UNIVERSITY OF COCHIN

School of Management Studies
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Research Scholar.

Cochin - 22,

5th October 1981

This is to certify that this thesis entitled 'Financial Planning and Control in Public Sector Undertakings in Kerala' is my original work and that it has not previously formed the basis of the award of any degree, diploma, associateship, fellowship or similar title of recognition.

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Cochin - 22,
5th October 1981

This is to certify that this thesis entitled 'Financial Planning and Control in Public Sector Undertakings in Kerala' is a record of **bona fide** research work carried out by Shri. P.R. Wilson under my supervision and guidance.

Supervising guide
(Dr. K.N. Nair)

C O N T E N T S

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PREFACE

Today India is seeking a speedy transformation of her semi-stagnant economy to a dynamic one by means of economic planning in a democratic set up. In the context of this growth oriented endeavour public sector has a vital role to play. After three decades of planned development, it has become important that India must make fresh appraisals on the role of public sector in the economic renaissance of the country.

Almost no comprehensive study has been made on this vital segment of the economy vis-a-vis the growth economics. This study is an attempt to fill this need in a very modest way. It presents the subject in a new perspective. An earnest attempt is made to reveal the critical problems inhibiting the growth of the public sector from a new angle which focusses the spot-light on the economics of development.

The incentive for taking up a research project of this nature and magnitude was given by Dr. K.Nanukuttan Nair, Reader, School of Management Studies, University of

Cochin. This study is the result of an intensive investigation extending over four years (from 1977 to 1981) and it is first of its kind. The period covered is nearly a decade in most of the eighteen industrial undertakings in public sector in Kerala.

The material for the study was collected from various sources. As far as possible data were collected from original sources. Where they were not available secondary source materials had to be made use of. Difficulties were many, sometimes contradictory data had to be shifted up and verified. Five separate schedules were administered to collect original data, along with depth interviews. The author had travelled all over the State of Kerala and visited all the public sector undertakings in Kerala. The top executives and their subordinates in the different functional areas were interviewed to make a realistic appraisal of the issues.

Although the researcher had the benefit of the interesting discussions he had with all these people, the views expressed and conclusions arrived at are his own and if there is any defect or short-comings he alone is responsible for them.

Every effort has been made to make the study, reliable comprehensive and useful.

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ABREVIATIONS USED

1.	P.S.E.	-	Public Sector Enterprises
2.	C & A.G.	-	Comptroller and Auditor General of India
3.	K.S.I.E	-	Kerala State Industrial Enterprises Ltd.
4.	Co.	-	Company
5.	Holding Co.	-	K.S.I.E.
6.	S.W.O.T	-	Strengths, Weaknesses, Opportunities and Threats.

NAMES OF THE COMPANIES COVERED BY THE STUDY

7.	K.C.L	-	Kerala Ceramics Ltd.
8.	K.E.L	-	Kerala Electrical and Allied Engineering Company Ltd.
9.	T.P.I	-	Travancore Plywood Industries Ltd.
10.	K.F.C	-	Kerala Fisheries Corporation Ltd.
11.	F.I.T	-	Forest Industries Travancore Ltd.
12.	K.S.O	-	Kerala Soaps and Oils Ltd.
13.	K.S.D.P	-	Kerala State Drugs and Pharmaceuticals Ltd.
14.	T.R.W	-	Trivandrum Rubber Works Ltd.
15.	Traco	-	Traco Cables Company Ltd.
16.	Pallathara	-	Pallathara Bricks and Tiles Ltd.
17.	Chalakuddy	-	Chalakuddy Refractories Ltd.
18.	Premo	-	Premo Pipe Factory Ltd.
19.	T.C.C	-	Travancore Cochin Chemicals Ltd.

20. T.S.M - Trivandrum Spinning Mills Ltd.

21. T.S.C - Travancore Sugars and Chemicals Ltd.

22. K.M.M.L - Kerala Minerals and Metals Ltd.

23. United - United Electrical Industries Ltd.

24. T.T.P - Travancore Titanium Products Ltd.

CHAPTER - I

1.1 INTRODUCTION, SCOPE AND METHODOLOGY

India is wedded to the ideals of socialism and democracy. Our country is undergoing a unique experience of planned economic development in a democratic set up. We are experimenting on a system of mixed economy for the speedy transformation of our semi-stagnant agro-based economy to a strong dynamic and industrially advanced one. In this growth oriented endeavour the public sector along with the private sector is playing a vital role. With successive implementation of five year plans for the past three decades, the public sector has assumed unprecedented importance fast approaching to the commanding heights of the economy.

1.1.1 At present the public sector enterprises accounted for nearly 75% of the total investment in the corporate sector. During the period of ten years ending 31st March 1979 the capital employed in the public sector enterprises increased from a little over Rs.3,000 crores to more than Rs.15,000 crores. The interest paid on the capital during

the same period increased from Rs.95 crores to nearly Rs.900 crores and the depreciation also increased from less than Rs.150 crores to over Rs.600 crores. The over all profitability increased from 2.8% in 1968-69 to about 9.7% in 1976-77. The public sector contributed to the exchequer nearly 20% of the total corporate taxes and more than 26% of total excise duty.[1]

1.1.2 There are various criticisms levelled against public sector in the issues of profitability, accountability and social responsibility. Taking into consideration of our limited resources, technological limitations and limited availability of technical know-how the achievement so far made by it is quite impressive. The economy has grown steadily through state owned enterprises on an all India basis. But the performance of public sector enterprises sponsored by state governments in general has not been either satisfactory or encouraging.

1.1.3 The State of Kerala is industrially backward and so the government has started many industries in the public sector. Most of them being commercial enterprises are expected to make sizeable surplus and contribute to the meagre resources of the Government and for their further growth. But it is a sad fact that many of them had continuously incurred losses and even depleted their capital resources

forcing them to depend on budgetary support to cover their financial defecits.

1.1.4 The problem of industrial sickness has become accute and some of the concerns are fast moving to the verge of liquidation. There are 10 major government owned companies with a capital of nearly Rs.10 crores (Rs.9.9 crores on 31-3-1978) which had incurred a net loss of Rs.174 lakhs in 1977-78. Another nine companies having majority ownership of the Government with a paid up capital of nearly Rs. 15 crores (Rs.14.9 crores during the year 1977-78) incurred a loss of Rs.139 lakhs during the same year.[2] T.C.C., a single company which is included in this list incurred a loss of Rs.258 lakhs in this year. It may be argued that profitability which is reflected in the Balance Sheet and Profit and Loss Account cannot and should not be the sole criterion to judge the performance of public sector undertakings. But it cannot be denied that profitability is essentially an index of such important factors as cost, productivity and efficiency. More over the industrial enterprises owned and managed by Kerala State Government are mainly commercial undertakings and as such they should be judged on the profitability and contribution made by them to the State Government.

1.1.5 Various reasons have been attributed to the poor performance of the companies, such as under utilisation of

rated capacity, lower volume of production and the consequent higher production cost, ever increasing salaries and wages and other expenses, higher interest burden, poor demand for product, lack of sales promotional activities, competition from private manufactures unprofessionalised, inefficient and bureaucratic management. But the major problems facing these concerns are related to management especially that of personnel and finance. These two areas are of critical importance calling for urgent action on technical, organisational and managerial levels. In fact success or failure of all functional areas considerably depends upon the manner in which the finance function is executed and controlled. To a large extend every activity of the organisation should be linked with finance and planned, implemented and conditioned through the availability and use of financial resources.

1.2 Problem

So the problems posed are :

1) How is financial manager in public sector performs his functions? What are the salient features of financial performance?

2) Are there proper financial planning and effective financial control in these organisations?

3) If they are practised, why are they not effective in controlling and improving financial performance?

4) If they are not practised, what is the system of financial management adapted at present and what are their drawbacks?

5) Is there any way to make the present system function more effectively?

6) How can a sound system of financial management be installed?

1.3 Hypothesis

1) It is said that in all the public sector undertakings there is financial planning and control but is not practised according to sound management principles.

2) Financial performance analysis is not systematically done to identify the strengths, weaknesses, opportunities of the firm and the threats faced by them.

3) Financial planning is done and control exercised at different levels of the organisation without proper integration and co-ordination.

4) Budgets are planned and projected without clear organisational objectives, policies and long-term plans.

5) Variances are not analysed for controlling the performance and effective remedial measures are not implemented.

6) Consequently review of remedial measures to assess their effectiveness is conspicuous by its absence.

1.4 Purpose of the Study

The purpose of the study is :

1) to find out whether there is proper financial planning and control in these undertakings,

2) to analyse the reasons for losses or profits,

3) to evaluate the existing system of financial planning and control and its role in reducing losses and increasing profits,

4) to find out the drawbacks of the existing system,

5) to suggest remedial measures and project future trends and

6) to recommend a plan of action to be implemented forthwith.

1.5 Scope and Limitations

1.5.1 A number of studies conducted on the public sector undertakings deal with their performance on a piecemeal basis, comparing them with the private sector, their role in the national economy, their contribution to the national exchequer etc. The emphasis is placed more on the macro-level than on the micro-level. The present study follows the micro-approach of dissecting the enterprises into functional operations and assessing their individual performance.

The study is limited to the industrial undertakings in the public sector run by Kerala State. Out of the total 21 manufacturing units 18 units are covered. The study is particularly directed to financial performance concentrating

on planning and on control of finance. Agro-industries Corporation and Keltron Corporation deserve separate study because of their special features so they are not brought under the purview of this study.

1.5.2 A unique feature of the study is that it has taken financial planning and control as total corporate planning and control. In other words, the study is conducted on the basic premise that finance management should adopt a corporate rather than a functional outlook. Hence the study is not restricted to how money is raised and allocated, but from where the money is raised, how effectively it is used and what are the benefits derived.

1.5.3 The latest managerial techniques in financial planning and control are discussed in relation to the public sector to show how little of these techniques have been used in these undertakings, and whereever they are used in a limited extent how inadequate they are.

1.6 Methodology

The present study is both descriptive and analytical. Descriptive in the sense that it trace the historical growth and present performance and analytical in the sense that it interprets and analyses the data and also projects future trends.

1.7 Data Collection

Primary data are collected through surveys and depth interviews. In collecting original data survey method is used whereever found necessary. Two separate sets of schedules are prepared for the collection of data. One set of schedules is used to find out the executive opinions regarding existing financial planning and control in their respective units. This schedule is pre-tested and administered in the Holding Company, consisting of six units of Kerala State Industrial Enterprises. The second set of schedules (four schedules, each for the management functions of sales, production, personnel and finance) is pre-tested and administered in all the 18 units covered by the present study. The secondary data are collected from financial statements of the undertakings and the budgets for a period over five years. The reports of the Comptroller and Auditor General of India and the various other reports of the Public Administrative Reforms Committee and the Committees of Public Sector Undertakings are made use of. Books and periodicals, and other literature published or unpublished, which had direct relevance to the study also are referred.

1.8 The Scheme of Study

The thesis is divided into two unequal parts. Part one in four chapters provides an analytical frame work for evaluating the financial planning and control process

prevailing in public sector organisations as a whole. Part two comprising of five chapters is an empirical study of financial planning and control process adopted in selected government companies in Kerala. It is an indepth study on what these firms and their managers actually do in practice. It highlights the strength and weakness of the present system suggesting remedial measures and a plan of action.

1.9.1 Chapterwise Distribution

Part - I

Chapter one projects the problems, presents the hypothesis and the scheme of study. The role of public sector in Indian Context is highlighted in Chapter two. A brief description of its growth and development is also given. The importance of clearly defined goals and the objectives of profitability and social responsibility are stressed, emphasising the accountability of public sector enterprises. The role of sound financial management for the efficient performance and profitability is stressed with particular reference to financial planning and budgetary control. Chapter three is a discussion on financial planning with reference to the different strategies to be evolved on the basis of SWOT (Strength, Weakness, Opportunity and Threat) analysis. The dependence of functional plans on financial plan is emphasised. Chapter four is completely

devoted to the control process in finance management. Alternative methods used in practice with help of different tools and techniques are reviewed.

Part - II

1.9.2 The following chapters constitute part - II. Chapter five is an indepth study on financial planning and control operations in six companies coming under the Kerala State Industrial Enterprise Ltd. The focus is on the involvement of the executives in the planning process and their awareness of the budgetary process followed in their respective organisations, the functional problems they face and capital expenditure decision. In Chapter six an attempt is made to reveal the inadequacies and limitations of budget preparation, implementation and control. Chapter seven is an assessment of financial strength and weakness in all the units under study for a period of over five years through using the technique of ratio analysis. Ratios in respect of asset utilisation, liquidity, solvency, profitability and cost are analysed in depth. Chapter eight is completely devoted to an evaluation of financial performance in general for all companies under study taking into consideration the special features responsible for their poor performance. In Chapter nine the results of the study is summed up and conclusions are arrived at, with recommendations and a plan of action to be implemented forthwith.

