Chapter one
Introduction

1.1 Background of the Study

Nepal is a poor and developing country. About 83% of the people of Nepal depend on agriculture. Therefore, the economic condition of the nation also depends on agriculture. On the other hand, economic development of the nation depends on its industrial establishment Business companies are essential also for the economic development of the developing countries. Rapid economic development is important for all countries of the world. Particularly, economic development is an important aspect for the development of the country like Nepal.

Industrialization is essential part of economic development of the country in the world these days. Developing countries are continuously trying to create necessary infrastructure and emphasizing on industrialization because it helps to up lift the economic standard of the people, generate employment opportunities, save foreign exchange through export promotion and reduce the dependency on import. Industrialization is the back bone of the developing country like Nepal. A country becomes fully developed if it uses appropriate patterns of industrialization because economic development of a country can make its strong and powerful in the world.

Nepal is mixed economy as well as least developed countries in the world, where per capital income is only $ 210 (WB 1988) and industrial sector is the second leading sector after agriculture. It is usually considered that a country which is advance on path of economic development, the role of agriculture sector goes on decreasing where the role of industrialization increases. It reduces automatically, the pressure on agricultural land.

Industrial point of view, Nepal is backward. So, more people are badly stricken by poverty, how ever, government and private sector should try to function side by side for the development of nation.

A cement industry has greater proposed and scope now a days. The large - scale natural resource user Udaypur Cement Industry limited, producing cement is established in 1987 AD and has been operating successfully.

The fixed assets of the UCIL include land, building, machinery, furniture and fixtures, office machinery, furniture and fixtures, office equipment, computer, electric installation, vehicles, ware house and other fixed assets under construction. These assets involve huge funds and are subject to depreciation which is a fixed cost and has string bearing on the operating profit. Thus, the efficient utilization of fixed assets is a must for producing the expected result. But without an appraisal of the performance of management of fixed assets of the mill, it cannot be inferred fairly whether or hot the fixed assets are utilized efficiently.

1.2 *Focus of the Study*

The UCIL is operating an a very low margin due to a substantial decrease and an excessive dependence an import of raw material from India being the main market of its finished products. Under the circumstance, if it fails to operate smoothly and economically it is likely to produce negative trading results.

Its smooth and economic operation is not possible without proper management for which a periodical performance appraisal is absolutely essential to pin point the areas of weaknesses and adept immediate corrective measure. The present study would focus on financing policy, depreciation policy, and utilization of fixed assets and profitability of investment in fixed assets of the mill.

1.3 *Statement of the Problem*

The UCIL was established by the government. During its early childhood, it suffered heavy looses owing to much delay in commencement of commercial production, serious and slackness on the part of government. It will not been able to meet the countries demand.

Udaypur cement industry limited is also not free from problems. Some of the problems which will come to know in the field of fixed assets management of the company may be as follows.

1) It is not clearly shown that Udaypur Cement Industry limited is able to utilize fixed assets properly?
2) What is the variability in the size of investment in fixed assets?
3) What is the significance of fixed assets management?
4) Is there any need to control over investment in fixed assets?
5) Has there been change in the variability in investment in the fixed assets over a period of study?
6) Is there any difficulty in fixed assets of Udaypur Cement Industry Limited to manage?
7) Which of the fixed assets create more problems?

1.4 Objective of the Study

The main objective of the present study is to appraise the performance of the fixed assets management of the UCIl. In particular, it aims at:

(a) Assessing the structure of fixed asses of the industry.
(b) Estimating the average annual growth of fixed assets of the Industry.
(c) Measuring the impact of gross block on sales and operating profit of the Industry.
(d) Reviewing the financing of fixed assets of the Industry.
(e) Evaluating the efficiency in the use of fixed assets of the Industry.
(f) Analyzing the depreciation provision of the Industry.
(g) Suggesting the remedial measures wherever found necessary.

1.5 Need and Significance of the Study

The UCIL is the major cement industry of Nepal. In order to take the full advantage, its successful operation which depends largely upon proper management is a continuous performance appraisal for finding out the areas of weaknesses and taking immediate corrective actions. As the

present study evaluates the performance of fixed assets management being one of the most important facts of the financial management of the industry, its need and importance cannot be over emphasized.

The present study makes a close inquiry into the fixed assets of the industry. In particular, it assesses the structure of fixed assets, analyses the depreciation provisions, estimates the average annual growth of fixed assets, measures the impact of gross block on sales and operating profit, evaluates the efficiency in the use of fixed assets and reviews the financing of fixed assets of the mill. In addition, the remedial measures have also been suggested on the basis of the findings of the study. Thus, the study assumes utmost importance to the owners as well as the management of the industry. On the one hand, it would enable the owners to judge the efficiency and effectiveness of the management while on the other the management would be made aware of the weaknesses and provided with the necessary remedial measures to be adopted.

1.6 Limitations of the Study

Although, the present study has been made for partial fulfillment of the requirement for the degree of master of business studies, it is of considerable use to the management as well as the owners of the industry. But users of the study would have to be acquainted with the limitations from which it suffers. Its main limitations are as follows:

(a)   The present study has been confined to the UCIL only due to the unavailability of relevant data and information pertaining to other units.

(b)   The present study has been confined to the evaluation of the performance of the fixed assets management only taking into account time, cost, and academic level and so on.

(c)   The present study the inferences have been drawn comparing the actual ratios with the absolute and historical standards, as the industry ratio could not be reckoned due to unavailability of the required data per training to the other units.

(d)   Although the present study makes use of appropriate financial and statistical tools in analysis of the relevant facts and figures for making meaningful interpretations, the reliability of the findings of the study largely depends upon the correctness of the data and information made available by the industry management.

(e)   The present study makes generalization about the performance of the fixed assets management of the mill on the basis of the data covered by the period of analysis from 2062/63 to 2066/67 only. Therefore, it should not be made an issue of discuss.

1.7   Organization of the Study

The entire study would be divided into five major chapters. The first chapter would give a general introduction of the subject matter containing background of the study, focus of the study, statement of the problems, objectives of the study, need and significance of the study and limitation of the study. While in the second chapter the relevant literature and studies would be reviewed marking logical and meaningful groupings. The third chapter would be the research methodology which would be adopted in carrying out the study where as in the fourth chapter the pertinent data would be presented and analyzed with the help of financial and statistical tools. The fifth chapter would give summary, Conclusion and suggestion for improving the fixed assets management of the industry.

Chapter two
Review of Literature

Conceptual / Theoretical Review

In this section an attempt has been made to review the theoretical aspect of fixed assets management with a view to forming a sound conceptual background for the study. It covers meaning and concept of fixed assets, types of fixed assets, importance of investment in fixed assets, distinctive aspects of the investment in fixed assets, funds flow related to ownership of fixed assets, objectives and importance of fixed assets management, replacement analysis of fixed assets, investment outside business, valuation of fixed assets, determinants of fixed assets and provisions for depreciation.

2.1. Meaning and Concept of Fixed Assets

The term 'Fixed Assets Management" consists of three words, i.e. fixed, assets and management. Fixed is known as something that is permanent in nature. Assets are valuable resources that generate profit. And, management is known as managing something tactfully. In this sense, fixed assets management is managing fixed assets tactfully. In fact, it is optimum utilization of fixed assets that generates maximum benefit.

Management of fixed assets is essential as fixed assets covert working capital into finished products. In particular, the term investors are more concentrated on fixed assets condition of an enterprise, as it influences the shareholder's wealth, the size of business, the pace and direction of growth of the enterprise and its risk complexion. In the long

run success of the enterprise is determined by the effectiveness in the management of such assets. A great deal of attention has, therefore, to be paid to the management of these assets for the survival and growth of the enterprise. In the long run, the success of the enterprise is determined by the effectiveness with which management commits resources to fixed assets in amount, type and timing.

Earnest W. walker and William H. Baughm, financial planning and policy. Harper and Bothers publishers, New York, 1961, P. 123. The important aspects of fixed assets management are:

(a) **Replacement**: Replacement is the very crucial aspect of fixed assets management. The management committee has to take decision whether to produce with existing machine or to buy a new machine. It includes proper calculation. Capital budgeting is a technique which helps in this calculation. Cash flows should be discounted to present while comparing both the machines.

(b) **Expansion**: Expansion is another aspect of fixed assets management. Whether to expand the enterprise or not is a crucial decision. Generally expansion of enterprise occurs when the enterprise can not fulfill the demand of customers with the existing capacity. The management should critically think whether the increasing demand of customers can be fulfilled by operating at full capacity or another plants to be set up.

(c) **Improvement of Product**: Improvement of product s necessary to exist in this cut throat competition. New technology is to be applied

to improve the product and also affect the profitability of the firm. If improvement of product reduces the profitability of the firm, it is not desirable to pursue improvement of product. In addition to above mentioned aspects. Other some aspects related to fixed assets management are.

(d) **Strategic investment on fixed assets**: Fixed are the assets of a relatively permanent nature, used in the operation of a business undertaking. A company should invest maximum funds in fixed assets. Excess investment on fixed assets reduce the earning capacity .So a company should considers strategic investment on fixed assets.

(e) **Rearrangement of fixed assets**: Arrangement of available fixed assets can be termed as rearrangement of fixed assets. A company should consider that available fixed assets are utilized effectively or not. If fixed assets are not utilized effectively then rearrangement of fixed assets procedure should be adopted.

(f) **Repair and maintenance**: Repair and maintenance of fixed assets are essential factors that should be consider to take decision on investment of fixed assets .By utilizing fixed assets m, its capacity of working . To maintain its capacity we have to make extra expenditure known as repair and maintenance expenses are not beneficial for the company.

Fixed assets are the assets of a relatively permanent nature, used in the operation of a business under taking, since production would be impossible without them. With the help of these assets raw material is converted into finished product. Essentially, fixed assets, such as land and buildings, plants and machinery are incidental to production used over a considerable period of time, and are not meant for sale. These assets are

consumed slowly in the production process and are replaced periodically. Fixed assets are collectively known as Block.

The types of business assets which are typically held for longer period of time than one year, fall into the general category of long term assets but are often described the term fixed assets. Long - lived assets or non - current assets.

