventive maintenance is practiced informally or by the experience of the employees.

Concerning to the last activity that is disposal of material practice out of the total 38 respondents 15(39.47%) of the respondents agree with the implementation of the procedure but, 18(47.36%) of the respondents did not agree with the implementations of the policy and procedure to perform the activity and 5(15.6%) of the remaining one responds their poor know how about the concept. This implies that the disposal of material practice is not guided or implemented based on policy and procedure of the enterprise. This in its term indicates the policies and procedures of the enterprise are not implementing in the material management activities of the enterprise except the activity of calculating depreciation practice.

3.3 Analysis on the methods of disposition in the enterprise

Table: 3 Existence disposition methods in the enterprise

Description	No of respondents	%age
What kinds of methods of disposition the enterprise is using?		
• Use within the firm	13	34.21
• Direct sale to another supplier	5	13.16
• Sale to a dealer or broker	20	52.63
• Sale to employee	0	0
• Donation to others	0	0
• Other	0	0
• Specify	0	0
Total	38	100%

Sources: questionnaire,2010.

According to the above table the organization uses different methods of disposition mechanisms. Among thus using within the firm direct sales to another supplier and sale to sealer or broker are the dominant ones. Based on this concerning to the first method 13(34.21%) of the respondents agree with implementation of use within the firm disposition mechanism, 5(13.16%) of the other respondents agree that the enterprise use direct sale to another supplier method of disposition. The remaining 20(52.63%) of the respondents come up with response that the enterprise use sales to dealer or broker method of disposition. As the majority of the respondents agree with the implementation of the sales to broker mechanism the performance of disposal mechanism concentrates on this method. This indicates that the enterprise costs both for broker and buyers in disposing the materials.

3.4 The analysis on reporting system of the disposal items.

Table: 4 Reporting system of disposal items in the enterprise

Description	No of respondents	%age
Is there any reporting system on items to be disposed for, stores to other working units and from other working units to stores?		
Yes	0	0
No	30	78.94
No idea	8	21.06
Total	38	100%

Sources: questionnaire, 2010.

According to the above table the researcher in investigates on the reporting system on items to be disposed for stores to other working units and for, other working unit to stores. Concerning this idea out of the total 38 respondents 30(78.94%) of the respondents agree with the non existence of the reporting system the remaining 8 (21.06%) of their respondents responds their non know how about the reporting system. This indicates that the reporting system is very poor and have its own negative impact on the material inspection performance of the enterprise.

3.4 Analysis on the existence of surplus items in the enterprise and their value in serving as a raw material input for other.

Table: 5 The existence of surplus items in the enterprise and their value

Description	No of respondents	%age
Are there any surplus items in the enterprise which could be the raw materials input for others?		

Description	No of respondents	%age
Yes	10	26.31
No	10	26.31
No idea	18	47.37
Total	38	100

Sources: questionnaire,2010.

According to the presented table out of the total 38 respondent 10(26.31) of them agree with the existence of the disposed ones and sealing as a raw material for others. But, 10(26.31) of the remaining one did not agree with its existence. The remaining 18(47.37) the respondent have not any know how about the idea as majority of the respondents have not any know how about the activity the indication of this idea is that the surplus items did not get any consideration and are not sense as a material input for other out puts. This in its case implies the enterprise have poor and an organized material management.

3.6 Analysis on safe place documentation for disposed items.

Table: 6 Existence of safe place documentation place for disposal items in the enterprise.

Description	No of respondents	%age
Is there a safe place for items totally disposed (un functional)?		

Description	No of respondents	%age
Yes	2	5.26
No	35	92.11
No idea	1	2.63
Total	38	100

Sources: questionnaire,2010.

According to the above table the respondents respond their idea on the placement of disposal on a safe place based on this out of the total 38 respondents 2(5.26%) of them agree with the safe placement of disposed items but, majority 35(92.11%) of the other one did not agree with the stated idea. The remaining 1(2.63%) of the respondent respond their nothing know how on the idea. This implies that the disposal items are not placed on a safe place and have not any futurity value in the enterprise.

3.7 Analysis on the partial flirty of office equipment.

Table: 7 Partial failiurity of the office equipments

Description	No of respondent s	%age
Is there any total or partial failure of office equipment (computer,		

Description	No of respondents	%age
printer, fax and photocopy machine etc) because of un scheduled maintenance?		
Yes	31	81.58
No	7	18.12
No idea	0	0
Total	38	100

Sources: questionnaire,2010.

Based on the above presented table the participant respondents have respond their idea on the partial failiurity of the office equipment based on this out of the total 38 respondents 31(81.58%) of them agree with the existence of the particular failiurity of office equipment in the office. But,7 (18.12%) of the respondents did not agree with the stated concept this implies that there is high amount of partial failure equipment in the office and this can the result of in proper placement of disposal items.