CHAPTER - II

ROLE OF PUBLIC SECTOR UNDERTAKINGS

2.1 In the process of rapid economic growth Indian planners have given priority to public sector development. "In East European countries and Soviet Union government ownership of industry is based on the belief that public enterprises are inherently good, and its merits or demerits are not discussed. Under the capitalistic system, as in the United States, state enterprises are considered inherently bad and a conscious effort is made to keep the government out of it, as far as possible. However, due to pressing needs, it is sometimes accepted with reluctance. For instance in national calamities like war, or major economic dislocation like depressions, public enterprises are created to be dissolved after they fulfilled their purpose. In some cases, however, they continue even after the original need disappears either because of their efficacy is established or because of fresh need for their continuance appears on the scene".[1] India had to adopt a viamedia course choosing neither fully socialistic economy nor a completely capitalistic system for the rapid growth and development of her

economy. In such a mixed economy both capitalistic and socialistic systems are expected to function in order to reap the benefits of both. The attitude of our national leaders was, as lucidly expressed by Jawaharlal Nehru "while the public sector must obviously grow-even now it has grown both absolutely and relatively - the private sector is not something unimportant. It will play its important role, though gradually and ultimately it will fade away. But the public sector will control the strategic points of our economy".[2] The real fact was that at the time of independence India had neither the material resources nor the human resources for complete nationalisation. However, with a view to avoid undue concentration of economic and industrial power and to disciplining all the economic forces basic to development the government of India had chosen to take direct responsibility of establishing and operating a wide range of heavy and basic industries to start with.

2.2 Public Sector Enterprises

The present position of public enterprises in India is the out come of the industrial policy persued by the government in the post independent period. In order to understand the vital role played by public sector undertakings one has to dig deep into the circumstances under which it came into existence and formed an integral part

of our economic system. In this context it will not be out of place to define public sector as it exists in India, trace their origin and growth, examine their objectives, evaluate their performance and assess their strength and weakness.

2.2.1 Public sector enterprises combine state ownership with state control. They may be completely owned and managed by the State. They may also be formed with majority ownership participation and control by the government. There is no separate company law applicable to public sector companies alone, although it had been desirable. A distinction should be made between public sector companies and private sector companies. According to Indian Companies Act, 1956, public limited companies and private limited companies can be incorporated in public sector as well as private sector. Hence government company (either public or private) shall comply with all the provisions of the Act. The central government may by notification in the official gazette direct that any of the provisions of this Act (except Sec.619 and 619 (A)) specified in the notification (a) shall not apply to any government company or (b) shall apply to any government company only with such exceptions, modifications and adaptations as may be notified in the notification.

2.3 Definition

Companies Act 1956 has defined a public sector company as follows :

"A government company is one in which not less than 51% of the paid up capital is held by the Central Government or by State Government or governments or partly by Central Government and partly by State Government or governments" (sec.617 Companies Act, 1956). The subsidiary of such a company is also a government company (sec.617).

The term public sector enterprise (PE) is used in this study in a very limited sense. It is a government organisation with more than 50% of its paid up capital owned and fully controlled by the state or central government established for the purpose of manufacturing or producing a commodity or making available a service to the public for a price. In otherwords it is only a government undertaking run on commercial lines for the purpose of producing some commodity or rendering a service at a price.

2.4 Legend

2.4.1 The Industrial Policy Resolution of 1948 called for a dynamic national policy directed to continuous increase in production by all possible means side by side with measures to secure its equitable distribution emphasising the need for the state to play a progressively active role in the development of industries. The resolution made it clear that for some time to come the state would contribute more quickly to the increase of the national wealth by expanding

its present activities where it is already operating and by concentrating on new units of production in other fields rather than acquiring and running existing units.

2.4.2 It was realised that out-right nationalisation of all means of production immediately after the attainment of independence was not advisable and possible for private enterprises properly directed and regulated has a valuable role to play. The public and private sectors were thus given complementary roles to play in promoting industrial development.

2.4.3 The directive principles of state policy enshrined in our constitution indicated the socio-economic goals towards which the efforts of the state were to be oriented and emphasised that "the operation of the economic system does not result in the concentration of wealth and means of production to common detriment."[3]

2.4.4 In December 1954 the Indian parliament accepted socialistic pattern of society as our national goal. With this in view the Industrial Resolution of 1956 statedthat "All industries of basic and strategic importance or in the nature of public utility services should be in the public sector. Other industries which are essential and require an investment on a scale which only the state in the present circumstances could provide have also to be in the public sector."[4]

2.4.5 In the successive five year plans, more and more emphasis was placed on public sector to accelerate economic growth. When the first five year plan was drafted it was realised that industrial development made possible in India by private initiative centred round only profit making ventures. This resulted in a lop-sided development in industrial structure. Capital oriented heavy industries and many of the capital goods industries were left out. The infrastructural facilities for starting such industries were not available.

2.4.5.1 Owing to such inadequacies the first five year plan assessed the scope and need for development of such industries and that it was best for the public sector to develop those industries in which private enterprises were unable or unwilling to put up the required resources and run the risks involved. The planning commission rightly pointed out that "Private enterprise naturally tends to calculate its risks and its returns over a comparatively short term and to hedge its outlays accordingly. It tends on the whole to be incapable of taking into account the total needs of the country, which require a rather different calculation of risks and a rather different kind of hedging against risk."[5] A major portion of the investment outlay (Rs.1,960 crores out of total outlay of Rs.3,760 crores ie. 52% of total outlay) in the first year plan was thus allotted to the public sector. Out of Rs.1,960 crores of public sector outlay only

Rs.55 crores was invested in industries and minerals. At the end of the first five year plan the investment in the 21 public sector undertakings were about Rs.81 crores. The first five year plan was only an agricultural plan.

2.4.5.2 The second five year plan placed added emphasis on the public sector industries. The draft plan said "The public sector has to expand rapidly. It has not only to initiate development which private sector is either unwilling or unable to undertake, it has to play the dominent role in shaping the entire pattern of investment in the economy, whether it makes investment directly or whether these are made by the private sector. In an economy which gets increasingly diversified there is scope for both public and private sectors to expand simultaneously, but it is inevitable, if development is to proceed at the pace envisaged and to contribute efficiently to the attainment of the larger social ends in view, that the public sector must grow not only absolutely but also relatively to the private sector."[6] During the second five year plan out of a total investment of Rs.7,772 crores, Rs.4,672 crores (60%) was in public sector. From this an amount of Rs.938 crores was invested in industries and minerals. At the end of the second five year plan the number of public sector undertakings increased to 48 with a capital investment of Rs.953 crores. (See tables 1 & 2)

2.4.5.3 Acceptance of socialistic pattern of society as the national objective further accelerated the growth of the public sector. In addition to this the need for planned and rapid development necessitated all industries of basic and strategic importance, or in the nature of public utility services, to be in the public sector. Other essential industries requiring investment on a massive scale which only the state in the present circumstances could provide, have to be in the public sector. As India is committed to the objective of a socialistic society she is increasingly compelled to enter directly into industrial and commercial activity.

2.4.5.4 Industrial Policy Resolution of 1956 gave added importance to public sector. The industrial sector was divided into three. The first category included those, the development of which was completely left to the state public sector. The second category was also to be uplifted by increased state participation. The third category was to be undertaken ordinarily through the initiative and enterprise of the private sector, though it will be open to the state to start any industry even in this category.

2.4.5.5 The third five year plan considered the public sector as a decisive instrument which the state could employ in preventing concentration of economic power and growth of

monopolistic tendencies. The rapid expansion of public sector serves a two-fold purpose, to remove certain basic deficiencies in the economic structure and the other to reduce the scope for accumulation of wealth and large incomes in private hands. As the share of public sector increases, its role in economic growth will become even more strategic and it will be in a better and stronger position to determine the character and functioning of the economy as a whole.

2.4.5.6 Out of the total investment of Rs.12,767 crores in the third plan the investment in the public sector came to Rs.8,577crores. Compared to all the five year plans the investment in public sector during the third five year plan was percentage-wise the maximum ie. 67%. Of this investment in industries and minerals was over 20% (Rs.1,726 crores). At the end of the third five year plan the total number of public sector undertakings was 85 and the total investment Rs.3,902 crores.

2.4.5.7 The public sector investment in the fourth and fifth plans were of the order of Rs.13,600 and 31,400 crores (60% and 66% of the total outlay) respectively. The total investment in industries and minerals in the corresponding periods went upto Rs.2,864 and Rs.7,362 respectively which formed 18.2% and 18.7% of the total outlay in public sector.

On 1st April 1974 the total investment in the 122 public sector undertakings went up to Rs.6,237 crores.

2.4.5.8 Rs.8,577 crores out of the total investment of Rs.12,767 crores is the outlay meant for public sector during sixth five year plan.

2.6 On 1st April 1979 the investment in the 176 public sector undertakings which came under the Bureau of Public Enterprises was Rs.15,602 crores. (See table 3)

Today the public sector covers a vast and varied range of activities, eg. mining and metallurgy, manufacture of electrical goods, machine tools, chemicals and fertilizers, building of ships, aircraft and locomotives, building and constructions, oil exploration and refining, provision of air, sea and road transport, industrial financing, life insurance etc. Its total investment exceeded Rs.30,000 crores in heavy and basic industries and infrastructure facilities like power, transport and communication alone. By this time the public sector undertakings in India grew enormously in their size and completely both individually and collectively.

"A study of large enterprises in India during 1977-78 showed that 51 public enterprises accounted for 80% of the total assets and 70% of the total net sales of the 101 corporate giants. The first twelve giant enterprises

were public enterprises and the private sector giant, the Tata Steel, was only thirteenth in the combined list. Further the top 25 of the enterprises in terms of total assets, 22 were public enterprises.[7] (see table 4)

2.7 The growth and magnitude of the public sector can be summed up as below: Before the commencement of planning in India, activity in public sector was confined to sectors like railways, ports, communications, broadcasting, irrigation and power and a few departmental industrial undertakings such as the ordinance factories, railway workshops and Post & Telegraphs. Since then the public sector has grown at a phenomenal rate.

2.8 Importance of Finance Management in Public Sector

The performance of the public sector for the last three decades has not come up to the expectations. Many enterprises in the public sector have failed either to generate adequate surplus for their own growth or to contribute any revenue to the national exchequer. In spite of the privileged position and the concessions and subsidies many of them enjoy, quite a number of these undertakings have eroded their paid up capital and accumulated losses. This has often been justified under the cover of social responsibility.

Even though the public sector had grown in size both in number of employees and capital investment the

management of these units seems to be far from satisfaction. There are several factors that have adversely affected the working of these organisations. They may be broadly classified as internal and external. The internal factors are related to the functional areas such as general administration, personnel, production, marketing and finance.

2.8.1 Although these factors have greatly retarded the growth of the public sector enterprises the greatest harm was done by unsound finance management especially due to the lack of financial planning and control. The vital role of financial planning and control in public sector undertakings can be viewed from two angles.

1) Paramount importance of its role.

2) How little is done in this direction.

It is said that "Management is essentially financial management because managerial efficiency is most clearly and discernable reflected in financial terms. Managers at all levels must be conscious of the financial implications of their actions and all decisions must be evaluated by them in terms of the cost involved."[8] Viewed from this angle, financial planning is total planning for the corporate body as a whole. This emphasises the need for a corporate rather than a functional outlook for financial planning and control in public sector. However, the sad fact is that

managers do not adopt even a functional outlook in many instances.

2.8.2 On the other hand, it is a fact that in many of the concerns even financial management as a separate function is being handled quite unsatisfactorily. Public enterprises in many cases do not have a basic framework in which efficient financial management is possible. A large number of public enterprises have no manual laying down the procedure for computation and maintenance of accounts and no inventory control methods. In many cases large amounts of capital is blocked in inventories and receivables. All this is a manifestation of inadequate professionalisation of management.

2.8.3 The necessity of sound financial planning and control assumes great importance in view of the huge investment in public sector undertakings, exceeding Rs.16,000 crores upto 1978-79. It is to be rated that an investment of this magnitude is made in a capital poor economy like India struggling for growth and development.

2.8.4 It is rather distressing that the return on investment in these units has been very meagre. The lower returns are being justified on the ground that the government has gone to those industries which are capital-intensive. But this is a fallacy, for there are a number of capital-intensive industries in the private sector which are showing

higher returns. It is true that the social investment largely accounts for the low rate of returns; even so, the responsibility for sound financial management cannot be under rated.

2.8.5 The losses incurred by public sector undertakings are really shocking around Rs.870 crores since inception. A country such as India which is at the thresh-hold of industrialisation cannot afford to bear such losses. These losses need not be due to the failure of financial planning and control alone. It is observed that "Public enterprises are often accused of lacking in cost-consciousness. This may be partly due to the lack of result-oriented approach and profit-consciousness and over-emphasis on procedures rather than performance. It is also said that the public enterprise manager has no direct financial stake in the operations; and deterrents to inefficient performance are also non-existent".[9]

2.8.6 In this context I.M.D. Little of Oxford University has commented :

1) "I have not discovered any national approach to project selection in public sector in India.

2) There seems to be quite insufficient cost-consciousness. This goes for the choice of projects, the design of projects and also the running of projects.