There are, however, two concepts of fixed assets first, fixed assets refer to only those assets of relatively permanent nature which have physical entity and can be seen or touched. These are called tangible fixed assets which includes land and buildings, plant and machinery, furniture and fixtures office equipments, and so on. Second, fixed assets designate to all those assets which are not current. Misunderstanding may, however, arise due to these concepts of fixed assets while analyzing the performance of the management of such assets. Mayer, therefore, advises to use the term non-current assets instead of fixed assets in the ratio under consideration in order to indicate that all non - current items are included in the comparison with capital.
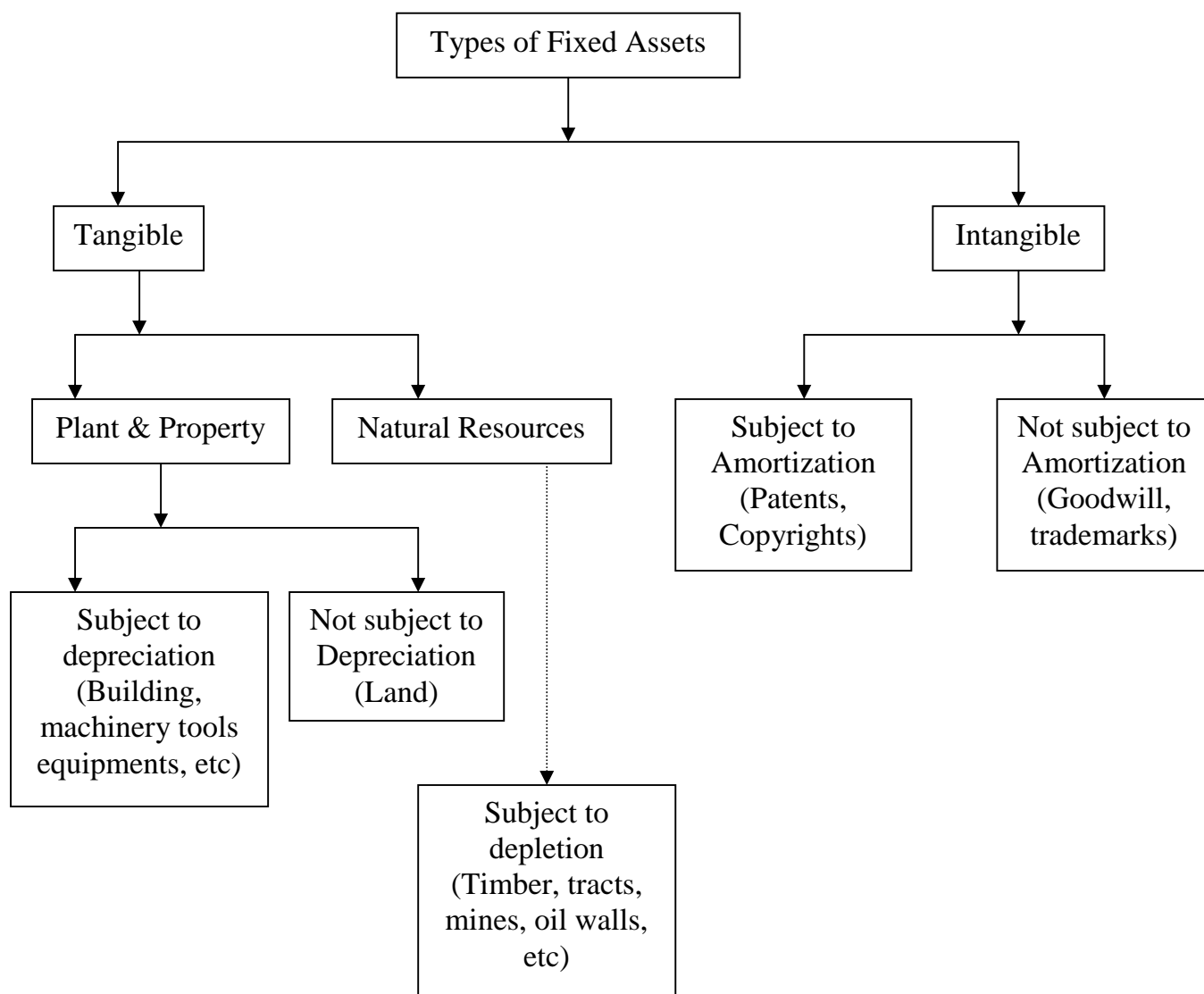
Fixed assets are not trading assets and the concern does not deal in them. The amount invested in them is more or less permanently blocked or sunk. As such, fixed assets symbolize slow moving investment. They produce income indirectly through their use in operation. Occasionally, they may be disposed off, due to wear and tear, obsolescence, etc.

Fixed assets utilize working capital as service assets. They make circulation of current assets possible. But, working capital also helps to maintain the fixed assets. Hence, it is clear that fixed assets and current assets are inter-related as both contribute to the earning power of the enterprise.

Benefit is derived from the use of fixed assets over long period. Only one year's sales are not the result of these fixed assets. In other words, exhaustion of fixed assets in the form of sales is a matter of long - term. Thus, it can be said that fixed assets are realized gradually form sales that are made during the serviceable life of the asset.

2.2. Types of Fixed Assets

Fixed assets fall into two general groups tangible and intangible. Tangible assets are tangible if it has bodily substance like machinery, land, building, tools and equipment, furniture and fixtures etc. These are those assets which we can see and touch. In tangible assets are neither physical goods nor evidence of property. We can not see and touch these assets. Goodwill, patents, trade marks, legal rights, copyrights etc. are the usual examples of intangible assets. Most of the accountants classified fixed assets as intangible fixed assets and tangible fixed assets. But Dr. A.N. Agrawal does not share this view in his opinion; it is not justified to class intangible fixed assets with fixed assets. In tangible assets do not, like fixed assets, necessarily lose their value by wear and tear or effusion of time nor do they have to be replaced. They are also not depreciated on the same principles as fixed assets. This shows an organic difference between them and fixed assets. Moreover, it is not necessary that intangible assets always help the company in earning profits. A company incurring loses year after year may show goodwill at an enormous figure but its goodwill is not being used to earn profit.

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                        ┌─────────────────────┐
                        │ Types of Fixed Assets│
                        └─────────────────────┘
                    ┌──────────┴──────────────┐
              ┌──────────┐              ┌──────────┐
              │ Tangible │              │Intangible│
              └──────────┘              └──────────┘
          ┌───────┴────────┐        ┌───────┴────────┐
  ┌──────────────┐ ┌──────────────┐ ┌──────────┐ ┌──────────────┐
  │Plant & Property│ │Natural Resources│ │Subject to│ │Not subject to│
  └──────────────┘ └──────────────┘ │Amortization│ │Amortization│
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Diagram hierarchy:

- **Types of Fixed Assets**
  - **Tangible**
    - **Plant & Property**
      - Subject to depreciation (Building, machinery tools equipments, etc)
      - Not subject to Depreciation (Land)
    - **Natural Resources**
      - Subject to depletion (Timber, tracts, mines, oil walls, etc)
  - **Intangible**
    - Subject to Amortization (Patents, Copyrights)
    - Not subject to Amortization (Goodwill, trademarks)

Tangible fixed assets: The fixed assets which can be touched and seen can be termed as tangible fixed assets .Plant and machinery, land and building, furniture and fixture, vehicles etc. are the examples of tangible fixed assets.

Intangible fixed assets: The fixed assets which can not be touched and seen can be termed as intangible fixed assets .Goodwill, trademark, patent right, copy right etc. are the examples of intangible fixed assets. These types of fixed assets are invisible but have financial value .These type of

fixed assets should amortize annually and should be deducted from value of fixed assets.

2.3. *Importance of the investment in fixed assets*

As we know, it is the fixed assets which convert input into output. Thus, it is very important of the investment in fixed assets. There the number of factors which influence the investment in fixed assets. The technology of the industry in which a company operates largely determines the quality of funds it must commit to fixed assets. While other factors influence the investment of individual firms in fixed assets, firm in the same industry generally need to have a similar portion of their total assets in fixed assets.

Another determinant of the fixed asset investment of the firm having limited financial resources is the need for facilities. Such firms can avoid highly specialized and expensive equipment through subcontracting of work or outside purchase of parts and components requiring special equipment. One of the less widely recognized strengths of American industry lies in the extent to which finished product manufacturers can rely on specialized manufacturers for particular parts or components. By virtue of their large volume as suppliers of their specialty items to many end item manufacturers these specially manufacturers can make economic use of highly specialized and expensive equipment that would be burdensome if production of these items were widely difficulty used.

The requirement of investment in fixed assets can be reduced by buying used equipment or old plant. Used equipments are available at price that is far below those of new equipments. This condition applies

where the rate of technological change in production methods has been moderate or slow.

2.4. Distinctive Aspects of the Investment in Fixed Assets

Certain distinctive aspects of investment in fixed assets make it especially important that new fixed assets be acquired only after searching consideration of the impact on investment return.

Firms have to invest huge amounts in fixed assets and any misleading decisions regarding investment can lead the firm towards its closure. Hence proposed additions to fixed assets should be considered deliberately and consciously as discrete proposals. Planning regarding, acquisition of new fixed assets should be done for ahead so that analysis of their desirability can be deliberate and appropriately organized.

Another important matter is the purchase of plant and equipment (or their long term lease) will bind the company over a period of years. If there is unnecessary investment in inventory, receivables or liquid reserves, management can act to cut these investments and free the funds involved in a matter of weeks or months. But the investment in fixed assets can be covered only through operations over a period of years. Not only is this, so much uncertainly of return as well as time involved. Similarly, the loss in forced sale of excess or obsolete equipment and facilities typically is great.

2.5. Funds flows related to ownership of fixed assets

In planning the outflows related to the acquisition of fixed assets, care should be taken to schedule the outflows in payment for the assets as they actually will be made since their timing may differ materially from

the time at which ownership of the assets is reflected in the accounting records of the firm. Depreciation is non cash expenses. Funds inflows from operation are not reduced due to the treatment of depreciation as non cash expenses. Provision of reducing depreciation from taxable income has a significant effect on the timing of outflows required to satisfy in come tax liabilities.

Pattern of deducting allowable depreciation affects firm's depreciation tax shield and hence the timing its outflows for taxes.

In a period of rising costs the tax free recovery through operations of the original cost of fixed assets will not supply a sufficient inflow of funds to pay for replacement of the assets. Additional funds are required to match the excess of replacement over original fixed asset cost to maintain constant level of physical facilities a long period of rising costs.

2.6. *Objectives and Importance of Fixed Assets Management*

The main object of fixed assets management is to acquire replace and dispose fixed assets of an enterprise in such a way that a minimum level of risk, the sales and profitability of the enterprise shall increase leading to maximizing its shareholder's wealth.

As we know, the objectives of fixed assets management is to maximize shareholder's wealth, the importance of fixed assets management is significant. Fixed assets have far reaching impact on the sales, profitability and risk, complexion of the enterprise. Mismanagement of these assets may endanger the survival of the enterprise.

Fixed assets involve huge amount of investment. As a result, any decision regarding fixed assets needs careful analysis and serious consideration of each and every aspect of the decision's repercussions.