3.8 Problems that face due to the unplanned maintenance.

Table: 8 Consequence of unplanned maintenance

Description	No of respondents	%age
Consequence of unplanned maintenance in the enterprise		
Total failure	10	26.32
Customer Dissatisfaction	5	13.16
Expenses incurred	23	60.08
Total	38	100

Sources: questionnaire,2010.

According to the presentation to the above table of the respondents raise their idea on the stated problems. Based on this out of the total 38 respondents 10(26.32%) of them responds the result of the problem is total failiurity, 5(13.6%) the other respondents respond that the main problem of the unplanned maintenance in the enterprise is costumer dissatisfaction apart from is

23(60.08%) of the other respondents respond that the cause of the problems additional expenses costs. This implies that the unplanned maintenance of the enterprise has different problems but the major problem is additional cost expense which is the indicator of failiurity of the Material management of the enterprise.

CHAPTER FOUR

SUMMARY, CONCLUSION AND RECOMMENDATION

4.1 SUMMARY

- Based on the analytical part of the paper majority or 52.6% of the participant respondents are males. On the other hand 60.5% of the participant are degree holder. Apart from this 51.10% of the respondents have a work experience > 10 years.
- Concerning to the material management activities and the existence of appropriate implementation of the policies and strategies majority of 92.10% agree with the existence of proper application policies and procedures in calculating depreciation practice. But more than 78.94 % of the respondents did not agree in the proper implementation of Asset recording practice. In asset revaluation 78.94% , preventive maintenance practice 52.63 % and disposal of material maintenance practice 47.36% respondents respectively did not agree that implemented the proper policy and procedures of material management in the enterprise.
- There are different disposition mechanisms that implement in different organization. But majority or 52.63 % of the respondents agree with the existence of selling to dealer or broker method.
- Concerning to the reporting system of the enterprise majority or 78.94% of respondents did not agree with the existence of proper reporting system to working unit or store.
- Apart from this majority or 47.37% of the participant have not any idea about the existence of surplus and selling the disposal surpluses as input for other production.
- Concerning to the safe place or handling of the disposed items majority or 92.11% of the respondents agree with the non existence of proper safe place.
- Proper maintenance of office equipment in scheduled time is one of the criteria in the material management of the enterprise. But due to lack of proper maintenance in time in the enterprise majority or 81.5% the respondents agree with the existence of partial filer of the equipment occurred in the enterprise.
- The main problems that face in the material management of the enterprise failure of equipment, Customer dissatisfaction, and high expense incurred.
- Due to unplanned maintenance the enterprise incurred high expense ascertained by 60.08% of respondents.

4.2. CONCLUSION

- Policy and procedures are the guidance plans for the effective utilization of specific activities in different organization. Most organization including different construction and engineering enterprises have their own policy and procedures, but the criteria difference is that in implementing those policies and procurers in the operation of activities. The stated enterprise have a critical problem in implementing these policy and strategies in its material management activity. But, amazingly the enterprise has implemented the policies and strategies in calculating its depreciation properly.

- Assets are renewable values of an organization different organizations renew their assets through different mechanisms. Among these preventive maintenance takes its major value. But the enterprise did not prevent its materials through preventive maintenance mechanism. All the long age materials are considered. As disposal ones rather than maintaining them.
- The disposition of materials may be serve as to proper material management activity. Different organizations use different disposition mechanisms. But the dual beneficial one is using within the firm or reprocessing the disposed materials as an input for further output. This benefits the organization to minimize additional costs. But, the enterprise disposal materials are not used as an input for further output. In addition to this the disposed ones did not get consideration by the department and sold through brokers.
- Based on the analytical part of the paper the organization did not implement proper policies and procedures in calculating its depreciation. This can lead for the total failiurity of the total material management activity.
- Items or Products must reevaluate when they take a time. Revaluations of assets based on material management policies and procedures. But the stated enterprise did not revaluation its Items or Products based on policies and procedures.

4.3 RECOMMENDATION

- As indicated in the conclusion part and analysis part of the paper except in its disposal calculation the department did not implement policies and procedures of the materials management of the organization properly. This implies that the department did not guided by the policies and strategies and monitor and evaluate each activity based on the direction of policies and strategies which interims the non existence of monitor and evaluation based on the procedures. This kind of problem can follow a big problem in the existence of the organization and should solve by creating committed managerial efficiency, creating an

awareness on the employees about the policies and strategies and monitor and evaluation each activity based on the direction of policies and strategies.