3) If Indian decision-makers become more cost-conscious,

there will be the problem of getting consultants to design with more of an eye to Indian scarcities."[10]

2.8.7 In making capital expenditure decisions an unjustifiable haste and over-enthusiasm of certain vested interests to launch the project at any cost often proved to be disastrous.

Above the weakness of capital budgeting Khera says "Capital budget estimates are knowingly kept low, so as to get the project through the several financial and other hurdles that would hold up its start. There is then the inevitable result that haunts every cost going far beyond the original estimates upon which the government had made the appropriate financial provision and parliament had approved it."[11] Again releasing the fund for project purposes involves delay. "Another problem in capital budgeting arises from the need, in the case of a major project, to secure reasonably assured finance over a forward period of several years, which our governmental system does not allow parliamentary sanctions to be obtained for more than one year at a time."[12]

2.8.8 Usually public enterprises follow the traditional pattern of budgetary forms and procedures. The classification of expenditure adopted in the budgets does not link expenditure with activities and end results, though this is a necessary requirement for performance evaluation. The

budgets are also not prepared in sufficient detail and only serves as a base for obtaining funds. It is not an instrument of controlling expenditure levels. They do not serve as a management control tool either. Some of the larger public enterprises have made a beginning by showing the distribution of expenditure in terms of end-results and the distribution of costs in terms of the major constituents of the product mix, thus satisfying the basic requirement of performance budgeting. The fact, however, remains that public sector enterprises do not make use of comprehensive business type budgeting control system.

2.8.9 In some of the public sector undertakings cost analysis is not done properly and there is no proper integration of cost accounting with financial accounting and overall budgeting.

These observations indicates that financial planning and control are a neglected area in the public sector concerns and this has retarded the rapid growth of the public sector.

2.8.10 The report of the Bureau of Public Enterprises on the working of the industries and commercial undertakings of central government for the year ended 1978-79 stated that as "In 1978-79, 159 operating public sector organisations made a profit of Rs.193.45 crores before tax, (an increase of over Rs.159.54 crores made in the previous year). But after payment

of tax the profit was reduced to a net loss of Rs.31.96 crores.[13] (In 1977-78 this loss was Rs.14.42 crores.) Even the number of concerns incurring losses has increased from 25 in 1968-69 to 61 in 1977-78 and the losses incurred by them increased from Rs.52.81 crores in 1968-69 to Rs.391.61 crores in 1977-78. The losses for Coal India and its subsidiaries in 1978-79 was Rs.212 crores which was higher than Rs.100 crores of 1977-78. "In 1976-77, as many as 43 units out of 135 undertakings with a capital investment of over Rs.3,600 crores incurred a total loss of Rs.146.91 crores."[14]

2.8.11 Nevertheless, one cannot deny the fact that the public sector has made significant contributions to our national economy. It has played a crucial role in implementing the industrial policy resolution of 1948 and 1956. In accordance with the industrial policy resolution of 1956 the state sector industries were established under the complete control and ownership of government. These include the key industries such as arms, ammunitions and such other defence items, atomic energy, iron and steel, ship building, aircraft, air transport, generation of electricity etc., and in the second group of industries - fertilizers, antibiotics, machine tools, dyestuffs etc., the public sector has been able to do partial justice. Even in the case of industries where private sector was left free to operate, the state has entered and created a healthy competitive situation.

2.8.12 The contribution to the national exchequer in the form of dividends, interest, incometax and excise duty increased from Rs.482 crores in 1969-70 to Rs.1,802 crores in 1977-78. The turnover of the products manufactured has increased from Rs.5,299 crores in 1972-73 to Rs.21,000 crores in 1979-80.[15] For social benefits and overheads the public sector undertakings expenditure had increased from Rs.41 crores in 1972-73 to Rs.95 crores in 1976-77. The amount of salaries, wages etc., paid to the employees had increased from Rs.541 crores in 1972-73 to Rs.1,408 crores in 1976-77.[16] The value of foreign exchange earned by these units increased from Rs.673 crores in 1973-74 to Rs.1,900 crores in 1978-79. It was able to provide employment for 19 lakhs people by 1978-79. It was able to produce goods worth Rs.11,400 crores by 1978-79.[17] Again the investment in public sector is increasing. "The total investment (paid up capital and long term loans) in 176 enterprises amounted to Rs.15,602 crores at the end of March 1979 compared to Rs.13,389 crores in 174 enterprises at the end of 1977-78."[18] Thus it can be seen that public sector in India had been a powerful stimulus for further growth. **(See table 5)**

2.9. Autonomy and Accountability

From the above the important role played by the public sector and its significant achievements are quite clear. It is to be pointed out that their performance is

being judged by a variety of vague objectives and considerations which afford so far uninformed criticism for the dilution of managerial accountability (see the Report of Public Sector Committee 1973). So it is all the more necessary now to lay down clearly the economical, social and financial objectives of each enterprise.

The management of the public sector should be given a large measure of administrative and financial autonomy for the effective performance of their activities especially of a commercial, industrial and financial nature or special service in public interest. But this autonomy should be subject to their accountability to government and Parliament. Government control and the parliamentary scrutiny are absolutely necessary to our set up. It is for this purpose that a separate Parliamentary Committee on Public Sector Undertakings was set up in 1964, followed by the establishment of the Bureau of Public Enterprises in 1965. An Audit Board under the supervision of Comptroller and Auditor General of India was formed in 1969 for undertaking comprehensive appraisal of the working of the government companies and corporations. These three institutions are formed to ensure the accountability of public sector consistant with their autonomy.

The accountability has to be ensured to the Board, the government and the parliament. The Board has to assess

the performance and the government has to see the concern functioning properly and give directions if necessary, and the Parliamentary Committee on Public Undertakings has to see whether their affairs are being managed in the context of efficiency and autonomy. The ethos of accountability is to be result oriented and not procedure oriented.

In his inimitable way Nehru emphasised the need for autonomy and accountability in the following words. "A government rightly has all kinds of checks, as it deals with public money, usually it has time to apply these checks; But when one deals with a plant and an enterprise where quick decisions are necessary which make a difference between success and failure, the way a government functions is not sometimes suitable. I have no doubt that the normal government procedure applied to public enterprise will lead to the failure of that enterprise. Therefore, we have to evolve a system of working public enterprises, where on one hand, there are adequate checks and protections and on the other enough freedom for the public enterprise to work quickly and without delay. Ultimately it has to be judged by the results, though one cannot judge by the financial results alone. In judging a big enterprise one has to judge by the financial results."[19]

2.10 Social Responsibility

One of the important functions of public sector

enterprise is to set social objectives and produce results. But in many of these concerns there is neither planning and programming of social activities to be performed nor any machinery in existence for the independent appraisal of the social performance. However, some of them have made substantial contributions to society in various fields. The important welfare measures started by them are the establishment of townships and extending financial assistance and starting educational institutions and hospitals. Over a period of four years ending 31st March 1979 more than 14 lakhs houses were built in new areas by the public sector. The gross capital expenditure on townships came to nearly Rs.500 crores. (Rs.484.17 crores to be exact). The investment constituted 3.53 per cent of total investment in fixed assets. Cost of maintaining these townships went up nearly by 69 crores (Rs.68.74 crores) in the year 1977-78. The social objectives either at macro-level or micro-level should be motivated by public good. There is a close connection between the social responsibility and achievements of objectives and its impact on profitability and accountability.

2.11 Conclusion

The objectives of public sector have been rarely fulfilled. The pace of march towards socialism through public sector has been slow. These concerns have hardly succeeded in generating a net surplus and it is more with

regard to state government undertakings. It has failed to reduce the regional desparities. Unemployment has been increasing day by day and strikes and lock outs are still prevalent in public sector undertakings. It can be said "Contrary to the expectations, the public sectors record performance in the last three decades or so has not been entirely satisfactory. Nor have the expectations of achieving a socialistic pattern of society been fulfilled. On the other hand, studies have shown that concentration of economic power has increased and within the corporate sector the assets of the bigger units have increased rapidly."[20] Nevertheless, it has helped the economy in some directions and prudent management of these units could prove to be fruitful in the long run.

CHAPTER - III

FINANCIAL PLANNING PROCESS

3.1 Introduction

It has been pointed in the previous chapter that many enterprises in the public sector fail to generate adequate surplus due to several factors and one of the reasons retarding their growth is unsound finance management especially in the field of financial planning and control.

3.2 The objective of this Chapter and the next is to provide a sound conceptual frame work within which a wide variety of financial planning and control decisions can be made. This is valuable more for its unsight and qualitative guidance than for its use in generating precise quantitative measure to specific questions that will be coming in the emphirical study that follows.

3.3 The discussion is focused on financial objectives, SWOT analysis, strategic and tactic planning and capital expenditure decisions. The critical role of functional plans in the overall financial planning is also highlighted.

Role of Financial Planning in Financial Management

Financial planning is an integral part of management. Planning as a function of management has been understood as a continuous process comprising ends, means, resources, implementation and control. In this process, ends imply the setting of specific goals, means specify the selection of policies, programmes and procedures used to pursue the goals, resources mean the estimation of the firm's needs, implementation calls for a design of the decision making process, and control pertains to the system of detecting, preventing, and correcting the errors on a continuous basis. Such an interpretation of planning as a managerial function is quite comprehensive and if integrated with finance, will make financial planning and financial management undistinguishable.

Objectives of Financial Planning and Control

The objectives of financial planning and control can be said to be :

1) To know the funds requirement
2) To allocate the funds most profitably
3) To measure the performance and compare it
4) To declare dividends.

In other words, financial planning is to facilitate (a) investment decision (b) financing decision (c) control decision and (d) dividend decision.

Importance of Financial Planning

1) Even though the significance of financial planning was recognised earlier, there was a total change in outlook towards the planning process after the second World War. There was general acceptance for the idea that business no longer stood helpless in the market forces. The same idea was put forward by Ernest Brech "Make trends, not follow them."[1]

2) A modern business has to operate in a complex environment.

3) The rate of technological change in the present world is very high.

4) The competition has become severe.

5) The growing size of the business makes management difficult.

6) Commitments in terms of money and time has increased.

Salient Features of Financial Planning

As was said before financial management and financial planning do not have separate identities and hence

they aim at: (1) maintaining liquidity (2) keeping business solvent (3) financing the growth and survival of the organisation. For the above purposes the financial management should have a corporate rather than a functional outlook. Finance men should be able to foresee the financial opportunities and show the profit if it carries out its strategic as well as short term plans giving due weightage to interrelationship between plans. The plan should show the capital expenditure requirements and show both internally generated and externally needed capital. Above all the organisation should have a comprehensive budgetary control system and the members of the organisation should be cost conscious.

Process of Financial Planning

The financial planning process has the following steps:

1) Classification of specific financial objectives
2) Strengths, weaknesses, opportunities and treat analysis
3) Developing financial strategies
4) Developing budgets
5) Decision making (Each of these steps are discussed separately).

What Financial Planning is not

Financial planning does not eliminate financial risk. In fact a good financial plan assesses the amount of

financial risk. Comprehensive financial plan is not the sum total of functional plans. Comprehensive financial planning is to guide the organisation as such, to attain the aims of organisation through an environment of uncertainty. Financial forecasting is the basis for financial planning. Alternatives submitted may be futuristic, but the decision is taken in the future light.

Limitations of Financial Planning

Since the future is uncertain it acts as the main limitation of financial planning. Even though we have developed systems that can assess the uncertainty and risk more or less realistically and contingency plans to cope with unanticipated forces, one cannot say that uncertainty is fully taken care of.

Changes that come in the internal and external climate of the organisation is also a limiting factor. Rapid changes in technology, political climate, organized labour unions and the community as a whole can obstruct the planning effort from achieving the desired results.

Psychological resistance (resistance to change the procedures and policies) even though they are not conducive to the present, forms a barrier.

Once capital is invested it causes the problem of inflexibility.

Assessment of capital to be invested in capital expenditure programs cannot be done accurately due to inflationary conditions and marketing forces.

Time and money that should be spent on planning is high especially in large businesses where this activity needs the most talented and generally most highly paid executives.

In small concerns planning expenditure may not commensurate with the benefit derived.

SWOT Analysis

First stage of financial planning is known as assessing the present position or corporate appraisal. It is one of the most difficult stages because financial planning is for the future which is uncertain and difficult to assess and predict. It is unpleasant for it may take false security, behind which managers find shelter, since it involves a lot of criticism and arguments which might lead to unpleasant human relations. Many a time it never goes beyond the false cover that each one is wearing. Strength, weakness, opportunity and threat (SWOT) analysis is done to provide a concrete base for the objectives of the organisation and a base line for financial strategies and tactical planning.

The following are the three different approaches for SWOT analysis:

a) The approach by the consultants,

b) One man commission or

c) the approach by a team.

If it is done by consultants the whole process is left in the hands of a few consultants. The disadvantage of this could be that the consultant may have to beg for answers. Even the answers obtained could be misleading. But the analysis will be objective and impersonal.

If it is entrusted one man commission the chief executive may sit and collect the data from his subordinates through occasional chats with his subordinates. He can give a real picture of the groups and individuals while following the culture and outlook of the company. The limitation of this approach is that it will be difficult to conduct a corporate appraisal for a large corporation, by one man.