Fixed assets decisions are irreversible. Once such decisions are taken, they can not be taken back, without bearing a substantial amount of loss, as market for second band assets are not easily available, and even if they available, desirable price for these assets can not be obtained.

Although creditors focus more a working capital section of the balance sheet than fixed assets section, fixed assets require careful study. Fixed assets require careful study; even the banker making term loans repayable over a period of years finds his interest in the fixed assets increasing.

2.7. Replacement Analysis of Fixed Assets

Replacement analysis is very much important aspect of fixed assets management. It is very difficult to take decision regarding replacement of equipment. Survey show that modern techniques for appraising replacement investment are not being used.

The most recent survey offered the following conclusion.

(i) In the majority of cases replacement is viewed like any other capital budgeting decision. Whatever criterion of assessment is used the result is then compared with a hurdle and accepted or rejected on that basis.

(ii) Payback and accounting rate of return are used except on large projects where DCF (Discounted Cash Flow) is employed. In the case of the first two, the method, of calculation is very often erroneous.

(iii)   Taxation, and investment incentives, is seldom considered except on large projects.

(iv)   Little use is made of the more up - to - date replacement assessment techniques.

(v)   Consideration of the alternative of leasing or purchasing second equipment is seldom takes into account.

(vi)   Cost saving in over 50 percent of the interviewed firms was treated as constant over the life of the equipment.

(vii) No account was taken of effect of price and wage inflation.

2.8.   Investment outside Business

One of the major category of assets are long - term investment. The funds can be invested (i) in fixed deposits (ii) government bonds and securities (iii) and in federal bodies, constant members, subsidiary organizations, financing agencies etc. The need to investment funds of a business firm outside the business arises because of the following reasons.

(i)   Presence of trust funds.

(ii)   Legal requirements, statutory reserve fund in co-operative societies is to be invested outside the business.

(iii) Surplus funds, temporary or otherwise.

(iv)   To earn goodwill and maintain good public relations.

(v)   Traditions and customs in the business.

2.9. *Valuation of Fixed Assets*

Valuation of assets / fixed assets is very much important. If the various assets / fixed assets are not shown in the balance sheet at their proper values, the correct profit or loss of the undertaking can not be ascertained. The valuation of the assets / fixed assets depends upon the nature of the assets / fixed assets. Valuation of some important fixed assets is described below.

1) **Goodwill:** It is an intangible fixed asset. Normally goodwill does not figure on the assets side of balance sheet. But when an established business has been purchased and payment has been made for goodwill, goodwill appears in the balance sheet as an asset at its cost. When it is written off against profits of any particular year, the amount so written off is deducted from the amount of good will in the balance sheet. It has, however, to be remembered that the amount of goodwill should in no case be increased even if it is felt that the goodwill of the company has substantially gone up.

2) **Land and Buildings**: Land does not depreciate and fluctuations in its value are ignored. It is, therefore, shown in the balance sheet at cost. But building depreciate and shown in balance sheet at book value minus the depreciation. Repairs are charged to profit and loss account, but if there are any structural alterations or additions which tend to increase the earning capacity of the asset, they are capitalized by debiting the building account.

3) **Plant and Machinery**: This asset is also shown at its book value at the beginning of the financial year after deducting depreciation. Additions or improvements are added to the cost and are separately shown, but repairs and minor renewals are charged to profit and loss account.

4) **Patents**: They are shown at cost. But the cost has to be written off during the course of the life of the patents. When a patent becomes valueless due to obsolescence, its value is written off, and it may be done even before the expiry of its life. If the value of a patent happens to be considerable, it may be advisable to periodically revalue it, but in no case should its value be increased even, if its value exceeds the book value.

5) **Loose tools**: At each time of stock taking loose tools are revalued by a responsible officer. The different between the ascertained value and the book   value if written off as depreciation.

6) **Investments**: While valuing investment, the best policy is to write down investments to their market value. Temporary market fluctuations may, however, be ignored. It is generally agreed that the basis adopted for valuing   the investment should be clearly stated in the balance sheet. It is also   considered   advisable   to divide investments into suitable classes according to   their nature. When the market price of any investment goes down, usually loss is debited to depreciation account and credited to investment fluctuations account, and the balance of investment

fluctuations account is shown as a deduction from investments in the balance sheet.

There are generally four different method of the valuation of the fixed assets. They are historical cost, present value, replacement cost and net realizable market value methods.

Fixed assets are generally valued at historical cost basis for balance sheet purposes. Fixed assets are valued by deducting depreciation or depletion charges from the original cost of the assets. Original cost or acquisition cost includes all expenditures made while acquiring and preparing them for use in operations. The acquisition cost of all long - lived assets is their cash equivalent price, including incidental costs. Incidental costs include transportation cost, installation cost etc. This method of valuation provides a uniform and objectives basis for valuation, even though its usefulness in measuring financial position after a period of violent change in the price level is open to question.

The valuation method which is associated with the future earnings of fixed asset, is present value of economic value method. This method is usually applied to fixed assets for internal management purpose rather than external reporting purpose. The current value of fixed assets is derived from utility of their use. It is defined as the present value of the sum of the future expected net cash flows associated with the use of the assets.

In this method, the time value of money is considered. The process of adjusting face value of future cash flows to their present value by means of anticipated interest rate. Interest rate is also known as discounting rate. The basic assumption of this method is that the money received today is more valuable than the money receivable in future because money received today can be reinvested to earn additional amount of profit. In

practice, however, it is extremely difficult to carry out this type of exercise because of the problems involved in the assessment of timing and the amount of future cash flows, and the level of interest rates.

The fixed assets valuation method which has something to do with the replacement value of such assets is the replacement cost method. This method has been suggested to value fixed assets under inflation in any conditions in which the historical cost for. Fixed assets greatly vary wit the replacement cost of these assets. Since fixed assets are replaced when they are totally used, worn out or obsolete, the replacement cost method of assessing the value of fixed assets appears to be realistic. The replacement cost of fixed assets is the current cost of acquiring other assets which will be put to the same use by the enterprise. In this method, therefore, the historical cost of fixed assets is adjusted with a price index of that particular asset. The use of price index numbers for assets - adjustment purpose has the effect of adjusting historical cost to current costs, but it is not that easy to find our price index numbers for each and every item of fixed assets.

The basis of net realisable / market value method of assessing the value of fixed assets is the selling price of such assets. According to this method, fixed assets are normally valued at their estimated sale price at the date of balance sheet less all the costs that have to be incurred in realisation the proceeds. Realisation is generally assumed to take place in an orderly way, and not as part of passive liquidation of the whole enterprise. Although this method seems logical, there may be a number of practical problems to be faced by the enterprise in the adoption of this method. The main problem, among others may arise in the determination of second hand selling price for fixed   assets, since the use of index

numbers will probably not be practicable in any assessment of realisation values.

2.10. Financing of Fixed Assets

Every organisation needs fixed assets too. Carry out their productive activities. Level of fixed assets varies from enterprise to enterprise. It depends on different things like nature of business, size of business, adoption of technology etc. Financing of fixed assets is one of the important aspects of fixed assets management. It is one of the major decisions of the enterprise to the major assets management. It is one of the major decisions of the enterprise to how much capital to be invested in fixed assets as well as the judicious mix of different types of sources for financing them. There should be optimum investment in fixed assets. Over or under investment in fixed assets may lead the enterprise towards failure. Management should pay much attention towards the financing of fixed assets.

2.11. Determinants of Fixed Assets

The investment in fixed assets involves commitment of funds for longer periods into the future and usually is difficult and costly to reverse often they are in large increments. Decision regarding investment is fixed assets bas far reaching impact in the success or failure of the enterprise, once these assets are acquired, they can not be disposed of except at a substantial loss. If assets are purchased on a long - term credit, a continuing liability is incurred over a long period of time. If increased earnings do not result from the purchase of the additional assets, the ability of the company to discharge its financial obligation may be affected

adversely. Hence, it is quite clear that the decision regarding investment in fixed assets in a matter of great deliberation and proper planning, because the amount enterprise for a longer period of time of fixed assets affect the profitability and riskiness.

The process of planning and forecasting involves four basic stops (a) the economic forecast (b) the sales forecast (c) the production fore cast (d) and financial fore cast. The process of financial fore casting and planning ties together the other three estimates economic, sales and production. The essential components of a long - range financial plan consist of the following statements.

1) **Project income statement**: Income statement prepared for the projected sales can be termed as projected income statement. To prepare low range financial plan projected income statement must be prepared. It shows the estimated profit after tax for the projected sales without project net income financial plans are not possible.

2) **Projected balance sheet**: The balance sheet which is prepared for the projected for the projected sales of specified period is known as projected income statement. It shows the projected assets and liabilities .It also helps to know the future financial strength of the organization. It is prepared to make the long term policy about the fixed assets.

3) **Statement showing sources and uses of funds**: The statement which shows sources and uses of fund is known as funds flow statement. It helps for making short term planning. It shows the total

sources of funds as well as total uses of funds. It helps to make financial plan by giving information about sources of funds.

Except above considerations, management should consider the following determinates while making investment in fixed assets.

1. **Nature of Business**: Nature of business largely determiners the amount of capital to be invested in fixed assets. For example, railways and other transport enterprises, utility enterprises such as electricity and drinking water, mining enterprises and the like require heavy investment in fixed assets. While trading enterprises require less fixed assets even than manufacturing enterprises.

2. **Size of Business**: Large and medium enterprises require more fixed assets than small and cottage enterprises. Hence, the size of business influences the investment in fixed assets.

3. **Labour - Capital Intensive**: Labour intensive enterprise needs less fixed assets than capital intensive enterprise. In the labour intensive enterprise most of the works are performed manually and in the capital intensive enterprise, most of the works are performed with the help of machine and equipments. For example, cigarette industry is the capital intensive enterprise while agro - based enterprise is the labour intensive enterprise.

4. **Nature of Output**: Nature of output also determines amount of capital to be invested in fixed assets. For example, salt producing

enterprise requires fewer amounts of fixed assets because large sum is to be invested in labour.

5. **Growth and Expansion**: - The quantum of fixed assets as also determined by the growth and expansion of the enterprise. if the enterprise plans to growth and expand its activities, the requirement of fixed assets is automatically high.

6. **Preliminary Expenses**: - Preliminary expenses are the expenses incurred in connection with the incorporation of a company and yield deferred benefits. They are usually written off in a number of years. Preliminary expenses have also significant bearing on the level of fixed assets.

Hence, it is proved that level of fixed assets depends on number of things. These all things will be carefully planned before investing in fixed assets.