- The preventive maintenance on fixed assets of the enterprise is poor or the preventive mechanism totally not implemented in the department. But this preventive maintenance has a dual benefit both in terms of cost effectiveness and life time of the materials. So the enterprise should implement this maintenance mechanisms through hiring experienced technicians, giving growth and developmental capacity building for the existed engineers and taking preventive maintenance as an objective of the material management department of the enterprise.
- Disposed materials are materials that considered as the life time ended assets but different organizations. The stated enterprise also consider the disposed materials as life time ended inputs and did not get any consideration. But these disposals can generate a means of income for the enterprise by selling to another firm or can be serve as an input for another out puts. So the department should give special consideration to the disposal.
- As indicated in the conclusion part of the paper the stated enterprise did not implement the policies and strategies of material management in calculating its products and have its own negative impact on the General Performance of the material management of the enterprise. Then it should be improve through implementing appropriate policies and procedures of material management.
- Revaluation of material asset needs to minimize additional cost and effective management of materials and the enterprise should reevaluate its materials annually to improve its performance of material management.

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Questionnaire on Asset Management

The objective of this specific questionnaire from Material management, Finance, Equipment Administration and Maintenance Departments, Audit and Inspection, and Purchasing services is for the consumption of research conducted for senior paper in partial requirement for BA Degree in Management in St Mary’s University College. The specific objective is to asses policy, procedure and real practice on Disposal of assets and tries to find out the limitation of the system if any and propose a system which alleviates the current problem.

What is Asset Management?

Asset management is a complete and structured approach to the long-term management of assets as tools for the efficient and valuable delivery of community benefits.

What is Asset Register?

An asset register includes information on asset description, location, conditions, residual life and asset current costs depreciation and value.

What is Asset Revaluation?

Asset revaluation is a technique that may be required to accurately describe the true value of the capital goods a business owns.

What is Depreciation?

Depreciation is a term used in accounting, economics and finance to spread the cost of an asset over the span of several years.

Or in simple words we can say that depreciation is the reduction in the value of an asset due to usage, passage of time, wear and tear, technological outdated or obsolescence, depletion or other such factors.

What is preventive Maintenance?

Preventive maintenance is a schedule of planned maintenance actions aimed at the prevention of breakdowns and failures. The primary goal of preventive maintenance is to prevent the failure of equipment before it actually occurs. It is designed to preserve and enhance equipment reliability by replacing worn components before they actually fail. Preventive maintenance activities include equipment checks, partial or complete overhauls at specified periods, oil changes, lubrication and so on.

What is Disposal?

Disposal is removing of materials from the enterprise or working unit by selling, transferring, giving for charity, or totally disposing (removing) from the enterprise in appropriate place (not disturbing the environment.)

Dear respondent,

Your immediate response is highly appreciated

Thank you very much

Tsehay Lakew

0911 33-07-30

1. Background Information

Gender F

Department _____ Educational status _____

Work unit _____ Position _____

2. Work experience in the Enterprise.

0-5 yrs

6-10 yrs

Above 10 yrs

Question	Yes	No	Comment
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3. Does policy and procedure on recording practice in the enterprise?			
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Question	Yes	No	Comment
4. Does policy and procedure on calculating depreciation?			

Question	Yes	No	Comment
5. Does policy and procedure on asset revaluation is implemented properly?			

Question	Yes	No	Comment
6. Does policy and procedure on preventive maintenance is implemented properly?			

Question	Yes	No	Comment
7. Does the enterprise policy and procedure on practiced on disposal of materials?			

8. If the answer for question no 5 is yes, at what time interval the assets are revaluate

0-1 year

0-5 years

5-10 years

9. What kinds of methods of disposition the enterprise is using?

- Use within the firm
- Direct sale to another supplier
- Sale to a dealer or broker
- Sale to employees
- Donation to others
- Others

Specify

9. Is there any reporting system on items to be disposed for, stores to other working units and from other working units to stores?

Yes

No

10. Is there any surplus items in the enterprise which could be the raw-materials (input) for others?

Yes

No

11. Is there any trend donation of surplus materials to Educational institutions or any social enterprise?

Yes
No
No idea

12. Does the enterprise buy surplus or second hand items?

Yes
No
No idea

13. Is there a safe place for items totally disposed (un functional) ?

Yes
No

14. Is there any total or partial failure of office equipment (Computer, Printer, Fax and Photocopy machine etc.) because of un scheduled maintenance?

Yes
No

15. Is there any recording system about the equipment history? (purchasing price, purchasing date, user, location).

Yes
No

16. What kinds of problem the enterprise faces because of unplanned maintenance?

- Total failure
- Customer dissatisfaction
- Minimize sales revenue (income)
- Expenses incurred
 - Overtime
 - Additional expense for spare part
 - High insurance premium charged by insurance company

○ Others



Specify _____

Thank you for your time

Appendices

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DECLARATION

I, the undersigned declare that this senior essay is my original work, prepared under the guidance of Ato Ephrem Admasu . All sources of material used for the manuscript have been duly acknowledged.

Name	<u>Tsehay lakew</u>
Signature	_____
Place of submission	<u>Adiss Ababa</u>
Date of submission	<u>24/10/2002</u>