The team approach is advocated to be the best method as the leader can lead a team from the company to proper places where strengths and weaknesses could be found. Since they are the members of the organisation and the data is collected by a group, the result will be less biased.

Thus the results of the study conducted about the present operations in a future oriented manner can be classified according to a scale of satisfaction of strengths, weaknesses, threat and opportunity.

The factors that are to be taken into consideration to appraise the present position may be broadly divided into internal and external. The internal factors may be divided into past performance sources of profit, risk analysis etc. The external factors may be classified under social responsibility of business, government restrictions and actions, purchasing power of people, external competition and environmental problems etc.

Internal factors to appraise the present position

Past performance

The company's historical performance can tell us the efficiency pattern. The best way to analyse the past is through ratios. Efficiency ratios (profit, sales, capital employed etc) can tell one the direction in which the company is going. Past ratios compared with the industrial ratios can be used as an indication of performance as compared to the industry. But the difficulty is that certain industries may not be in a position to compare with others due to differences in size, capital employed, market coverage etc. Another draw back is that it is not easy to find out the capital employed as a separate amount to assess the performance. These limitations does not mean that this ratio analysis is useless, but is should be used as an indicator.

Sources of Profits

The next step is to find out the profit on the basis of products, sales and marketing channels. The cost accounting system should be able to tell this. If it is a product costing system at work it should tell us which product is contributing towards profit. If it is a processing industry it must be able to tell us the separate process contributions and product-by-product contributions.

Risk Analysis

Risk that is associated with the company could be many but a few of them are very important such as those arising from product, supplier, market, customer and technology. Product risks relate to whether company's profit is based on a single product, or whether it is equally spread among a group of products etc. Risks associated with supplier is whether he belongs to another country or he enjoys monopoly etc. By market risk is meant the problems in the industry as a leader or weak supplier or the distribution channel one has got etc. Technological risks are those connected with the product and with the plant and machinery. It is basically the problem of absolescence in product front and production front. All these risks should be assessed before any strategic decision is taken, for this can throw light on the risk absorbing capacity of the firm.

Cost Allocation

Allocating the cost to different geographical areas and different products are important. Unless done logically this may lead to totally different answers which will give misleading indications. Since it is a planning process the planners' interest would be to find out what difference it will bring if product mix is changed or product proximity is changed. This is different from cost accounts' interest which aims at allocating the cost on the basis of some logic. Here, one is interested in post mortem whereas the other one, in dynamics of change. An important step is to examine the allocation of resources between products and to compare this with their real profit contribution. "Resources" means not only money, materials, building and plant, but also what are probably the scarcer resources of management talent, capability and technical skills. Analysis of this type is very difficult for the data concerning them may not be quite adequate or reliable. Even then an attempt in this direction will bring out more concrete results.

Productivity

The size of the company, its locational advantages or disadvantages, its degree of specialisation, quality of its products and so on, are important factors affecting productivity. Its efficiency in handling operations and

transport and services is also significant. Since the production executive has always in mind some production programmes he should look for cost reduction and technological developments possible. There is a "taken-for-granted-notion" in all companies that its production method is streamlined and hence is optimizing. This deceptive notion may prove wrong if a continuous effort is made to locate areas where cost reduction is possible.

Marketing and Distribution

In this area the company should know who are its customers, where they are located, what is their strength and whether their loyalty has been established etc. It should also have a thorough knowledge of its advertising and sales promotion activities and where it stands when compared to its competitor. Sales force also should be analysed as to how they deal with customers, whether they keep up the image of the company, how efficient the after sales service system is etc. An analytical study of the distribution channel will expose the strengths and weaknesses of the existing mode of distribution. This is important ex especially if the idea of market penetration is envisaged and product changes are anticipated.

Organisational Resources

Executives and workers form the frame work of the organisation. When one deals with organisational resources

it goes without saying that the organisational structure should be identified. "Once the structure has been identified it becomes possible to look at the impeding management processes such as succession and the strength and weaknesses of key managers and their teams."[2] The team spirit existing in the organization, the ability of its members to stretch themselves without grumbling, and to dedicate to the organisational goal achievement are important factors for effective performance. "The assessment of the management capability and dynamism is a very delicate task, yet it is one of prime importance. There is very little point in deciding to launch a range of new products if it is known that the marketing manager is incapable of making a success venture. Assessment such as this can only be made at the highest level of the organisation, which is one reason why the chief executive must be very closely involved in the appraisal."[3]

The employees' motivation is a very important activity for it directly contribute to productivity. A firm which provide enough motivation, can do better when compared with a firm whose employees are not at all motivated. The assessment of the employees' loyalty towards the organisation is another major factor. A strike or go slow due to the agitation of one or two employees which in due course obtains the sympathy of the whole working class, bringing down the company's performance. On the other hand the success of some companies, even quite larger ones, can be

traced to the inventive flair of just one or two key personal. Sometimes this may be due to the totality of relevant skills among large numbers of shop floor workers.

The above internal appraisal will bring out not only the strength, weakness, opportunity and threat, but also the internal expenditures and internal generation of revenue. The revenue generation can be improved by cost reduction methods, cost control, streamlining the production, improved inventory control etc. Internal expenditure in this connection will be on modernising the plant, replacing machineries and such other items. Such an analysis will throw light on capital expenditure programmes to be undertaken and bring out the current and fixed assets utilisation, liquidity position, solvency position, drawbacks of cash management, capital utilisation, cost compared to revenue etc.

External factors that are to be taken into account for the appraisal are the following.

Social Responsibility:

Social responsibility, is an intelligent and objective concern for the welfare of society that restrains individual and corporate behaviour from ultimately destructive activities, no matter how immediately profitable and leads in the direction of positive contributions to human betterment.

In meeting this responsibility the business should line up to its legal obligation also. In fact social attitudes towards the firm and firm's responsibility to the society have assumed great importance in recent years. Formerly people were bothered only about products. But now they are bothered about sales procedures, canvassing procedures etc.

Government restrictions and actions

M.R.T.P. Act and other Government restrictions are to be taken into consideration when assessing the business position. Taxation, safety regulations, trade union laws etc., are some of the government actions that can affect the business. Political stability is another important factor. Multinationals have more of the problem of political stability to be assessed before investing money there.

Economic Variables

Purchasing power of the people, distribution of wealth, population, availability of labour etc., are some of the relevant economical patterns to be assessed.

Competition

A complete assessment of the competitor's strengths and weaknesses will be helpful. This is discussed under sales planning.

Buying raw material

Unless the industry belongs to the primary sector the power of the suppliers to bargain on raw material supply should be assessed first. If the supplier is enjoying monopoly it should be assessed as to what will happen if the supplier is on strike or is facing any other problem. The possibility of importing raw materials, the distance to be covered etc. are questions which should be given proper consideration. Stock requirements, purchase price, discount facilities, succeptibility of the product to market conditions etc., are also to be assessed.

An environmental scanning on the availability of external finance will throw light on the finance available both short term and long term. New financial institutions both governmental and non-governmental, available bank facilities, the methods, norms and conditions of these and other leading institutions etc., should be properly studied. A thorough study of the capital market (both equity financing and debt financing) should be conducted in order to assess properly the funds available from the external sources.

Report

After analysing all the internal and external factors the last step will be to prepare a report on the corporate financial position. The report should be in detail pinpointing strength, weaknesses, opportunities and threats.

It may be divided and subdivided according to functions like general management, marketing, finance etc., and each should point out the strengths and weaknesses. If possible this report should be ranked according to the levels of satisfaction.

3.13 FINANCIAL OBJECTIVES

3.13.1 Introduction

"Objective" is a term most often used to indicate the end-point of a management programme, whether related on general or specific terms, whether qualitative or quantitative, and whether tentative and vague.

3.13.1.1 Differing divisions in a company may be working for opposing objectives, or different people in the same division may be pulling in opposite directions. This may be done in blissful ignorance, each person thinking that he is acting in the best interests of the company, occasionally, it may be deliberate.

3.13.1.2 Objectives are needed to direct and correct the planning and control process.

3.13.2 Return on Share Holders Capital (ROSC)

Return on shareholders capital (ROSC) is an important concept because it is not only a "de facto and a de jure corporate objective of any company, it can also be

measured with complete accuracy."[6] Return on investment(ROI) means the return on capital invested in a project. ROSC is the return on the shareholders capital invested in the company.

3.13.2.1 The objectives may be viewed from the sides of both the employees of the organisation and owners of the organisation, and at any time they are the maximum affected people. Both have their own objectives. These objectives may be complementary, non-interactive or even mutually exclusive.

3.13.2.2 All organisations are formed to provide a specific benefit for specific groups of beneficiaries. If an activity is thought likely to contribute to its purpose then that activity will be undertaken; if not, not. If both the shareholders and employees should be satisfied, more weightage should be given to ROSC.

3.13.2.3 Shortcomings of this view are :

1) it does not take into consideration the fact that the organisation exists to serve a purpose that lies outside the organisation.

2) it has excluded the social aspects of the organisation and

3) it may be impossible to quantify the objectives in a practical situation.

3.13.3 Return on Investment (ROI)

Another approach is to give primary emphasis on return on equity capital among multiple objectives. According to Ansoff "the primary economic objective is to optimise the long term rate of return on the equity employed in the firm." He claims that the idea of selecting rate of return as a yardstick has three distinct advantages:

(1) "Return on investment is a common and widely accepted yardstick for measuring business success.

(2) Unlike other formulations, it permits us to sidestep the present problems of what capital is to be used.

(3) Rate of return is a common and convenient yardstick for comparison of business prospects in different industries."[6]

There are a number of other objectives which contribute in different ways to the improvement of the rate of return. They are subsidiary objectives.

3.13.3.2 Ansoff has accepted the following premises to build up what he calls 'practical system of objective'.

"1) The firm has both (a) economic objectives aimed at optimising the efficiency of its total resources - conversion process and (b) 'Social' or non-economic objectives, which are the result of interaction among individual objectives of the firm's participants.

2) In most firms, the economic objectives exert the primary influence on the firm's behaviour and form the main body of explicit goals used by management for guidance and control of the firm.

3) The central purposes of the firm is to maximise long-term return on resources employed within the firm.

4) Social objectives exert a secondary, modifying and constraining influence on the management behaviour.

5) In addition to proper objectives, two related types of influences are exerted as management - responsibilities and constraints."[7]

The major drawback with the approach is that the calculation of ROI is not easy in practice for there are a good number of other variables acting on it. Even though the advocates mathematical precision with respect to ROI the subjectives cannot be quantified and they have a high bearing on ROI.

3.13.3.3 Limitations of return on investment are many and the chief ones are the following:

1) In the short period it may be more profitable to lease than to own, even though it may be detrimental in the long run. This will reflect on ROI.

2) Intensity of assets utilisation varies from one industry to another.

3) Some companies use historical costs and some use the replacement costs for asset valuation and the results are not comparable.

4) ROI ignores what may be national or company policy: eg. full employment which intensive mechanisation may not provide.

5) When dealing with multi-product and multi-division business the allocation or apportionment of assets, costs and sales revenues present formidable problems.

3.13.4 Wealth Maximisation

There are some salient features regarding objectives. They are :

1) Objectives form a hierarchy.

2) Multiplicity of objectives.

3) Objectives determine goals and standards.

4) There are long-term and short-term objectives.

"The objective of 'business' has traditionally meant that the firm is an economically or money-motivated purposive social organisation. This implies that a set of objectives or purposes can be identified in most firms, either in the explicit form as a part of firm's business plan or implicitly through past history and individual motivation of the key personnel. Traditionally the measure of success in a business firm has been profit - the excess of returns to the firm over the costs incurred - and it is this measure that has distinguished a business firm from other forms of social

organisation such as government, the church, the armed forces, non-profit making foundations etc."

3.13.4.1 According to Hussey the broad concepts of objectives can be divided into components. Like many other authorities he feels profit is a primary objective, followed by many other secondary objectives. "The primary or profit objective of the business is set in advance of strategy."[8]

3.13.4.2 The micro-economic theory of the firm gave birth to the concept of profit maximisation. Many a time profit maximisation is considered to be a single business objective. Nikita Kruschev once said "with regard to an individual enterprise, the question of profit is of great importance as an economic indicator of its efficiency."[9]

The fall of the profit maximisation theory starts with branding profit as immoral and socially unacceptable. Profit maximisation theory fails "because it is basically a steady state theory concerned with successive equilibrium conditions and is not capable of dealing distinction between short and long range horizon, and because it does not recognise the exchange between investments for current profit and therefore, future returns."[10] Total profits are not considered to be as important as earnings per share. A firm may raise total profits by issuing stock and investing it in treasury bills.

3.13.4.3 Even earnings per share is not an acceptable criteria because :

a) "This objective does not allow for the effect of dividend policy on the market price of the stock. If the objective was only to maximize earnings per share, the firm would never pay dividend."[11]

b) Another shortcoming of this objective is that it does not consider the risk or uncertainty of the prospective earnings stream.