2.12.   Sources of Financing

Investment in fixed assets is long term financing and it is a well - know maxim that the long - term sources and that short term sources should not be utilized for meeting long - term needs. All fixed assets are blocked for a long period. Hence, they are known as block capital. For block capital the funds have to be obtained from long term sources whether from share capital a by borrowing or by both. Not only this, the management of the enterprise has to decide a judicious mix of various types of sources which will maximize the shareholder's wealth and minimize the risk complexion of the enterprise.

A company should raise a proportion of the total funds by way of loans or debenture a preference shares and the rest by equity shares but the exact limit will depend on the type of industry or industries in which it engaged.

The following are the sources of financing of fixed assets:

(i) **Equity Shares**: Equity shares are one of prime sources of financing. Equity shares represent the ownership position in the enterprise. The equity shareholder's are the legal owners of the company. Equity / ordinary shares are the source of permanent capital since they do not have maturity date. Capital contributed by equity shareholders by purchasing the Shares, they are entitled for dividends. The amount or the date of dividend is not fixed. It is decided by the board of directors. In the public enterprises, the government has wholly or partly ownership on the equity shares.

(ii) **Preference Shares** :- According to sec. 2 (K) of company act, 2053 preference shares are those shares which carry preferential right to receive dividend every year and refund of capital at the time of winding up before any amount given to ordinary shares. Preference share is often considered to be hybrid security since it has many features of both ordinary shares and debenture. Preference dividend does not have the advantage of interest because it will not be treated as an expense by income tax authorities, preference dividend must come out of after tax profits. Therefore, when funds are raised by way of preference

shares, the advantage to the company rather than equity share is not much.

(iii) **Debentures**: A debenture is long term promissory note for raising long loan capital. The firm promises to pa interest and principal as stipulated. People who purchase the debentures are called debenture holders. An alternative form of debenture in India is bond. Bonds are issued mostly by the public sector companies in India. In the U.S.A. the term debenture is used, it generally means unsecured bond.

Debentures are invariably secured by a floating charge on the assets of the company. This liability involves a commitment of a certain involves a commitment of a certain cash outflow annually both in the form of interest and sinking fund.

Convertible debenture is an attractive form of investment as it provides a double incentive of the investor, i.e., a fixed interest so long as the company passes through the gestation period and higher dividends once the enterprise starts earning profits. The debenture holder is given the option to convert the same into equality shares subsequently.

(iv) **Warrants**: A warrant entitles the purchaser to buy a fixed number of ordinary shares at a particular price during a specified time period. Warrants are generally issued along with debentures issue as "Sweeteners". In the U.S.A., warrants have been used in the past mainly by financially weaker firms to attract investors. Now, of course, warrants are used by large financing package.

Warrants may also use in conjunction with ordinary a preference shares.

(v) **Retained Earnings**: Retained earnings is also one of the important source financing fixed assets The enterprises are expected to generate adequate profits and surplus so as to replace and renew their fixed assets.

(vi) **Capital Markets**: Capital markets deal in securities. Generally, private enterprises raise funds from capital markets. The public enterprise can not raise funds from capital markets without prior approval of the government.

2.13. Leasing

Sometimes leasing of equipment is more advantageous than outright purchase. Leasing avoids payment of full amount of the value of the equipment in one installment. However the real effect of cash flow in the case of leasing and out right purchase and mortgaging the equipment to raise the required funds is identical. Quality of earnings deteriorates by the obligation to pay fixed amount is both the cases.

The entire payment of lease amount is allowed as a deduction for the purpose of calculation of incidence of income tax. Similarly, the leased equipment could be returned to the owner when the new and economical equipment is available in the market or when project proves unprofitable. But for a long period, lease is more costly.

2.14.   *Provision for Depreciation*

Depreciation is the loss or diminution in the value of the assets consequent upon wear and tear, obsolescence, effusion of time or permanent fall in market value. There are different methods of charging depreciation like; Straight line method, diminishing balance method, insurance policy method etc. Which method of charging depreciation is followed depends on management discretion.

While deciding the methods of depreciation, the management must consider the tax implication. The management should also consider its impact on dividend distribution. If the management chooses straight line method, the distributable surplus in the earlier years would be heavy. This would enable the management to declare dividends more easily than if they follow the diminishing balance method, when the surplus will be comparatively less, similarly, if depreciation is based on historical cost, adequate funds can not be collected to replace the assets at the end of its life. This objective could be met if depreciation is calculated on the estimated replacement cost of the assets.

The following are the rate of depreciation generally adopted, though, it is quite possible that special circumstances may make them higher or lower.

Freehold land and building, 1% - 3% p.a.

Leasehold land and building, written of over the period of the lease.

Plant and machinery, 5% - 25% p.a.

Van and motor lorries etc, 10% - 25% p.a.

Patents (Life 16 years), $^1/_{16}$ of original cost each year.

Furniture, fixtures and fittings, $2\,^1/_2$% - $7^1/_2$% p.a.

Engines (movable), 10% ; fixed $7^{1}/_{2}$% p.a.

2.15.   *Review of Related Studies*

In this section an effort has been made to review the related studies with a view to forming an empirical background for study. The studies reviewed are as follows:

The UCIL, the oldest and largest jute manufacturing unit in Nepal, has been suffering from a lot of problems related to production, marketing, personnel and finance since its adulthood. But it is surprising that until now not even a signal study has been made on the perpetual problems confronting the mill. However, some these were found to have been submitted by master's degree students to the faculty of management, T.U. Here an attempt has been made to review briefly the related theses.

Neelam Dhungana made a study on the entitled "Fixed Assets Management in the Manufacturing Public Enterprises of Nepal" in 2049 B.S. This study was based mainly on the secondary data obtained from the financial statements and official records of the mill. The financial techniques like ratio analysis and trend analysis were used for analyzing the fixed assets. In addition, the statistical tools like average, and index number were also applied to make the analysis more scientific and useful. The major findings of the study were an excessive investment is fixed assets, an inefficient utilization of fixed assets, an excessive provision for depreciation, an unprofitable investment in fixed assets and a second financing practice of fixed assets.

Mention may be made that no study was made on the fixed assets management of the UCIL to see whether the existing problems were resolved by adopting the proper remedial measures. Hence, there is a great need for a study on the fixed assets management of the mill.

Chapter III

Research Methodology

The present study probes into the fixed assets management of the UCIL which is one of the most important aspects of the financial management. The methodology applied in conducting the study consists of research design, population and sample, nature and source of data, data collection techniques and data analysis tools.

3.1 Research Design

The present study is obviously be a case study of the UCIL. It makes an intensive investigation into the fixed assets management of the mill for obtaining a complete and accurate description of existing situation. It involves the systematic collection and presentation of data to give clear picture of the financial management of the firm. Thus, a descriptive research design has been adopted in carrying out the study.

3.2 Population and Sample

At present the jute industry in Nepal consists of eight units which form the population for the study. The selection of any one of these units cannot fairly represent the characteristics of the entire population. Hence, it is necessary to make the study of the total population. However, the question of population and sample does not arise, as the present study is a case study of the UCIL

3.3 Sources of Data

This present study is based mainly on secondary data. The sources of secondary data are both internal and external. The internal secondary data include the data available in financial statements and unpublished official records of the UCIL. The external secondary data include the data available in books, periodicals, unpublished official records of the government organizations and published and unpublished reports.

3.4 Data Collection Technique

First of all, an exhaustive list of required data and information for the study were prepared. Then a letter recommendation for proper help was asked for and obtained from the campus. After then, the data needed for the appraisal of fixed assets management of the UCIL were obtained directly from the registered head office of the mill at Udaypur. The supplementary data and information were obtained from the unpublished official records of the office of the Register of Companies, the reports of the controller and Auditor General of Nepal and the previous studies related to this aspect.

3.5 Data Analysis Tools

The financial techniques like ratio analysis, funds flow analysis and trend analysis from the main tools for the purpose of analysing financial facts in the present study. In addition, the statistical tools like percentages, averages, standard deviation, forestation, regression, index number and analysis of time series have also been applied in order to make the analysis move systematic, scientific and useful. Besides these, graphs have also

been constructed to give a much more vivid picture of the trends and relationships of the financial facts under consideration.

3.6 Organisation of the Study

The entire study has been divided into five major chapters. The first chapter gives a general introduction of the subject matter containing background of the study, focus of the study, statement of problems, objectives of the study, need and significance of the study, limitations of the study and organization of the study, while is the second chapter the relevant literature and studies have been reviewed making logical ad meaningful groupings. The third chapter devises the research methodology to be adopted in carrying out the study where as in the fourth chapter the pertinent data have been presented and analysed with the help of financial and statistical tools. The fifth chapter gives summary. Conclusions and performance of fixed assets management of the mill are as follows.

In the previous chapter, the research methodology adopted carrying out the study was framed. This chapter presents the relevant data meaningfully in the forms of tables and graphs and analyses them with the aid of financial and statistical tools for fulfillment of the stated objective. In particular, it assesses the structure of fixed assets, estimates the average annual growth of fixed assets, measures impact of gross block on sales and operating profit, review the financing of fixed assets, evaluates the efficiency in the use of fixed assets and analyses the depreciation provisions of the UCIL.

Chapter IV
Data presentation and analysis

4.1 Structure of Fixed Assets

In the structure of fixed assets, the magnitude and trend in proportion of gross block and fixed assets (net) and their components to the total assets has been studied.

The structure of fixed assets shows where the enterprise has fixed capital intensive or working capital intensive. Fixed capital intensive enterprises are those where portion of fixed assets are nigh. In working capital is more enterprise, working capital is more required instead of fixed capital. The nature of production process determines the capital intensiveness of the enterprise. The more the enterprise is capital intensive the less would be the requirement of working capital. For example, in a manufacturing enterprise the requirement of fixed assets is very high while in service enterprise the requirement of fixed assets is low. Another important thing is that the size of fixed assets should be optimum. If excess capital is invested in fixed assets, it will reduce the liquidity position of the enterprise and ultimately reduce the profitability of the enterprise.

If the percentage of gross block to total assets or net fixed assets to total assets is high, the enterprise has high degree of investment in fixed assets. And if the percentage of gross block to total assets or net fixed assets to total assets is low, the enterprise has low degree of investment in

fixed assets. Table 4.1 shows the structure of fixed assets of UCIL during the period 2062 to 2066.

Table 4.1

Percentage of Gross Block Accumulated Depreciation and Net Fixed assets to Total Gross Assets of UCIL during 2060 to 2066

(In Percent)

Year	*Gross Block*	*Accumulated Depreciation*	*Net Fixed Assets*
Reference	*1*	*2*	*1-2*
2060	77.95	7.57	70.38
2061	81.20	10.48	70.72
2062	82.19	13.19	69
2063	78.63	17.20	61.43
2064	79.87	20.19	59.68
2065	79.79	22.56	57.23
2066	76.50	24.05	55.45
Average (x)	76.44	16.46	62.98

The percentage of gross block to total assets, as shown in table 4.1, registered a fluctuating trend during the period of study. It varied from 82.19 percent in 2062 to 76.50 percent in 2066 constituting a range of 5.69. During the first three years it continuously increased as a result of

successive increases in gross block as against decreases in total assets and went up from 77.95 percent in 2060 to 82.19 percent in 2062 Which was the highest during the period of study. It decreased heavily to 78.63 percent in 2063 due to an increase in gross block at a lower rate as compared with total assets. In 2064 it again increased to 79.87 percent resulting from an increase in gross block as against a decrease in total assets. It further slightly went up in 2065 to 79.79percent. It further stepped down to 76.50 percent in 2066 owing to an increase in gross block at a lower rate as compared to total assets. In first, fourths last year it was below the average percentage (i.e. 79.44) while it was above in second, third, fifth & sixth of the study.

The percentage of accumulated depreciation to total assets of the mill marked an increasing trend during the period of study. It recorded a range of 16.48 varying from 7.57 percent in 2060 to 24.05 percent in 2066. During the period of study it continuously increases in accumulated depreciation as against decreases in total assets.

In 2066 it increased to 24.05 percent which was the highest during the period of study resulting from an increase in accumulated depreciation as against a decrease in total assets. During the first three years it was lower than the average percentage (i.e. 16.46) whereas it was higher during the last four years of study.

The net fixed assets to total assets percentage of the mill recorded a declining trend during study period except in 2061. It varied from 55.45 percent in 2066 to 70.72 percent in 2061 recording a range of 15.27. It increased slightly from 70.38 percent in 2060 to 70.72 percent in 2061.

Which was the highest during the period of study resulting from a substantial increase in net fixed assets as against a decrease are total assets. In 2062 it decreases in total assets. In 2063 it decreased to 69 percent due to a decrease in net fixed assets as against an increase in total assets. During the last five years it continuously stepped down from 69 percen5t in 2062 to 55.45 percent in 2066 owing to successive decreases in net fixed assets as against increases in total assets. During the first three years it was above the average percentage (i.e. 62.98) while it was below during the remaining years of study.

The high magnitude with low range of variation and a bit inconsistent trend in proportion of gross block and net block to total assets of the factory show a satisfactory position towards the structure of its fixed assets.

4.2   Average Annual Growth of Fixed Assets

Fixed assets represent the operational capacity of the enterprise. Fixed assets should be increased if the increase in sales can not be met with the existing plant and equipment. Fixed assets may be operating at full capacity a less than full capacity. Growth of fixed assets is essential when fixed assets are operating at full capacity because increase in demand of customers can not be met with the existing plant and equipment. But when fixed assets are not operating at their full capacity, it is worthless to increase the fixed assets when there is increase in demand of customers.

In order to measure the growth of fixed assets, average annual growth of fixed assets should be computed. The average annual growth of fixed assets can be calculated as below.

Table 4.2

Average Annual growth in Gross Block and Fixed Assets (Net) of UCIL

(Rs. in thousand)

Gross Block	*Fixed Assets (Net)*
12058.14	726.28

Table 4.2 shows the average annual growth in fixed assets. It is evident from the table that the growth in gross block and growth in fixed assets (net) are positive.

4.3 Impact of Gross Block on Sales and Operating Profit

Gross block, sales and operating profit are related in the sense that gross block generates sales by utilizing working capital and ultimately generates profit. Hence, the impact of gross block on sales and operating profit is large.

The impact of gross block on sales and operating profit may be positive a negative. The positive impact of gross block on sales and operating profit occurs only when existing plant and equipments are operating at full capacity. In this situation, increase in gross block in

association with increased working capital leads to increase in production and generates profit if produced goods are sold. If existing plant and equipment are not operating at optimum capacity, the increase in gross block does not lead to increase in sales and it may reduce the operating profit.

Gross block, sales and operating profit are interdependent. Any movement in one has its effect upon the movement of other too. The expanding gross block should have its impact upon sales as well as upon operating profits. It can be said that either the gross block has followed the increase in sales or the expansion of gross block has been justified on account of increase in sales if the rate of growth of increase in sales. If the rate of growth of sales is higher than the rate of growth of gross block, it can be said that there is better utilisation of gross block expansion. On the other hand, of gross block expansion rate is more than that of sales it represents excess investment in gross block and its poor utilisation. If the trend in operating profit margin is also considered and the increasing trend of operating profit margin shows better operating efficiency and more profitable sales, the impact of gross block will be more sales and more profits. In case of operating loss the expansion in gross block may not be profitable. Table 4.3 shows the impact of gross block on sales and operating profit.

Table 4.3

Indices of Gross Block, Sales and operating profit of UCIL during 2060 to 2066

(Best year 2060 = 100)

Year	Gross Block	Sales	Operating Profit
2060	100.00	100.00	100.00
2061	107.15	135.88	112.94
2062	113.90	148.59	110.25
2063	121.89	212.70	84.17
2064	124.80	184.65	131.68
2065	130.24	192.56	140.23
2066	134.73	242.95	136.32
Average (x)	118.95	173.90	116.51

Correlation between gross block & sales, r_{12} = 0.94

Correlation between Gross Block & operating profit, r_{13} = 0.60

Indices of gross block marked increasing trend during the period of study. It was 137.73 in 2066 as against 100 in 2060.

Indices of sales registered the fluctuating trend during the period under review. It varied from 100 in base year to 242.95 in 2066 constituting a range of 142.95.

Indices of operating profit also registered the fluctuating trend during the study period. It varied from 84.17 in 2060 to 140.23 in 2065 recording a. range of 56.06

Indices of sales was increasing with respect to the base year. It indicates efficient utilization of expanded gross block to generate sales during the period under review. Indices of sales increased continuous up to the year 2063 then it slightly decreased and lastly it again increased. On the whole, the expanded gross block has been managed efficiently as the average index of sales (i.e. 173.90) is much larger than the average index of gross block (i.e. 118.95).

There was increase in indices of operating profit during the study period. Except in 2063. It shows the satisfactory utilization of gross block during the study period. In 2063 the indices of operating profit decreased to 84.17 which indicates lack of utilization of expanded gross block to generate operating profit. Indices of operating profit again increased from the year 2064 to the end of period under review. It shows a good utilization of expanded gross block. On the whole expanded gross block has been utilized to generate operating profit as the average index of operating profit is 116.51.

It can be inferred that UCIL has been utilizing expanded gross block, efficiently to generate sales or operating profit.

4.4 Financing of Fixed Assets

Fixed assets have a long span of tine. They are generally financed by the proprietors of the enterprise. If the owner's funds are not sufficient to finance the fixed assets of the enterprise then fixed assets should be financed through long term borrowings. It means that at any cost short term funds should not be used to finance fixed should not be used to

finance fixed assets. Although, Nepalese private enterprises rely on external sources for financing the fixed assets. Nepalese public enterprises have usually been found reluctant to borrow from outsiders.

Here, in this study financing pattern of jute industry with reference to UCIL has been analyzed using fixed assets to net worth ratio and fixed assets to long - term funds ratio.

4.4.1. Fixed Assets to Net worth Ratio

This ratio explains the relationship between fixed assets and tangible net worth, viz, preference share capital, equity share capital and retained earnings. This ratio is very important for the purpose of analysis. By a thorough study of this ratio the following questions may be answered.

(a)   Have the owners provided enough funds to finance fixed assets?

(b)   Have those funds been unnecessarily blocked up in fixed assets?

It is an important tool, for judging the margin of safety for long - term creditors. The lesser the ratio the greater is the margin of safety for long term creditors. If the net worth is less than the fixed assets, it implies that the loan funds are utilized to finance a part of the fixed assets, and when he amount of ownership funds exceeds the value of fixed assets, a part of the net working capital is provided by the shareholders. The yardstick of this measure is 65 percent for industrial undertakings.

It means that 65 percent of funds are to be used for acquiring fixed assets and rest for current assets. This ratio of fixed assets to net worth is calculated by dividing the fixed assets by net worth of the industry or company. The formula may be expressed as follows.

Table 4.4.1

Fixed Assets to Net worth Ratio of UCIL

Year	Fixed Assets in Rs. '000'	Net Worth in Rs. '000'	Ratio (%)	Absolute Standard (%)	Deviation from Standard (%)	Deviation from previous year (%)
2060	219416	170026	129.04	65	64.04	-
2061	226770	170630	132.90	65	67.9	3.86
2062	232391	171571	135.44	65	70.44	2.54
2063	231417	176936	130.79	65	65.79	-4.65
2064	226631	181676	124.74	65	59.74	-6.05
2065	227006	188846	120.20	65	55.2	-4.54
2066	224500	193857	115.80	65	50.8	-4.4

X   **22642**   **178.42**

S.D.   **4.48**   **8.74**

Coefficient of S.D. **0.019**   **0.048**

Coefficient of correlation between fixed assets Net worth is - 0.071

Table 4.4.1 shows the ratio of fixed assets to net worth so as to consider the financing of fixed assets of UCIL during the period 2060 t 2066.

The absolute amounts of net fixed assets and net worth of the mill, as indicated in table 4.4.1, registered indefinite trends during the period under study, The linear co-efficient of correlation between net fixed assets and net worth comes to be - 0.071 which indicates that the variables have a very 100 degree of negative correlation and suggests that the mill has not followed a uniform policy to finance fixed assets by raising shareholder's funds. The standard deviation in net fixed assets and net worth in net fixed assets and net worth are Rs. 4.48 thousands and Rs. 8.74 thousands respectively whereas the coefficient of standard deviation for net fixed asserts and net worth are 0.019 and 0.048 respectively. The greater coefficient of standard deviation for net worth indicates that the variation in net worth has been much greater in different years as compared to net fixed assets.

During the period of study, the net fixed assets to net worth ratio registered a fluctuating trend and varied from 115.80 percent in 2066 to 135.44 percent in 2062 recording a range of 19.64 percent. During the second and third year, the ratio increased due to increase in net fixed assets accompanied by relatively higher increase in net worth. This ratio rose to 32.9% in 2061 and 135% in 2062 with a deviation from previous year being 3.47 & 2.54 respectively. In the year 2063, the ratio moved down to 130.79 percent and the drop in the ratio continued up to the year 2066 and

reached to 115.80 percent with a deviation from previous year being ranged between - 4.4 to - 6.05 during these years. The decrease in ratio happened because of decrease in fixed assets accompanied by increase in net worth. The net worth increased because of increasing back of earnings. The fixed assets decreased by the amount of depreciation.