According to Van Horne "Objective of the firm is to maximize the wealth of its present owners."[12] Along with this social considerations can also be an important company objective. He says "an objective of maximizing earnings per share may not be the same as maximizing market price per share. The market price of a firm's stock represents the local judgement of all market participants as to what the value is of the particular firm. It takes into account present and prospective future earnings per share, the timing and risk of these earnings, the dividend policy of the firm, and any other factors that bear upon the market price of the stock. The market price serves as a performance index or report card of the firm's progress; it indicates how well management is doing on behalf of its stockholders."[13]

Wealth maximization of the shareholder is an invisible market mechanism which operates on share value of the company.

If the shareholders are dissatisfied, there is a possibility of an outside takeover or a stockholders' revolt which is a sword hanging over the heads of management.

"Because maximizing shareholder wealth is consistent with the efficient allocation of resources in the economy, we shall use it as our objective in considering how financial decisions should be made."[14]

Above this primary objective the financial management will have to look into its functional objectives. These objectives may be derived objectives or could be given as specific objectives in the statements. These will be short-term objectives and long-term objectives. These objectives will be based on the functions of the financial management basically related to raising adequate capital and optimising its utilisation.

3.14 Financial Strategy

The next step in financial planning process is financial strategy. "Strategic planning process involves identification of alternatives, the collection of information, evaluation and selection of alternatives and finally the strategic decisions themselves."

3.14.1 The distinction between strategic, administrative and operating decisions is not clear-cut and often they overlap. To have a clear picture of financial strategic

planning will have to classify them. As for the operating decisions "the object is to maximize profitability of current operations."[15] Decisions like resources allocation, inventory control, budgeting etc., fall into this category. Administrative decisions are for structuring the firm in a way which creates a maximum performance potential. Decisions regarding authority and responsibility, information, distribution channel etc., fall into this category. Strategic decisions are concerned with external, rather than internal matters and have a long time-span.

3.14.2 The distinction between strategic planning and operating planning can be made through an analogy. Ansoff illustrates his view of the essential meaning of the terms with well-known cow analogy. He maintains that the operating problem is concerned with getting as much performance as possible out of the company's investment in current markets, a process which likens to 'seeking the best way to milk a cow.' Strategic problems are on a different level. They are concerned with allocating the firm's resources to activities which offer the largest potential return, which may not necessarily have anything in common with current activities "..... but if our basic interest is not the cow but is the most milk we can get for our investment, we must also make sure that we have the best cow money can buy. Strategic management can only attempt to be a more efficient milker."[16]

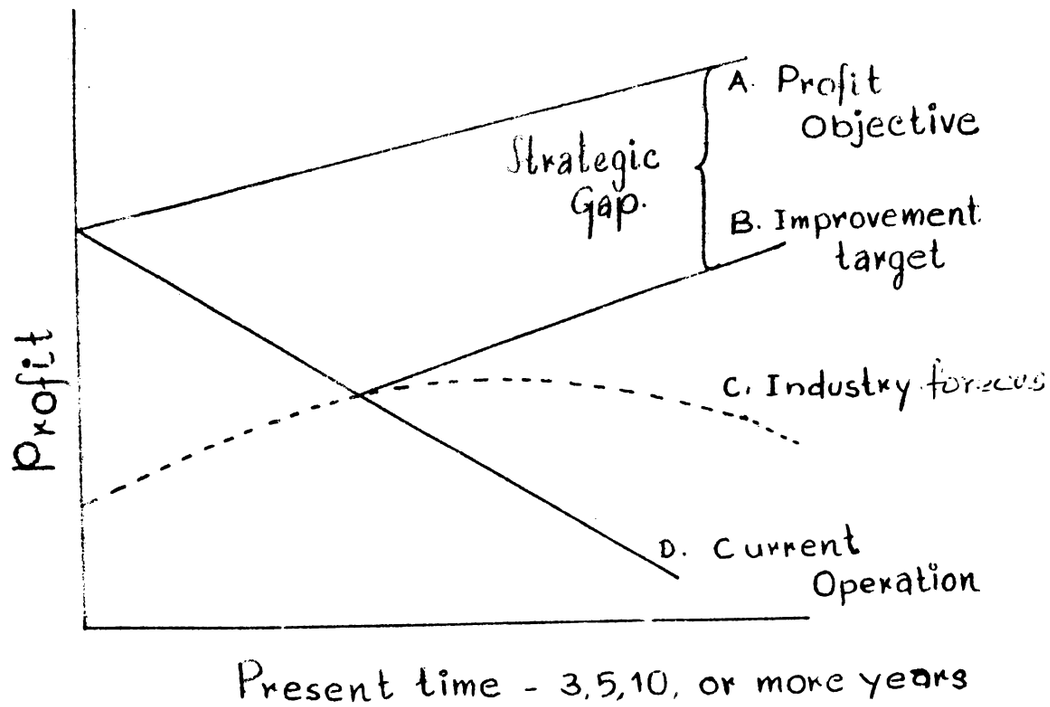
3.14.3 When Financial Strategy Used

At first the company should prepare a forecast on the assumption that the company will react to any external event in the same way as the company has reacted in the past. This forecast is based on the existing conditions. This forecast is based on the assumption that the company does not do anything new, but continues as it was doing before. The purpose of this forecast is to determine whether any new strategic decisions need to be taken. It would destroy the purpose if new policies were built into it. Secondly, a forecast that includes some new activity of which the company has no experience will be more inaccurate than one that reflects only those policies the company had hitherto pursued. Thirdly, any forecast for any company consists of a complex mix of individual assumptions, it is perhaps sensible to keep this complexity within guards by all possible means. There is a fourth justification for this forecast. Sometimes, a company that is facing a threat decides to take a rigorous action to avoid it without first calculating the consequences of it, if not avoiding it. It must sometimes be the case that standing still is preferable to stepping into the unknown and this forecast shows what the consequences of doing nothing might be. The Fo.forecast indicates whether any change in the policy is required. If there is a gap between target and forecast, then the policy makers must consider the company's strategy.

3.14.3.1 After making an Fo.forecast, if the company finds that it will reach where it wants to be, then no strategy is needed. But if there is a difference between company's targets and Fo.forecast that difference is called strategic gap. According to Hussey "Part of the disciplined thinking which must accompany the development of strategy is to assess the extent of the problem. One very useful and simple technique to assist in this is gap analysis. This sets out the targets the company is trying to achieve, what is expected from current operations and what the "gap" is between expectations and requirements. Filling the gap is what strategy is about."[17]

3.14.3.2 This diagram clearly explains the strategy used. Line 'D' measures what the company expects to achieve from its current operations, assuming that no change in strategy

[18]



is made. Line 'B' is the effect of the proposed profit improvement projects on the profits. Line 'C' is the average return, according to the industry trend. Line 'A' shows what company wants as profit. Now it is the duty of the top management to make use of strategies to close the gap between A and B which is called the strategic gap.

3.14.4 Purpose of Financial Strategy

Strategy has various purposes and, the important among them are :

1. "It must decide what opportunities it wants to pursue and what it is willing and able to accept.
2. It must decide on its scope and structure, and especially on the right balance between specialization, diversification and integration.
3. It must decide between time and money, between building its own or buying - ie. using sale of a business merger acquisition and gaint venture to attain goals.
4. It must decide on an organization structure appropriate to its economic realities, its opportunities and its programme for performance."

3.14.5 Risk and Opportunities

It is important for a business organisation to know what business it is in. If one does not have a clear idea regarding what business one is in, other firms may take

over all the opportunities and may prevent the organisation's growth; and the proverb 'where there is no vision people perish' will happen.

According to Drucker there are four kinds of risks. They are:

1. "The risk one must accept, the risk that is built into the nature of the business.
2. The risk one can afford to take.
3. The risk one cannot afford to take.
4. The risk one cannot afford not to take."[19]

3.14.6 Financial Synergy

According to Ansoff "In a majority of firms, advantage of scale exist under which a larger firm with same total sales as a number of small firms, can operate at a cost which is lower than the sum of the operating costs for separate enterprises."[20] This effect is 'synergy'. According to this two plus two gives an effect of more than four. Ansoff expressed it as ROI = $\frac{S_1 - O_1}{I}$ where a product brings in an annual sales of 'S' as operating costs of 'O' rupees are incurred for labour, materials, overhead, administration etc. Investment in the product development will come to rupees I. Suppose we want to have a similar expression for T products

$$(ROI)_T = \frac{S_T - O_T}{I_T} \quad [21]$$

By finding out where the firm's potential remains, one can say whether threre is sales synergy, investment synergy, operating synergy or management synergy.

As a corollary of this, if the product addition is wrong there will be negative synergy. This is a situation where minus two and minus two will give an effect of minus five.

By taking to consideration the opportunities, risks, synergy etc., the company should develop strategy or strategies to fill up the strategic gap. The strategy could be a purely direct financial strategy or some other strategy. This strategy is based on the SWOT analysis. The strategy should be so developed as to exploit the strengths and opportunities of the firm and to cover up its weaknesses and threats.

3.14.7 A direct financial strategy is one where steps are taken to change the capital structure, when it is found on SWOT analysis that such a change is warranted.

An indirect financial strategy is one where changes are brought about on other fields like marketing, R & D, etc., and fresh finances are sought. For this capital structure will have to be adjusted. A direct financial strategy is used if the decision is to change the mode of financing or to shuffle the capital structure. Both these strategies will

depend on the following aspects :

1. Whether the shareholders require quick return or growth.
2. Whether they prefer steady or fluctuating returns.
3. Whether it is a new business or running business.
4. The nature of the business.

3.14.7.1 Hence a financial strategy will be developed on the basis of SWOT analysis and the factors discussed above. Whatever be the strategy, finance manager will have to look into it so as to assess the impact of such strategy on the finance of the organisation. The most important impact that should be assessed is that of a particular strategy on the capital structure and the cost of capital. Once the financial manager has calculated the projected rates of return for the various proposed capital expenditures, he can rank them according to return. The next step calls for a similar ranking of the amounts that can be procured from the several sources of funds on the basis of their relative costs. Basically, the capital budgeting process is the matching of uses of funds (capital expenditures) with sources of funds (sale of capital stock, profits and debt financing). Such ranking and uses and cost will enable the financial manager to find the breakeven point in capital expenditures. The break-evenpoint is reached at a level at which the rate of return from a given project equals the cost of procuring funds for the proposed capital expenditure. Thus as long as

the cost of financing projects (cost of capital) is lower than the projected rate of return capital expenditures should continue to be made.

3.14.7.2 As the first step in this process the financial manager should look into capitalisation to see whether the company is already over-capitalised or under-capitalised. 'The term capitalisation or the valuation of capital includes capital stock and debt.' According to another approach capitalisation means a word ordinarily used to refer to the sum of the outstanding stocks and fonded obligation which may represent wholly fictitious values. But here the word capitalisation is used in the sense that it refers to the volume of capital. Capital structure refers to the composition of capital which is represented by the capital stock, long-term debt, debentures and surplus. Basic principles of capitalisation are (a) earnings theory and (b) cost theory.

3.14.7.3 According to earnings theory the capitalisation of a company should be equal to the capitalized value of its estimated earnings. The factors that are used to find out the capitalization are (a) the expected amount of earnings and (b) the fair rate of return for capital invested in the particular enterprise. The earnings divided by the rate of return of the industry will give the amount of capitalisation. According to cost theory the capitalisation is determined by the cost of fixed capital. This method is quite useful in

the case of a new company; for capital investment will give a clear idea to the promoters regarding the capital to be raised. This theory is not much effective in the cases of companies whose earnings are irregular.

3.14.7.4 Another set of features related to capitalisation is over-capitalisation and under-capitalisation. A company is said to be over-capitalised when its earnings are not large enough to yield a fair return on the amount of shares and debentures that have been issued or where the amount of securities outstanding exceeds the current value of assets . The reasons responsible for over-capitalisation are (a) promotion with inflated assets (b) high promotion expenses (c) inflationary conditions (d) shortage capital (e) defective depreciation policy (f) liberal dividend policy (g) Taxation policy etc. Over-capitalisation affects shareholders in two major ways: (a) loss of capital through depreciation and (b) market price for the shares will be less than the actual price paid by them. Over-capitalisation brings down the efficiency of the organisation by increasing fixed cost per unit.

3.14.7.5 There are three usual remedies to correct over-capitalisation. One remedy for over-capitalisation due to over-valuation of assets is to invest the earnings of the company from year to year back into the business by building new plants, and expanding old ones. This will provide adequate protection for equity. Second method is to reduce

the interest charges or by returning the debentures before maturity. Thirdly by reducing the amount of capital outstanding.

3.14.7.6 Under-capitalization means insufficiency of capital required to meet the total needs of the corporation. A corporation may be under-capitalized when it is making excessively high rate of profits as compared to the return enjoyed by similar corporations in the same industry. The usual reasons for under-capitalisation are (a) high efficiency maintained (b) under-estimation of earnings (c) conservative dividend policy and (d) unforseable increase in earnings. The after-effects of under-capitalisation are (a) consumers' feeling that they are over-charged (b) increased wage demands (c) more competitors (d) government restrictions etc. Different approaches to correct under-capitalisation are (a) declaration of bonus shares if the firm desires to reduce the price of shares of an under-capitalized successful corporation without changing capitalisation, it can split the shares and reduce the value of each share in accordance with the rate of the split-up.