Fixed assets to net worth ratio was always higher than the absolute standard of 65 percent. The deviation of this ratio from the absolute standard varied from 50.8 percent in 2066 to 70.44 percent in 2062 recording a range of 19.64 percent. This ratio highly deviated during the period of study. There was relatively lower deviation of the ratio from absolute standard during the last year of revised period.

To sum up the fixed assets to net worth ratio of UCIL during the period of study indicates that 100 percent of shareholder's funds are utilized to finance fixed assets. Also, it was not sufficient, so the mill depend on borrowings and finances the part of fixed assets and all current assets from borrowings.

The forgoing analysis indicates that UCIL financed its fixed assets from its own sources and also depend on borrowings.

4.4.2. Fixed assets to long - term funds Ratio

The fixed assets to long term funds ratio shows whether, long term funds were sufficient to finance fixed assets or not. This ratio is intimately connected with the concept of working capital and debt to equity ratio.

Normally working capital is known as excess of current assets over current liabilities. If current assets over current liabilities. If current assets exceed current liabilities it means they are being financed through long term funds. There fore, long term funds must cover some current assets requirement and then only the presence of working capital will be felt. But if they are not sufficient to finance even fixed assets, there will be working capital deficit.

Ideally, this ratio should not exceed unity. If it is less than unity, it means that long - term funds are more than the fixed assets and they are used for the purposes other than the long - term assets i.e. for financing working capital.[2]

Fixed assets to long term funds ratio can be computed on the basis of following formula.

Fixed assets to long term funds =

$$\frac{\text{Fixed Assets (Net)}}{\text{Long - term funds}}$$

Here fixed assets will mean net fixed assets as indicated above and long - term funds will denote equity and preference share capital reserves, debentures and long term loans.

Fixed Assets to Long term funds Ratio of UCIL

(2060 to 2066)

Year	Fixed Assets in Rs. '000'	Long term fund in Rs. '000'	Ratio in Times	Absolute Standard (times)	Deviation from Standard (times)	Deviation from previous year (times)
2060	219416	258184	0.84	1	-0.165	-
2061	226770	253571	0.89	1	-0.11	0.05
2062	232391	254323	0.91	1	-0.09	0.02
2063	231417	253885	0.91	1	-0.09	0
2064	226631	258298	0.87	1	-0.13	-0.04
2065	227006	248055	0.92	1	-0.08	+0.05
2066	224500	257690	0.87	1	-0.13	-0.05

X   **226.42**   **254.42**

S.D.   **4.48**   **3.63**

Coefficient of S.D.   **0.019**   **0.014**

Coefficient of correlation between fixed assets and long - term fund is - 0.49

Fixed assets to long - term funds ratio of UCIL has been presented in table 4.4.2, along with the standard deviation and coefficient of standard deviation in fixed assets and long - term funds and the coefficient of correlation between fixed assets and long term funds.

The absolute amounts of both fixed assets and long - term funds of the mill during the period of study from 2060 to 2066 are shown in table 4.5, recorded indefinite trend. The linear coefficient of correlation between fixed assets and long term funds comes to -0.49 which shows that the two variables have a moderate degree of negative correlation and suggests that the mill has not followed a uniform policy to finance fixed assets by raising long - term funds. The standard deviation in fixed assets and long - term funds are Rs. 4.48 thousands and 3.63 thousands respectively while the coefficient of standard deviations for fixed assets and long - term funds are 0.019 and 0.014 respectively. The greater co-efficient of standard deviation for fixed assets shows the fixed assets of the mill varied more than its long - term funds.

The fixed assets to long - term funds ratio of the mill marked a fluctuating trend during the period under review. It is fluctuated from 0.84 times in 2065 with a range of 0.08. In the year 2061, this ratio increased to 0.89 times with a deviation from previous year being + 0.05 times due to increase in fixed assets accompanied by decrease in long - term fund. Increase is fixed assets resulted because of purchase of furniture and fixtures in this year. Decrease in long - term funds resulted due to decrease is net worth. This ratio continuously increased up to the year 2061 and reached to 0.91 times with a deviation from previous year being 0.02 times

in the year 2062 and 0.01 times in the year 2063. The increase in this ratio occurred during these periods due to relatively higher decrease is long - term funds as against decrease in fixed assets. In the year 2064, the ratio decreased to 0.87 times with a deviation from previous year being -0.04 times due to decrease is fixed assets accompanied by increase in long - term funds. In the year 2065 the ratio again increased to 0.92 times with a deviation from previous year being 0.05 times due to relatively higher decrease in long - term funds. In the year 2066 it decreased by 0.05 times and declined to 0.87 times due to increase is long term funds accompanied by decrease in fixed assets. There was increase in long term funds due to increase in net worth.

There was not wide deviation of actual ratio from unity. The deviation of actual ratios from standard varied from -0.08 times in 2066 to -0.16 times in 2060 recording a range of -0.08 times during the period of study. In fact and 0.84 times to 92 times of long - term funds were utilized to phase F.A. 0.08 times to 0.16 times of long - term funds were utilized to finance working capital or there was no working capital deficit. Hence, the position of the mill was satisfactory as there were sufficient long term funds to finance fixed assets as well as working capital.

4.5   Efficiency in the use of Fixed Assets

Fixed assets are earning assets. They are utilized to generate sales and returns there form. Therefore, the frequency with which the fixed assets are utilized to generate sales affects the efficiency of fixed assets. The greater the turnover of fixed assets shows more efficiency of the fixed assets of an enterprise and vice - versa. The fixed turnover ratio of fixed assets is the main measure of the efficiency of fixed assets. Therefore, in

order to measure the efficiency of fixed assets of UCIL, fixed assets turnover has been calculated.

Fixed Assets Turnover Ratio:

An enterprise acquires plant and machinery and other productive fixed assets for the purpose of generating sales, the efficiency of fixed assets should be judged in relation to sales. The sales to fixed assets ratio or fixed assets turnover ratio shows the efficiency with which the enterprise of utilizing its investment in fixed assets such as land and building, plant and machinery, furniture etc. It also indicates the adequacy of sales in relation to investment in fixed assets. In short run fixed assets turnover ratio can be good indicator of efficiency because the enterprise can not adjust its fixed assets for short - term market fluctuations. The standard for this ratio is 5 times in manufacturing industry. This ratio can be computed in the following way.

$$\text{Fixed assets turnover} = \frac{\text{Net Sales}}{\text{Net Fixed Assets}}$$

The term 'Net Sales' includes the sales revenue received from the sales of jute and jute products. 'Net Fixed Assets' includes the fixed assets currently used by UCIL minus accumulated depreciation.

A high fixed assets turnover ratio is indicative of the efficient utilization of fixed assets in generating sales. While a low fixed assets turnover ratio signifies inefficient management and utilization of fixed assets.

Table 4.5

Sales to Fixed Assets (Net) Ratio of UCIL

(2060 to 2066)

Year	Net Sales in Rs. '000'	Net Fixed Assets in Rs. '000'	Ratio in Times	Absolute Standard (times)	Deviation from Standard (times)	Deviation from previous year (times)
2060	198574	219416	0.90	5	-4.1	-
2061	269822	226770	1.18	5	-3.82	+0.28
2062	295057	232391	1.26	5	-3.74	+0.08
2063	422386	231417	1.82	5	-3.18	+0.56
2064	366663	226631	1.61	5	-3.39	-0.21
2065	382384	227006	1.68	5	-3.32	+0.07
2066	482443	224500	2.15	5	-2.85	+0.47

X   344.85   226.42

S.D.   89.78   4.48

Coefficient S.D.   0.26   0.019

Coefficient of Correlation between net sales and net fixed assets is 0.35

Fixed assets turnover ratio of UCIL has been presented in the table 4.5, along with the standard deviation and coefficient of standard deviation in sales and fixed assets and the coefficient of correlation between sales and fixed assets.

The absolute amounts of fixed assets and sales of the mill, as indicated in Table 4.5, marked fluctuating trend during the period of study from 2060 to 2066. The liner co-efficient of correlation between sales and fixed assets come to 0.35 which indicates that the two variables have low degree of positive correlation. The standard deviations in sales and fixed assets are Rs. 89.78 thousands and Rs. 4.48 thousands respectively whereas the coefficient of standard deviations for sales and fixed assets are 0.26 and 0.019 respectively. The greater coefficient of standard deviation for sales indicates that the variation in sales has been much greater in different years as compared to fixed assets.

The fixed assets turnover ratio of the mill marked a fluctuating trend during the period of study. It varied from 0.90 times in 2060 to 2.15 times to 2066 recording a range of 1.25 times. The deviation in the fixed assets turnover ratio as compared to the previous year was found from -0.21 times in the year 2064 to 0.56 times in the year 2063.

This ratio moved up to 1.18 times in the year 2061 and continued to increase till the end of 2063 with a deviation from the previous year being varied from 0.08 times to 0.56 times during these periods. This ratio increased from the year 2061 to the year 2063 due to increase in sales

relatively higher than increases is fixed assets. In the year 2063 the fixed assets turnover ratio was 1.82 but it come down to 1.61 times in the year 2064 with a deviation from the previous year being - times. It was due to the fact that the decrease in sales accompanied by relatively lower decrease in fixed assets. In the year 2065, the ratio slightly increases with a deviation from the previous year being +0.07. It was due to the fact that the increase in sales accompanied by relatively lower increase in fixed assets. In the last year of study, this ratio increased due to increase in sale accompanied by decrease in fixed assets. In the last year of study, the ratio moved up to 2.15 times with a deviation from the previous year being +.47.

The deviation of actual ratios from standard shows decreasing in the trend during the period of study. It varied from -2.85 times in 2065 to -4.1 times in 2060. Each year fixed assets turnover ratio was lower than the absolute standard i.e. 5 times and was much lower than the standard that was suggested by Radhe Shyam Pradhan by analyzing fixed assets turnover ratios of ten manufacturing public corporation. He has computed the mean ratio as 2.4 times over the eleven year study period. The foregoing analysis indicated that the fixed assets of the mill were inefficiently utilized through out the period under review.

4.6 *Profitability in the use of fixed Assets*

Fixed assets are purchased for their use in a business to earn profit. Hence, it is essential to judge the profitability in relation to investment in fixed assets or whether fixed assets are profitably used in the enterprise or not. The return on fixed assets ratio measures the profitability in relation to investment in fixed assets. Therefore, in order to measure the profitability of fixed asses of UCIL, return on fixed assets ratio has been calculated.

Return on Fixed Assets Ratio:

Return on fixed assets ratio is the relationship between net income and net fixed assets. It can be calculated in the following way.

$$\text{Return on Fixed Assets} = \frac{\text{Net Income}}{\text{Net Fixed Assets}}$$

'Net Income' is the earning after interest and tax. And 'Net Fixed Assets' is the gross block of UCIL minus accumulated depreciation.