3.14.8 Sources of Finance

The sources of finance can be broadly divided into internal sources and external sources.

3.14.8.1 Internal Sources of Finance

A Finance Manager has got three major internal sources available. They are tax provisions, depreciation allowance and plough back profits.

Tax Provision

Corporation tax is payable on the corporate following the end of the government financial year in which the company's year also ends. Thus the corporation tax is worked out on the profit earned in a company year, and the tax is deducted to leave the profit which may be distributed or retained. The tax so deducted is not paid until the end of the financial year. For this period of time, therefore, the company can use the tax funds. This is a sort of rolling liability.

3.14.8.2 Depreciation

From the financial point of view, depreciation seems to be the largest single source of internal funds. So the accountant depreciation is not a source of funds at all. It is an accounting process for the gradual conversion of fixed assets into earnings. Financial approach suggests that even if a company does not earn a profit on operations it would, at least, experience a cash holding by the amount of its depreciation charges - assuming that there are no capital outlays or other special transactions affecting the

cash flow. A firm finds it easier to generate cash flow through depreciation rather than from retained earnings. Depreciation is a business expense deductible from income before computation of tax liability or profit. This amount could be used as a sort of cushion to fall back.

3.14.8.3 Plough-Back Profits

The Companies (Amendment Act 1974, lays down that dividends should be paid only out of profits available after providing for depreciation as per rules and also for transferring a maximum of 10% of the profits to reserve. However, if a company voluntarily wishes to transfer a higher percentage than that prescribed, it may do so in accordance with the rules framed by the central government. These earnings could be used provided the management is sure to make a better earnings with it.

3.14.8.4 Equity

The residual owners of a corporation net-worth are the stockholders and hence they enjoy certain legal rights. This has a direct bearing on the selection of the sources of long-term funds. An all common stock structure of long-term funds has several advantages particularly to the firm with limited fixed assets and sizable fluctuation in the annual rate of profits.

Preferred stock is a hybrid corporate instrument. It has features if both the common stock and debt securities, varying according to the specific provisions of the certificate. The financial manager should be aware of the major features of both common and preferred stock.

Many corporations avoid debt financing due to insufficient and sizable fluctuations in the annual rate of profit. An important reason for an all common stock structure is that it enables management to retain complete flexibility of decision making in such areas as disposing of assets, acquiring another company through an exchange of shares, and short-term borrowing. The board in an all common stock structure also has complete freedom in distributing as much of the earnings in dividends as it wishes.

3.14.8.5 Debt Financing

Financial manager must look into other sources of financing before deciding on long-term debt financing and also be aware of major types of debt securities. He must know the potential investors and must design the way to reach them through intermediaries, direct placement etc.

In deciding whether or not to sell debt securities the financial manager must consider four basic issues: First, he must weigh the relative advantages of a long-term bond issue versus a series of term loans. Second, he must

decide whether direct placement should be made or whether the firm should use an intermediary. Third, if an intermediary is issued, should the firm seek bids or should it negotiate with one investment banker. Fourth, the monetary value of such costs as options, warrants and conversion right must be measured.

The virtues attached to long term debt financing are: (1) it permits the equity owners in a company to secure additional funds without taking equity partners (2) the interest costs of borrowing are tax deductible and (3) under favourable conditions of financial leverage incremental profits will fully accrue to the equity.

The disadvantages attached to debt financing are if the incremental profits generated by borrowed funds do not earn enough to pay the interest cost of the debt the common stockholders will be worse off. Failure to pay interest and sinking fund requirements could cause bankruptcy or other reorganisation. Thus financial manager should seek to avoid a high ratio of debt capital to equity.

3.14.8.6 Institutional Financing of Business

In India there are a good number of financial institutions which supply finance for industries. They can broadly be classified into primary institutions and secondary institutions. Primary institutions are Life Insurance Corporation, Unit Trust of India, Commercial banks, Co-operative

banks, provident fund and pensions authorities etc. The secondary institutions are international institutions, regional institutions and national institutions. Examples could be International Finance Corporation, International Bank for Reconstruction and Development etc. Asian Development Bank, World Bank etc., and Industrial Finance Corporation, Industrial Credit and Investment Corporation etc. Financial manager should exploit to the maximum the facilities rendered by these organisations. Other sources of finance for the finance manager are public deposits, foreign capital and intercorporate investment.

3.14.9 Cost of Capital

One of the most controversial concepts in finance management is cost of capital. There should be an optimum policy to be followed in financing the company, so that the value of the company is maximised is a unanimously accepted theory. It is regarding the cost of financing that two school of thoughts had emerged. One school of thought led by Modiglanni and Miller argues that the corporation's cost of capital is constant and it is independent of the method and level of financing. According to the other school of thought the cost of capital varies with the method and level of financing. Irrespective of the fact whether method and level of financing influences the cost of capital one has to measure the cost of capital. For this we have to look into the discounting rate that firm uses.

3.14.9.1 Discount rate is one by which, usually, the attractiveness of a capital investment is decided. This rate is usually the cost of capital of the firm. This rate is used to:1. "Accept a project if its net present value is positive when all cash flows are discounted at the cost of capital rate.

2. Accept a project if its internal rate of return is greater than the cost of capital.

If these rules are followed, the market price of the stock supposedly will be maximized over the long-run. The cost of capital, then, represents a cut-off rate for the allocation of capital investment projects. In theory, it should be the rate of return on a project that will leave unchanged the market price of the stock. In this sense, the cost of capital is the required rate of return needed to justify the use of capital." [22]

3.14.9.2 In order to study the cost of capital three assumptions are to be made :

a) Effect of risk on business is constant.

b) the firm follows a constant dividend policy.

c) the firm has a constant capital structure.

3.14.9.3 To find out the cost of capital of the firm one has to look into the cost of specific sources of financing. Before that it should be borne in mind that since our focus is on the valuation of the firm as a whole, we must use an

overall cost of capital as the acceptance criterion for investment proposals, even though the firm may finance one proposal with one type of financing and another proposal with another type. It is the overall mix of financing over time that is important. In order to assess the cost of a specific source of financing one has to assess the explicit cost. A source of financing which may be defined as "the discount rate that equates the present value of the funds received by the firm, met all underwriting and other costs, with the present value of expected outflows".[23] These outflows may be interest payments, repayments of principal, or dividends. "Thus, the explicit cost of a specific method of financing can be determined by solving the following equation for K.

$$I_o = \frac{C_1}{(1+K)} + \frac{C_t}{(1+K)} \cdots\cdots + \frac{C_m}{(1+K)^m}$$

Where I_o is the net amount of funds received by the firm at time o, and C_t is the flow in period t".[24] The cost of specific sources of financing can be derived from the above formula by solving the equation to find out K which is the discounting rate. Once the explicit cost of each specific source of financing is assessed, these costs can be combined to get the overall cost of capital to the firm. The specific costs to be assessed are (a) cost of debt (b) cost of preferred stock, (c) cost of equity (d) cost of retained earnings and (e) cost of depreciation. There are different approaches to assess the cost of equity like dividend/price ratio

realised yield, earnings/price ratio and dividend/price + growth rate of earnings. "Once the costs of individual components of the capital structure have been computed, these costs may be weighted according to some standard and a weighted average cost of capital calculated."[25] Advantages and disadvantages of computing the cost of capital is expressed by Van Horn as "If measured properly, a weighted average cost of capital approach can lead to optimal investment decision. The cost of capital is only a means to an end - namely that of maximizing the market price of the stock. Unfortunately, it is easy to lose sight of the objective because of the somewhat mechanical nature of the approach. By financing in specific capital structure proportions over time, the firm is able to hold financial risk constant."[26]

3.14.9.4 Optimum Capital Structure

The optimal capital structure is one at which the marginal real (both explicit and implicit) cost of each available method of financing is same. The implicit cost is expressed in terms of investors penalizing the price of the stock. According to the theory of optimum capital structure one should keep on financing till the optimum level is reached. In practice the financial manager decides this optimum level by examining the effect of leverage to analyze the relationship between earnings before interest and taxes and earnings per share. By this analysis a Earnings Before

Interest and Tax (EBIT) - Earnings per share (SPS) chart is drawn and intersection is found out.

3.15 FINANCIAL TACTICAL PLANNING

After developing a financial strategy the next step in the financial planning process is to develop a tactical plan based on the strategy. Tactical plan is financial plan usually covering a period of twelve months and coinciding with the financial year of the company. It is known under different names such as budget, profit plan, functional plan, one year plan etc., Strategic planning and tactical planning are not mutually exclusive. As Welsch says "the strategic long-range and tactical short-range profit plans normally should be developed concurrently for all practical purposes and the executives in charge of each of the responsibility centres throughout the firm should practise in their development in harmony with planning premises." [27]

3.15.1 Since both plans are prepared concurrently it should not be conceived that there is no difference between these two plans. The following are the major differences:

1. Point of view - financial strategic planning is seen from the corporate point of view or as a whole while financial tactical plan is functional in outlook.

2. Time span - Financial strategic planning usually covers long time spectrum whereas financial tactical plan is short-term.

3. Objectives of financial strategic planning are always new and without past references whereas in financial tactical plan experience will be helpful.

4. Financial strategic planning is original and is the source for other plans. Financial tactical planning is included in the strategic planning.

5. Measuring the effectiveness of a tactical plan is easier compared to that of a strategic plan.

6. Strategic planning is more uncertain compared to financial tactical planning.

3.15.2 Even though with the abovesaid differences financial strategic planning and financial tactical planning could be differentiated, many a time these differences are subtle. As Steiner says "Strategy gives rise to tactics and tactics may be considered a substrategy which, in turn, employs tactics for execution."[28]

3.15.3 Objectives of tactical planning are "(i) to provide the manager of the responsibility centre with full opportunity to sell his plans to executive management (ii) to provide the members of the executive committee an opportunity to discuss among themselves and with the responsible manager all relevant implications and assumptions implicit in his

plans and (iii) to develop the best possible plan that the combined talents of the entire group including the manager of the responsibility centre can devise."

Tactical plan is a cost-oriented plan. It divides the costs on the basis of functions. This plan is developed by functional executives and are coordinated by the finance manager into an overall plan-budget. Four functional plans namely sales plan, production plan, personnel plan and cash plan are discussed below :

3.16 SALES PLANNING

3.16.1 Importance

In an existing business the primary source of cash is sales. In a competitive market, sales plan provides the foundation for periodic planning in the firm. This is because volume of sales dictates the capital additions needed, man-power requirements, the production level and many other operational aspects. For assessing the long-range financial policies sales planning is necessary. It is based on the sales planning that the quotas for various market segments are decided. The forecast together with the budget is often used by top management for improving coordination of policies and practices in the areas of marketing production, inventory, financing personnel and purchasing. Reasonably acceptable sales forecasts can improve the efficiency of the whole organisation.

3.16.2 Steps in Sales Planning

The following are the steps followed in this respect:

1. Identification of the intolerable and uncontrollable factors that affect the general business.
2. Developing a set of criteria for selecting the uncontrollable factors.
3. Preparing a sales forecast.
4. Breaking down the industrial sales forecast to company sales forecast.
5. Integrating the sales plan with total business plan.
6. Developing a sales budget.

3.16.3 Identification of the controllable and Uncontrollable Factors

Welsch says "Fundamentally, managerial decision making entails the tasks of (i) manipulating the relevant controllable variables and (ii) taking advantage of the relevant non-controllable variables that may influence long-run operational success."[29] This is to identify the factors that affect the firm's activities. Even the relevant variables that affect the management activity can be termed as controllable and uncontrollable, external and internal. It can also be grouped according to time dimensions. The impact of variables may be different. For a large firm impact of relevant variables may come from international

market and for a small one it could be from local market. Relevant variable is that which has direct and significant impacts on the enterprise. The uncontrollable variables on which the company has no control are population, per capita increase, inflationary conditions etc., and the controllable variables are product lines, price, advertising and promotion expenditures, sales force, sales areas etc.

3.16.4 Assessing the impact of Uncontrollable Variables

The best way of looking into the uncontrollable is to look into the drafts of the National Five Year Plans which will speak about the population growth, income distribution, general economic growth, etc. The population growth may be divided into different age groups. Regarding the general economic conditions the population may be divided into different groups like high income group, low income group etc. After this, the particular group the product is intended to serve could be identified. Their behaviour should also be assessed. Analysis of the past also could be of some use. Here instead of avoiding the noncontrollable factors their impact is assessed, so that full advantage of favourable impacts can be obtained and of unfavourable impacts can be minimised. Another factor to be taken care of is the brewing government restrictions. Some organisations operate at regional, National or International level. Hence the type of the firm, the variety of products, channels

and methods of distribution, etc., also should be taken into consideration.

3.16.5 Forecast

Sales Forecast can be divided into two on the basis of period covered, namely short-term and long-term sales forecast. The drawbacks of long-term forecasts are :

1. The probability of error is high
2. Conditions in the coming period cannot be predicted with confidence.
3. It will be unrealistic to predict cost trends, competition, trend in prices etc., over a long time span.
4. It is more likely that unanticipated events can upset the calculations.