High return on fixed assets indicates profitable investment in fixed assets and low return on fixed assets indicates investment in fixed assets is not profitable.

Tale 4.6

Return on Fixed Assets Ratio of UCIL

(2060 to 2066)

Year	Net income in Rs. '000'	Net Fixed Assets in Rs. '000'	Ratio in Percent	Average Percent	Deviation from Average Percent	Deviation from previous year percent
2060	(10642)	219416	(4.85)	(0.7)	(4.15)	-
2061	(10038)	226770	(4.43)	(0.7)	(3.73)	0.42
2062	(9097)	232391	(3.91)	(0.7)	(3.21)	0.52
2063	(3760)	231417	(1.62)	(0.7)	(0.92)	2.29
2064	980	226631	0.43	(0.7)	1.13	2.05
2065	8150	227006	3.6	(0.7)	4.3	3.17
2066	13161	224500	5.9	(0.7)	6.6	2.3

X   **(1.57)**   **226.42**

S.D.   **8.5**   **4.48**

Coefficient S.D.   **(5.41)**   **0.019**

Coefficient of correlation between net income and fixed assets is - 0.06

Table 4.6 reveals return on fixed assets ratio of UCIL along with the standard deviation and coefficient of standard deviation in net income and fixed assets and the coefficient of correlation between net income and fixed assets.

In absolute rupee amounts the net income and fixed assets of UCIL registered a fluctuating trend which resulted in a fluctuating ratio during the period of study from 2060 to 2066. The linear co-efficient of correlation between net income and fixed assets comes to -0.06 which indicates that the two variables have very low degree of negative correlation and suggests that the factory has to minimize fixed assets in order to maximize net income. The standard deviation in net income and fixed assets are Rs. 8.5 thousands and 4.5 thousands respectively while the coefficients of standard for net income and fixed assets are -5.41 and 0.019 respectively.

The return on fixed assets ratio of the mill registered indefinite trend during the period under study. The ratio varied from (4.85) percent in 2060 to 5.9 percent in 2066 constituting a range of 10.75 percent.

The ratio was negative in the year 2060 and continued till the year 2063. After the year 2063, it started to move positive and continued till the end of study periods. In the year 2061, the ratio decreased to (4.43) with a deviation from the previous year being 0.42 due to decrease in net loss with respect to increase in fixed assets. Again, the ratio decreased to (3.91)

percent in 2062 and (1.62) percent in 2063 with a deviation from the previous year being 0.52 percent in 2062 and 2.29 percent in 2063 due to decrease in net loss with respect to decrease in fixed assets. It started to move positive in the year 2064 and was 0.43 percent in this year with a deviation from the previous year being 2.05 percent due to occurrence of income accompanied by decrease in fixed assets. It increased to 3.6 percent in the year 2065 with a deviation from the previous year being 3.17 percent due to relatively higher increase in net income as against increase in fixed assets. It again increased in the year 2066 which was 5.9 percent with a deviation from the previous year being 2.3 percent due to increase in net income accompanied by decrease in fixed assets in comparison to previous year.

The average return on fixed assets ratio is (0.7) percent. The deviation of actual ratio from average ratio varied (4.15) percent in the year 2060 to 6.6 percent in the year 2060 to 6.6 percent in 2066. There was negative deviation from the average during the year 2060 to the year 2063 and was positive deviation during rest of the study periods. The fore going analysis indicates that there was profitable use of fixed assets during the last three years of study periods but there was unprofitable use of fixed assets during the year 2060 to the year 2063. To sum up, fixed assets has not been used profitably during the periods under review.

4.7　Analysis of Depreciation Provisions

Most fixed assets have limited lives and the cost of such assets is customarily spread over the life of these assets through depreciation. When provision of depreciation fund is built up every year, the business will not experience the shortage of working capital. The enterprise will not have to look outside for finance at the time of replacement of the assets.

Analysis of depreciation provision is necessary. It reveals how old were the fixed assets of the enterprise and how efficiently they were utilized to generate sales and profits. Analysis of depreciation provision includes analysis of adequacy of depreciation and review of depreciation policy.

4.7.1. Adequacy of Depreciation

The amount of depreciation charged in the profit and loss account must be adequate enough to replace the old fixed assets with property of equal efficiency at the end of its useful life. Hence, depreciation should be charged which satisfies the need of the industry whether on the basis of the current cost or historical cost. Adequacy of depreciation can be measured with the help of comparative study between gross block and accumulated depreciation.

Table 4.8 presents indices of gross block and accumulated depreciation of UCIL during the period 2060 to 2066.

Table 4.7.1

Indices of Gross Block and Accumulated Depreciation of UCIL

(2060 to 2066)

(Base year 2055/56 = 1000)

Year	Gross Block in Rs. '000'	Index Number	Depreciation in Rs. '000'	Index Number
2060	243029	100.00	23613	100.00
2061	260406	107.15	33636	142.45
2062	276823	113.9	44432	188.17
2063	296246	121.9	64829	274.55
2064	303297	124.8	76666	324.68
2065	316530	130.24	89523	379.13
2066	327436	134.73	102936	435.93
Average		118.96		263.6

Indices of gross block and indices of accumulated depreciation marked increasing trend during the period of study. Indices of gross block varied from 100 in 2060 to 134.73 in 2066 constituting a range of 34.73. Similarly, indices of accumulated depreciation varied from 100 to 435.93 recording a range of 335.93. The mean index number is 118.96 of gross block and 236.6 of accumulated depreciation.

Index of accumulated depreciation increased to 142.45 and index of gross block increased to 107.15 in the year 2061. Index number of

accumulated depreciation was grater than the index number of gross block. It indicates there was adequacy of depreciation in this year. Indices of accumulated depreciation were 188.17, 274.55, 324.68, 379.13 and 435.93 in the year 2062, 2063, 2064, 2065 & 2066 while indices of gross block were 113.9, 121.9, 124.8, 130.24 and 134.73 in the year 2062, 2063, 2064, 2065 and 2066 respectively. It shows that from the year 2061 to the end of period under review, indices of accumulated depreciation was always highly greater than the indices of gross block. It suggests there was adequate depreciation maintained by management under review period. By comparing average index of accumulated depreciation and average index of gross block, it can be inferred that the position of the mill was so much satisfactory from the viewpoint of adequacy of depreciation during the study periods.

4.7.2. Review of Depreciation Policy

Depreciation policy of the enterprise is framed by the top level of management. However, the management should decide the depreciation policy keeping various factors in mind. Depreciation policy of UCIL has been studied by calculating following two ratios:

(i)   Depreciation to Gross Block Ratio

(ii)   Depreciation to Sales Ratio

Table 4.9 represents accumulated depreciation to gross block ratio and annual depreciation to sales ratio of UCIL during the period 2060 to 2066.

Ratio of Accumulated Depreciation to Gross Block and Annual Depreciation to

Net Sales of UCIL during 2060 to 2066

Year	Accumulated Depreciation in Rs. '000'	Gross Block in Rs. '000'	Acc. Depreciation to Gross Block Ratio in (%)	Annual depreciation in Rs. '000'	Sales in Rs. '000'	Annual Depreciation to Sales Ratio in 'Percent'
2060	23613	243029	9.72	9392	198574	4.73
2061	33636	260406	12.92	10041	269822	3.72
2062	44432	276823	16.05	10884	295057	3.69
2063	64829	296246	21.88	1927	422386	0.46
2064	76666	303297	25.28	11855	366663	3.23
2065	89523	316530	28.28	12856	382384	3.36
2066	102936	327436	31.44	13539	482443	2.80

The ratio of accumulated deprecation to gross block marked increasing trend during the period of study. The ratio varied from 9.72 percent in the year 2060 to 31.44 percent in the year 2066 constituting a range of 21.72 percent. The ratio moved up to 9.72 percent in the year 2060 and continued till the last year of study and reached to 31.44 percent in this year. The ratio were 12.92, 16.05, 21.88, 25.28 and 28.28/ in the year 2061, 2062, 2063, 2064 and 2065 respectively. The ratio shows increasing trend because of relatively higher increase in accumulated depreciation in comparison to increase in gross block.

Annual depreciation to sales ratio registered fluctuating trend during the period under review. It varied from 0.46 percent in the year 2063 to 4.73 percent in the year 2060. It was 4.73 percent in the year 2060 and decreased to 3.72 percent in the year 2061 with a deviation from previous year being -1.01 percent due to relatively larger increase in annual sales as against increase in annual depreciation. It again decreased to 3.69 percent and 0.46 percent in the year 2062 and 2063 with a deviation from previous year being - 0.03 percent and -3.23 percent respectively. The ratio moved up to 0.46 percent and reached to 3.23 percent in the year 2064 with a deviation from previous year being 2.77 percent due to increase in annual depreciation accompanied by decrease in sales. It again increased to 3.36 percent in the year 2065 with a deviation from previous year being 0.13 because of relatively larger increase in sales as against increase in annual depreciation.

Accumulated depreciation to gross block ratio has increasing trend while annual depreciation to sales ratio has fluctuating trend. It indicates that the mill has not so stable depreciation policy.

Chapter V

Summary, Conclusion and Suggestions

5.1 Summary

A cement industry has greater proposed and scope now a days. The large - scale natural resource user Udaypur Cement Industry limited, which is situated in sindhuli, jalpa-chilaune village Udayapur producing cement. It is established in 1987 AD and has been operating successfully.

The fixed assets of the UCIL include land, building, machinery, furniture and fixtures, office machinery, furniture and fixtures, office equipment, computer, electric installation, vehicles, ware house and other fixed assets under construction. These assets involve huge funds and are subject to depreciation which is a fixed cost and has string bearing on the operating profit. Thus, the efficient utilization of fixed assets is a must for producing the expected result. But without an appraisal of the performance of management of fixed assets of the mill, it cannot be inferred fairly whether or hot the fixed assets are utilized efficiently.

It provides direct employment to a large number of people and contributes significantly to the tax revenue as well as country's balance of payment situation by earning convertible foreign currency. Besides these, many others are benefited in numerous ways. In order to take the full advantage, its successful operation which depends largely upon proper management is a must. The proper management requires a continuous performance appraisal for binding out the areas of weaknesses and taking immediate corrective actions.

The management has various functional areas production, marketing, finance, personnel and so on. Though each of these areas needs to be

evaluated periodically, the top priority should be accorded to the financial one. The present study looks into the fixed Assets Management of the industry with special reference to the Udaypur cement industry Ltd. which is one of the most important aspects of its financial management.