In spite of these defects long-term forecast is essential for capital investment extending over several years. The company should have a long-term sales forecast and a short-term sales forecast (operating sales forecast).

"The basic general purpose of the operating sales forecast is to predict how much of a company's output can be sold during a specific future period in certain markets." One criterion for deciding the length of operating sales forecast is that it should at least cover the manufacturing cycle. The characteristics of the product and customer demand should be taken into consideration. The degree of accuracy expected by top management, availability of statistical data, firm's accounting period etc., should be taken

into consideration. There are different methods of making the sales forecast, and the important ones are Executive opinion method, Market research, Industrial survey etc.

3.16.6 Integrating the Sales Plan with Total Business Plan

3.16.6.1 According to Kotler "Three different styles of annual planning are found in the corporate world. The first is top-down planning so called because top management sets goals as well as plans for all the lower levels of management. This model is taken from military organisation where the generals do the planning and the troop carry it out. In commercial organisations this goes along with a Theory X view of employees, that they dislike work and responsibility and prefer to be directed.

3.16.6.2 The second style is known as bottom up planning, so called because the various units of the organisation prepare their own goals and plans based on the best they think they can do, and they send them to upper management for approval. This style is based on Theory Y thinking about human nature that they participate in the planning and running of the enterprises.

3.16.6.3 Most companies use a third style known as goals down - plan up planning. Here top management takes a broad look at the company's opportunities and sets corporate goals for the year. The various centres of the company are responsible for developing plans designed to help the company reach

these goals. These plans when approved by top management became the official annual plan."[30]

3.16.6.4 The top management sets the goals for the organisation based on the long-range objectives. Suppose the goals for the coming year are decided as (1) an annual increase in sales of 10%. (2) An annual pretax profit on sales of 20% and (3) An annual pretax profit on investment of 25%. Now three forecasts are available, namely (a) Industrial forecast (b) company forecast (c) forecast based on goals of organisation. It is the duty of the chief sales executive to develop a plan that will show what should be done in order to reach the set goals. It is possible that the company need not have to take any special effort to increase the sales to the set goals for the usual growth rate of sales coincides with the set goals. If not, extra efforts will have to be put to achieve them. This plan of action for the coming year is the operating sales plan for the company for the coming year.

3.16.7 Sales Budget

Once the plan of action for the coming year is decided the top sales executive can break up the total sales plan for each month, for each product, and for each territory. Now he can spell out the expenses related to the plan of action. To increase the sales he might need sales promotion, advertisement, new salesmen etc., Here he determines the media of advertisement to be used and its cost, the sales

promotion activities to be undertaken and the funds needed for that. Thus the sales budget will show both the detailed sales plan and the expenditures related to it. Here he can make use of marketing cost analysis to help him in preparing the sales budget as explained below :

3.16.7.1 "The separable, or direct, expenses are measured and assigned directly to customers commodities and so forth.

3.16.7.2 The common or indirect expenses are allocated or assigned to functional cost groups (a functional cost group is the cost of a signle activity; thus a functional classification puts together all the expense items that have been incurred for the same activity.)

3.16.7.3 In some cases only the variable marketing expenses are included in the functional cost group. In other cases both the fixed and variable expenses are included.

3.16.7.4 The factors that measured the variability of the various marketing functions performed by the manufacturer are identified and the amounts of these factors in the aggregate are determined.

3.16.7.5 A measurement is made of the share of the variable activity of each of these functional cost groups which is utilized by the segment of sales whose cost is being measured. This indicates the share of cost of that function allocated to a particular segment of sales.

3.16.7.6 The excess or deficit of dollar gross margin over the sum of direct expenses and the share of the various functional cost group allocated to a segment of sales indicate its relative profitablity or unprofitability."[31]

A sales budget prepared on these lines will be very helpful to perform control function more efficiently.

3.17 PRODUCTION PLANNING

3.17.1 In a sellers market the capacity to produce will be an important limiting factor and so production planning assumes critical importance. In the modern world, manufacturing processes have become more and more complicated and complex as compared to production in earlier days. Owing to this the problem of production planning and budgeting has become more complex. Where production is the limiting factor, production planning is all the more important, since all other budgets will be based on it. This criterion is more applicable to firms enjoying monopoly.

3.17.2 The crux of the production planning problem is striking an optimum balance between sales, production and inventory levels. The obstacle standing in the way is inter-departmental conflicts. Sales managers always want old products to be modified according to market demands and are against introducing new products. Production managers will prefer a low cost product which is standardized and

which can be produced without the existing system being affected. Manager in charge of inventory will prefer to have old products.continued for they are through with the sources of supply of raw materials and the procedure for procurement and issue to ensure continuous production. The possible solution for overcoming departmental conflicts will be to have co-ordination between sales, inventory and production by having a co-ordinated production budget.

3.17.3 Before making a production plan management should make the basic decisions that relate to projected employment, setting variable activity rates to employment and programming the use of resources. Only when decisions indicated above are made at higher levels for the coming period as the planning horizon, detailed scheduling can be done at lower levels taking into consideration the constraints given in the broad plan.

3.17.4 In order to make an aggregate plan for production three elements are necessary, namely

1. Projected sales
2. The period covered
3. The relevant cost

3.17.5 Sales will be taken from the sales budget if sales forms the limiting factor.

PLANNING TIME HORIZON [32]

Present period implementation of firm's already made	Firm's plan for upcoming period	Tentative plans for immediate future periods	Intermediate range plans for products and capacity	Long range plans for markets and capacities
Detailed plans and schedules for the use of the existing work force and equipment	Based on forecast of demand for this and future periods make plans for immediate capacity needs. This may involve hiring or laying off personnel setting production rates and planning for the use of overtime and inventories	Size of workforce production rates subcontracting overtime Inventories	Changes in production mix projected capacity needs for equipment and manpower	Studies of market & their locations studies of the size and location of facilities.

(Since long-range plans are strategic decisions and were already discussed, more importance is given here to coming and immediate future plans which can be called aggregate planning).

3.17.6 The most important objective of production planning is to produce the needed quantity at minimum cost. Two major factors that need consideration is optimising costs are the workforce and the needed inventory. A production plan cannot be decided without taking into consideration these two dependent variables.

3.17.7 "If inventories are used to absorb seasonal changes in demand, then capital and obsolescence costs, as well as the cost associated with its storage, insurance, and handling tend to increase. Beyond the question of seasonal factors, the use of inventory to absorb short term fluctuations incurs increases in these same costs when they are compared with some ideal or minimum inventory level that is necessary to maintain the productive process. When inventories fall below this ideal or minimum level stock-out costs and costs associated with short runs increase."[33]

3.17.8 Similarly the labour force is also costly. It is costly because of the costs arising from selection, training, and lower effectiveness etc. It may cause lockout, unemployment, compensation and can affect public relations and public image. This may result in adding or eliminating shifts. Incremental costs involved are shift premia, overhead costs etc.

3.17.9 The decision process regarding production rate, inventory, workforce etc., can be diagramatically presented.

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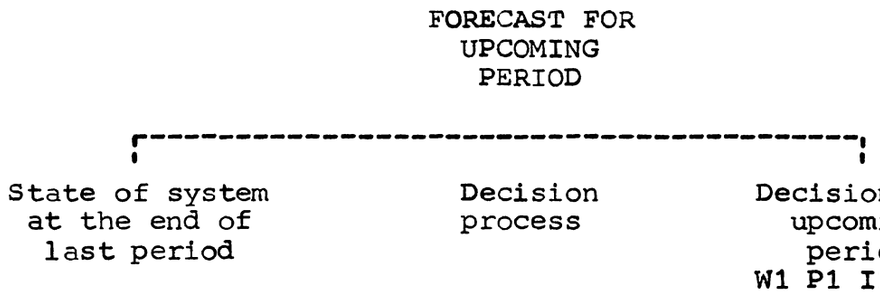


(W = Workforce, P = Production rate and I = Inventory)

Here the decision that is to be made is what should be the coming periods production rate, how much labour force is needed, and how much inventory is to be maintained by taking into consideration the demand for the coming period and state of the system (workforce, production rate, and inventory).

3.17.10 If at the end of the last period this decision is made, costs resulting from such a decision can be calculated. This decision is for the next period. The decisions for the next series of periods can be calculated in a systematic manner.

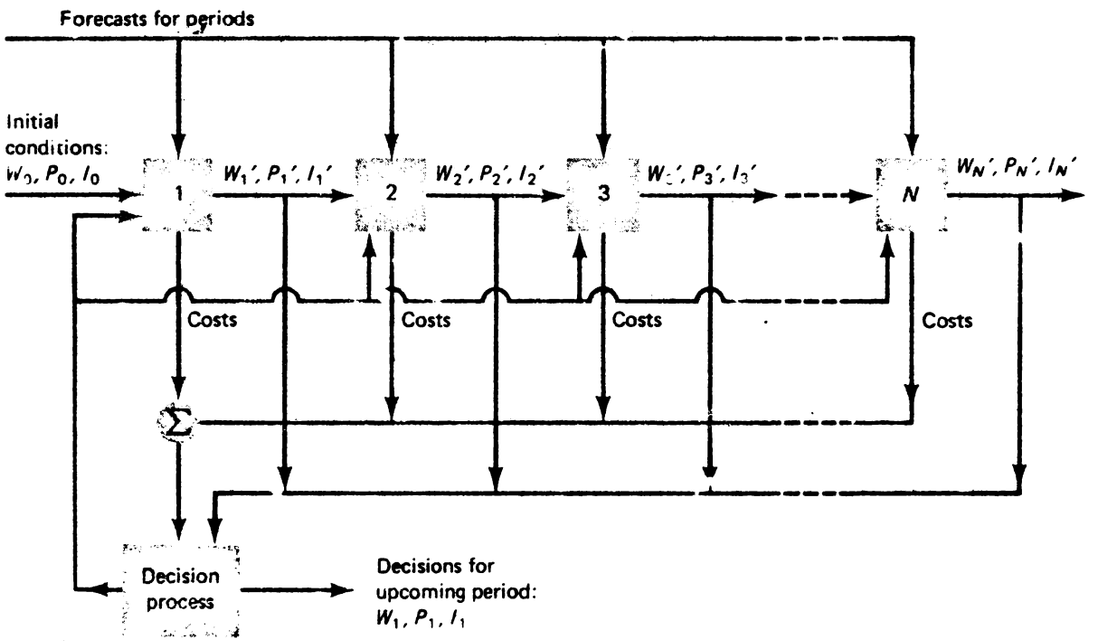


Figure 8. Multistage aggregate planning decision system for planning horizon of N periods

3.17.10.1 The above figure shows a multistage aggregate planning system in which the horizon has been expanded by means of forecast for each period. In order to make decisions concerning the workforce size and production rate for the upcoming period. One has to consider the sequence of projected decisions in relation to forecasts and their cost effects. The decision for the upcoming period will be affected by the future period forecast and the decision process must consider the cost effects of the sequence of values which occur in effect at the end of one period and the beginning of the next. The feedback loop from the 'decision process' box to the stage boxes indicate that the decision

process may involve some iterative or trial and error process in order to obtain the solution.

3.17.11 Now the question remains as to how to make a decision and what are the available techniques to facilitate such a decision making. The three widely used methods are graphic method, Linear decision rule and search decision rules.

3.17.12 From the production plan the production budget is developed. "The production budget in physical terms is an estimate of quantity to be manufactured during the budget period. In developing a production budget the first step is to establish policies relative to inventory levels. The next step is to determine the total quantity of each product that is to be manufactured during the budget period and the 3rd step is to schedule or porate this production to interim periods.

3.17.13 In short, the following considerations should be given in preparing the production budget :

1. Optimum production capacity.
2. Management policies regarding inventory control, buying, manufacturing and labour relations.
3. Inventory investment, storage facilities, suppliers etc.
4. Plant utilizations under existing condition.
5. Financial restrictions.
6. Principal budget factor.
7. Economical lots of production run.

8. The effect of the length of the processing period.
9. Production requirement (for stock, direct delivery or partially stock and delivery).

3.17.14 Inventory levels

The major goal of inventory control is to discover and maintain the optimum level of inventory investments. In this there are two implicit costs involved :
1. More investment in inventory will lead to unnecessary carrying costs, obsolescence and risk due to market condition and (2) a lower inventory stock will lead to production interruption, economic disasters to the company and high costs due to unplanned buying at contingencies.

There are some advantages attached to inventory holding. Inventories are cushions to absorb planning errors and unforeseen fluctuations in supply and demand and facilitate smooth production and marketing operations. Further, inventories help to isolate or maximize the interdependence of all parts of the organisation, so that each department may work effectively; for example, many parts and sub assemblies may be purchased or manufactured, stored and used as needed.

There is a mistake notion that inventory control is nothing but testing clerical accuracy. But the main objective of inventory control is to maximise the

profitability of the concern by balancing inventory investment against what is needed to sustain smooth operation.

As far as inventory is concerned, looking from c costing point of view there are two costs namely cost of carrying the inventory and the cost of not carrying sufficient inventory. The economics of inventory reflects the minimisation of the total of these two costs.