The study has been undertaken with an objective of evaluating the performance of fixed assets management of UCIL. In particular, it aims at assessing the structure of fixed assets, estimating the average annual growth of fixed assets measuring the impact of gross block on sales and operating profit, reviewing the financing of fixed assets evaluating the efficiency in the use of fixed assets and analysing the depreciation provisions of the factory. Over and above, it is also intended to suggest the remedial measure wherever found necessary.

The study covers a period of 7 years (from F/Y 2060 to 2066) and is based mainly on secondary data. The data required for the study have been obtained from reliable sources such data after proper recasting and condensation have been arranged in different tables needed for the fulfillment of stated objectives. In order to analyze the data, the financial techniques like ratio analysis and trend analysis have been applied. In addition, the statistical tools like percentage, average, range, standard deviation, correlation, and index number have also been used in order t make the analysis more systematic, scientific and useful.

The entire study has been divided into five chapters. Chapter - 1 gives a general introduction of the subject matter covering background of the study, focus of the study, statement of the problem, objectives of the study, significance of the study, and limitations of the study while in

chapter - 2 the conceptual literature on the subject and related studies have been reviewed making logical and meaningful groupings. Chapter - 3 frames the research methodology consisting of research design, population and sample, nature and source of data, data collection techniques and data analysis tools to be adopted in carrying out the study whereas in chapter - 4 the pertinent data have been presented and analysed with the help of financial and statistical tools with a view to drawing sound conclusions. Chapter - 5 gives summary, conclusions and suggestions for improving the performance of fixed assets management of the factory.

5.2   Conclusion

The major findings of the study may be summed up as follows:

(i)   The percentages of gross block, accumulated depreciation and net block to assets of the UCIL registered fluctuating trends during the period of study. Their average percentages came to be 79.44, 16.46 and 62.98 having a range of variation of 5.69, 16.48 and 15.27 respectively. The proportions of gross block and net block to total assets of the mill were always much above 50 percent. The very high magnitude with low ranges of variation and very low in consistent trends in   proportions of gross block and net block show a satisfactory position towards the structure of fixed assets of the mill.

(ii)   The factory witnesses an average annual growth of Rs. 12058.14 thousand in gross blocks during the period under review also it showed an average annual growth of Rs. 726.28 thousand in fixed assets (net) during the same period. The growth in gross block is net

fixed assets. As the factory is not operating at its full capacity, it is worthless to increase gross block even if there is increase in demand of customers.

(iii)   The index number of gross block of the frill recorded an increasing trend throughout the period of study while the indices of sales marked a increasing tendency during first four years and a falling tendency last two year except in 2066. The index number of operating profit registered the fluctuating trend during   the   study period. The averages of indices of gross block, sales and operating profit came to be 118.95, 173.90 and 116.51 respectively. Obviously, the impact of expansion in gross block on sales was good and also it was positive on operating profit. Further, there was a high degree of positive correlation between gross block and sales and gross block and operating profit. Thus, the investment in gross block was profitable due to better utilisation of fixed assets.

(iv)   The linear coefficient of correlation between fixed assets and net worth of the mill during the period under review was negative being 0.07 which implies that a definite policy for financing fixed assets was not followed. The coefficients of standard deviations for fixed assets and net worth were 0.019 and 0.0020 respectively. As the coefficient of standard deviation for net worth was greater than that of fixed assets, there was more variability is net worth. The ratio of fixed assets to net worth marked an increasing trend during the first three years and a decreasing trend during the last four years of study.

It varied from 115.80 percent in 2066 to 135.44 percent in 2062 recording a range of 19.64.

As it was always much above the standard ratio of 65 percent, the owner's funds are not sufficient for financing the fixed assets and major part of the fixed assets and major part of the fixed assets and all current assets requirements are financed by borrowings.

(v)   The linear coefficient of correlation between the fixed assets and long - term funds of the mill during the period of analysis was negative being 0.49 which indicates that a definite policy for financing fixed assets was not followed. The coefficients of standard deviations for fixed assets and long - term funds were 0.019 and 0.014 respectively. As the coefficient of standard deviation for fixed assets was greater than that of long - term funds, there was more variability in fixed assets. The ratio of fixed assets to long - term funds recorded an increasing trend during the period of   study except is 2064 and 2066. It constituted a range of 0.08 varying from 0.84 in 2060 to 0.92 in 2065. As it was always less below unity, the long - term funds were sufficient not only for financing the fixed assets but also for financing a major part of the current assets requirements. Thus, the practice of financing fixed assets of the mill is sound.

(vi)   The sales to fixed assets ratio of the mill registered an increasing tendency during the period of study except in the years 2064 and 2065. It constituted a range of 1.25 varying from 0.90 times in 2060 to 2.15 times in 2066. However, it was always below the generally

accepted norm of 5 times making an indication of un efficient utilisation of investment in fixed assets.

(vii) The linear coefficient of correlation between net income and net fixed assets of the factory during the period of analysis was negative being 0.06. It indicates that an unprofitable investment policy was adopted. The coefficient of standard deviations of net income and net fixed assets were - 5.41 and 0.019 respectively. The greater coefficient of standard deviation for net income implies that there was more variability in net income as compared to net fixed assets. The return on fixed assets recorded a decreasing tendency during the first four years and an increasing tendency during the last three years of study. It varied from - 4.48 percent in 2060 to 5.9 percent in 2066 constituting a range of 10.38. The average rate of return on fixed assets was negative being - 0.7. The foregoing analysis makes it clear that the investment in fixed assets of the mill is not profitable.

(viii) The indices of both gross block and depreciation of the factory marked increasing trends during the period under review. The index number of gross block increased from 100 in 2060 to 134.73 in 2066 while that of depreciation increased from 100 in 2060 to 435.93 in 2066. Also the index number of depreciation was always highly greater than that of gross block during the period of analysis. The mean index number of study was 118.96 while that of depreciation was 263.6. Obviously, the provision for depreciation made by the factory; is even more than sufficient.

(ix) The accumulated depreciation to gross block ratio registered an increasing tendency during the period of study. It varied from 9.72 percent in 2060 top 31.44 percent in 2066 constituting a range of 21.72. The ratio of annual depreciation to sales marked a decreasing tendency during the first four years and last year of study while an increasing tendency during the remaining years. It recorded a range of 4.27 varying from 0.46 percent in 2063 to 4.73 percent in 2060. The ratio accumulated depreciation to gross block shows that the mill has charge stable depreciation while the indefinite trends and high ranges of variations in the ratio of annual depreciation to sales makes it clear that a stable policy of charging depreciation on fixed assets has not been followed in the mill.

5.3 Suggestions

In the light of a mentioned analysis and interpretations, some glaring suggestions may be offered as follows:

(i) In order to face the market competition and boost the sales, every effort needs to be made to improve the quality of the products.

(ii) After a careful research of the market, an appropriate product mix should be made for promoting the sales.

(iii) Every effort needs to be made to bareness full installed capacity of the mill to improve the productivity and profitability.

(iv) A suitable costing system should be introduced to control the fast rising operating cost of the mill.

(v)   The fixed assets of the mill should be properly revalued to build up the satisfactory structure.

(vi)   The owner's funds need to be injected into the mill with a view to strengthening the liquidity and enhancing the profitability of the mill.

(vii)   A stable and suitable policy of charging depreciation on fixed assets should be adopted to show true and fair view of the financial performance and position of the mill.

(viii) Efforts need to be made from all concerned to promote the jute cultivation in the neighboring district of the mill (Siraha, Saptari, Sunsari, Morang and Jhapa) with a view to avoiding the transportation cost of raw jute being imported from India.

(ix)   In order to promote the export of jute products, the proper subsidy should be given like other exporting countries.

(x)   In order to increase the demand for jute products in the internal market, the production and supply of non - perishable polythene products polluting the environment should be banned.

Lastly, it would not be out of place to mention here that the study has been made with some specific objectives. It, therefore, does not claim to have looked into all the problems confronting the mill. Though it has made a detailed   analysis at least of the fixed assets, an inter-firm comparative analysis could not be made due to various constraints.

BIOBLIOGRAPHY

1. Myer, John N., Financial Statement Analysis, Prentice Hall of India P. Ltd., New Deli, 1974.

2. Weston, J. Fred and Brigham, Eugene F. Managerial Finance, holt, Rinehart and Winston Inc., 1972, New York.

3. Walker, Earnest W. and Brigham, William H., Financial Planning and Policy, Harper and Brothers Publishers, New York, 1961.

4. Horngren, N.L., Ramanathan, A.R. and Grewal, T.S., Management Accounting, Sultan Chand and Sons, New Delhi, 1977.

5. Guthmann, Harry G., Analysis of Financial Statement, Prentice Hall of India Pvt. Ltd., New Delhi 1976.

6. Garbutt, Douglas, Carter's Advanced Accounts, Pitman Publishing, London.

7. Hunt, Pearson, et., all Basic Business Finance, Richrd D. Irwin, Inc., Homewood, Illinis, 1971.

8. Franks, Julian R. and Scholefield, Harry H., Corporate Financial Management, Gower Press Ltd., Britain, 1974.

9. Horngren, Charles T., Introduction of Financial Accounting, Prentice Hall, Inc., New Jercy, 1984.

10. Joshi, Dr. Shyam Economic Policy Analysis, Taleju Prakashan, Bhotahity, Kathmandu, Second Edition 2062.

11. Kirkman, Patrick R.A., Accounting under Inflationary Conditions, George Allen and Unwing, London, 1978.

12. Agrawal, Dr. Govind Ram, Dynamics of Business Environment in Nepal, M.K. Publishers and Distributors Bhotahity, Kathmandu, 2002 Edition.

13. Neild, R.R., 'Replacement Policy., National Institute Economic Review, number 30 (1965). Scholefield, H.H., 'Replacement of Equipment', Accounting and Business Research, number 8 (Autumn 1972).

14. Pradhan, Radhe Shyam, Public Corporation of Nepal, National Book organisation, New Delhi 1986.

15. Pandey I.M., Financial Management, Vikas Publishing House Pvt. Ltd., New Delhi, 1995.

16. Prather, Charles L., Financing Business Firms, Richard D. Irwin, Inc., Homewood, I lli nots, 1959.

17. Rau, S.B., Financial Management, Vikas Publishing House Pvt. Ltd., New Delhi

18. Chaudhary, S.B., Analysis of Company Financial Statements, Asia Publishing House, Bombay, 1964.

19. Walgenbach, Paul H. and Dittrich, Norman E., Accounting, an Introduction, Harcourt Brace Javanovich, Inc., New York, 1973.

20. Citman, Lawrence J., Principles of Managerial Finance, Harper and Row Publisher, New York, 1982.

21. Westwick, C.A., Management, How to use Ratios, Grower Press Limited, Epping Essex, 1973.