3.17.15 After finding out the production for the different periods of time, expenses that are related to such quantity of production are tabulated. The labour costs usually will be worked out by the personnel department. But the production budget should include the direct and indirect labour cost that is related to specific quantities of production. Similarly the material cost - direct and indirect, power, fuel and oil and other related costs should be worked out for the specified quantity and should be included in the production budget. The production budget will show the production quantity and cost related to that quantity. The quantity specified will be optimum production based on possible capacity utilisation decided as was said before.

3.18 PERSONNEL PLANNING

Just as finance emphasises costs and margins, and markets stress the customer, personnel is people oriented. Success here will depend upon the degree to which they are

perceived as making hardheaded realistic contribution to the solution of management problems.

3.18.1.1 Many a time the nature of personnel function is often confusing and ambiguous. Personnel is trying to solve the human problem and despite much social research, the behaviour of human being is less predictable. One of the important personnel functions is to help line management learn to detect and solve it's own problems. To detect the problems of line managers and to identify the trouble spots of the organisation need unusual personalities. Problems of personnel management are ever-growing, for the human beings environment is constantly changing. The ability of the personnel department lies in gaining confidence and respect of the members of other departments. Instead of forcing himself, the personnel manager should be able to persuade other departments that he is trying to help them with their problems and to meet their objectives. This calls for a close co-ordination between personnel and other functions of the organisation.

3.18.1.2 Looking to the future of personnel it seems that a heavier proportion of time and efforts will be devoted to planning and control functions. As companies have become much more planning conscious in other fields (marketing, finance, production) they have also sought to establish clearer policies as to their requirements and usage of human resources.

3.18.2 Manpower Planning

Manpower planning is a system which ensures availability of men in terms of quality and quantity as and when needed over a period of time. Thus manpower planning leads to better selection of personnel and effective job assignment. It helps the management to review the performance of its personnel and other matters like promotion, transfer etc. Manpower planning establishes job specification or the qualitative requirements of jobs determines the number of people required and finds supply source to fill the requirements.

3.18.2.1 Manpower planning is required (1) to assess the manpower requirement (2) to look into the possibility of the internal sources (3) to assess the specific training requirements.

3.18.2.2 Manpower planning involves two procedures : (1) demand estimation and (2) supply plan preparation. Demand could be due to retirement or due to new jobs. The supply could be from external source or internal source. While preparing the manpower plan the points to be remembered are (a) quantitative (b) qualitative (c) temporal (d) locational (e) job positional. Each aspect looks into specific need of the requirement. "Planning for demand and supply of right kind of manpower in right numbers at right times and places and for right jobs must be followed by plans for mobilisation of human resources by way of external

recruitment on one side and transfers and promotions on the other."[36]

3.18.2.3 It must be borne in mind that manpower plan is not a separate plan and a careful investigation reveals that it is the manpower demand plan that is a derivative plan of the business plan and the organisational plan. Manpower planning requires assistance from a number of disciplines. The problems of manpower planning are basically behavioural. Manpower planning in India is facing a different problem today. "The acute shortage of different categories of manpower which characterised the labour market during the first and second plans and to a lesser extent during the third plan have vanished to a large extent. In many categories as for example engineers and agricultural acientists, the current supply is in excess of the capacity of the economy to absorb the available supply."[37]

3.18.2.4 Two of the limitations of manpower planning are: (1) forecasting is not an exact science and (2) changes in the economic conditions can affect manpower planning. If too long periods are chosen the inability to predict effectively the likely changes in the economic, social and technological spheres makes the manpower forecast less accurate.

3.18.3 PERSONNEL BUDGET

Personnel budget should be prepared by the personnel department on the basis of the manpower planning. Different grades of labour on the basis of skill and experience required for each job and the quantity of labour power should be taken into consideration. It should include all the expenses related to selection, recruitment and training. Salaries, wage incentives and other aminities, should be shown for each individual employee. Expenditures with regard to changes in the work conditions and long-term wage agreements should be reflected in it.

Any contingencies that are anticipated should find provision in the budget.

3.19 CASH PLANNING

3.19.1 Cash planning otherwise called liquidity management is part and parcel of finance management. Liquidity is directly related to profitability. Even though the firm should have sufficient cash at its disposal to meet the day-to-day requirements. Both long-range planning and short-range planning should exist in an organisation. To know the short-term uses and sources of cash, an organisation should have short-term cash planning.

3.19.2 The Objectives of cash plan are given below :

1. Establish a co-ordination between working capital, sales, investment and debt.
2. Find out the excess or shortage of cash
3. Arrange for short-term borrowing or invest idle cash
4. Make sound bases for credit and a basis for current control of the cash position.
5. Find out the probable cash position out of the planned operations.

A cash plan should estimate both the cash receipts and cash disbursements. To estimate the cash disbursements and receipts the organisation should look into the nature and performance of working capital.

3.19.3 Working Capital

Working capital can be divided into net working capital and gross working capital. Net working capital is an excess of current assets over current liabilities. Gross working capital means total current assets. The distinction between gross working capital and net working capital is necessary to determine the amount and nature of assets that may be used to meet current liabilities. If there is any cash surplus, that could be used to meet future operational needs.

3.19.3.1 Circulating capital is a better term for working capital. It keeps on changing form cash to operating expenses to production to sales to receivables and to cash. This shows the circulatory nature of the current assets. Working capital can be divided on the basis of time.

1. Fixed working capital, and
2. Permanent working capital.

3.19.3.2 Part of the investment on current assets is known as permanent working capital and can be defined as that amount of funds required to produce a certain volume of goods and services in a given period of time. This amount is permanently sunk in current assets, but it may change it's shape. This amount increases after each cycle of operation and remains with the firm. Even the permanent working capital can be classified as initial working capital and regular working capital. "Initial working capital is the amount of cash required to initiate the circulation and keep it moving till inflow of the business starts generating funds and the cash inflow by way of receivables becomes greater than cash outflow in various activities of a firm."[38] Once the firm gets established, this initial working capital will be replaced partly by credit and that amount could be used for some other purpose. Regular working capital is found in the business because every company needs such an excess of current assets over current liabilities as is necessary to maintain

the circulation of the capital from cash inventories to receivables and back again into cash. The investment in regular working capital is rather fixed in nature and hence the fund for this purpose should be furnished on a long-term basis. Variable working capital also can be divided into seasonal working capital and contingency working capital. Seasonal working capital is due to demand factor. Contingencies come out of rise in prices, natural calamities, war etc. These temporary needs of working capital are usually met by bank loans, cash credit etc., Lack of adequate working capital can affect the profitability and liquidity and result in decline in efficiency.

Two kinds of factors, namely environmental factors and internal factors, influence the working capital. Environmental factors could be availability of raw material, income rise, conditions of demand, inflationary conditions etc. The internal factors are nature of the industry, size of the inventory, credit policy etc.

3.19.3.3 Components of Working Capital

Major components of working capital are inventory, receivables and cash.

3.19.3.3.1 Inventory can be defined as money stored in the shape of four broad categories, namely (1) Raw materials (2) Stores and spares (3) Work in progress and (4) Finished

goods. The factors that influence the inventories are 1) the uncertainties of nature (2) time needed for inventories to travel through various processes and (3) costs associated with inventories. The major cost element related to inventory is the inventory carrying cost which consists of cost of capital being tied up, cost of storage and handling and cost due to spoilage. The level of inventory is decided by taking into consideration the lead time, anticipation stock, stock out costs, safety stocks etc.

3.19.3.3.2 Credit sales can take any shape like notes receivables, bills receivables, book debts etc. A considerable amount of current assets is constituted by accounts receivables. The costs related to receivables are opportunity cost of cash tied in credit sales, collection cost and the element of doubtful or bad debts. The extent of receivables depends on the credit sales and internal policies, cash discount, debt collection period etc. Cash discount is allowed in order to have the speedy recovery of the outstanding debts. The length of the credit period has a cost of capital which can affect the firm's net worth. It is the duty of the finance manager to initiate a credit policy which has the lowest cost of capital. Another aspect the financial manager should consider is the credit risk. The importance of credit risk can be seen from the following effects :

1. The amount of time required to collect an account increases with the increase of risk default.
2. The cost of collection increases as risk increases.
3. The longer it takes to collect an account the greater to the firm is the investment in that account and
4. The present value of the returns on an account decreases in relation to the amount of time needed to collect the account.

3.19.3.3.3 In this respect the finance manager can classify debtors into different groups on the basis of risk. Once this is done the finance manager should see that the firm's cost of capital is recorded through different categories. The finance manager should also see that the firm has got a streamlined debt collection procedure. In developed countries the debt collection will be entrusted with specialised agencies on a commission basis or the responsibility of debt collection will be sold to jobbers who will bear the risks such as bad debt loss.

The general principle accepted with regard to each balance is that since the organisation wants to remain fully invested it should keep cash at a minimum level. Operating with minimum cash balance can benefit a company in two ways, first when fully invested each rupee remains active and adds to the profit of the firm and at the same time reduces the dependence on an outside sources of finance. The three

The three major motives behind holding a cash balance are (1) transactionary motive to meet the transactions like purchases, labour, taxes etc. (2) precautionary motive is to meet the contingencies and (3) speculative motive is to take the advantages of profitable opportunities. The factor that influences the cash position are sales pattern, debt collection policy, composition of debt, nature of business, inventory needs and cash disbursements.

3.19.4 Once the finance manager gets an insight into the working capital he can easily prepare a list of cash inflows and cash disbursement for the coming period. This will be in the form of cash flow statement. Once the cash flow statement is prepared there will be certain periods when cash inflow is more than the cash outflow and periods when cash outflow is more than the inflow. If the inflow is more, he should think of the most profitable way of investing them and when cash outflow is more he should think of how to finance them.

3.19.4.1 When cash outflow becomes more than cash inflow, there are many short-term financing facilities for the finance manager like :

1) Bank credit:

i) Cash credit arrangement

ii) Overdraft arrangement

iii) Loan arrangement

iv) Bills discounting facilities

2) Advance against raw material

3) Advance against finished goods

4) Advance against work-in-progress.

3.19.4.2 Before going for external sources of financing the finance manager should look into the internal sources like undistributed surplus and depreciation. Once the inflows and outflows are matched taking into consideration the minimum cash requirements, the finance manager should prepare a cash budget.

3.20 CAPITAL EXPENDITURE PLANNING

3.20.1 Without much exaggeration we can say that no area of decision-making is as important as capital expenditure decision. Any type of investment commitment is for the purpose of earning a satisfactory return on the funds invested, spread over a period of time. Usually, the word 'investment' is associated with stocks and bonds. But the same return on investment principle is applicable in the field of investing funds in plant, machinery, building and other assets.

3.20.1.1 The main problems associated with investment problems are (1) Screening problem and (2) Preference problem or Ranking problem. First one is connected with screening all investment proposals to reject those which will not give a satisfactory return and second one that of

choosing the best alternative. Capital expenditure may be:-

Expansion programme, cost reduction programme, buy, lease or produce, choice of equipment, strategic commitments etc.

3.20.1.2 Capital expenditure planning is an activity of allocating limited resources to various demands. A capital expenditure may be defined as any expenditure other than operating expenditure, the benefits of which extended over a period of time exceeding one year. The key characteristic of capital expenditure is that at least a major part of the expenditure is made at one point of time and the benefits are realised at different points of time in future.

3.20.1.3 From the above the salient features of capital expenditure are

i) Usually a large sum of money

ii) a stream of future earnings

iii) a single lumpsum invested at a particular time

iv) benefits realised at different points of time in future.

Some basic concepts are to be borne in mind while deciding on capital expenditure.

3.20.2 Resources Allocation

Whatever be the size of the firm, from the point of view of economy its resources are limited. It is the

challenge and responsibility of the top management to see that these limited resources are allocated to those activities which yield maximum return. Another point to be remembered is that it is this allocation which determines the survival and growth of the firm.

3.20.3 Marginal Efficiency

As more and more investments are made, the marginal efficiency (or rate of net return on cost) is likely to fall. Lindsay says "Investment tends to do away gradually with the incentive that promotes it, investment either custs costs and in the process saturates further cost-cutting possibilities or expands output and in the process saturates the market and therefore the possibility of further output-expanding investment.[39]

There are 3 types of capital expenditure, in the context of marginal efficiency concept.

(1)	A direct addition to net profit	- extramachine which will increase net profit due to increased production.
(2)	An indirect addition to net profit	- Improving working condition, investment in research etc.
(3)	No addition to net profit	- Sports centres and similar non-essentials.

3.20.3.2 A systematic capital expenditure process should include six major steps :

1) Capital expenditure forecast
2) Capital expenditure budget
3) Cash forecast
4) Cash budget
5) Detailed calculations
6) Accounting procedures

3.20.4 There are varying opinions regarding how much should be the time length of the forecast. The only thing to be remembered is that the shorter the period the more accurate and more precise can the data be. Again it should be remembered that forecast is only a step for budget preparation; rather it gives only guidelines. Whatever possible, it should be supported with cost figures. The period of forecast should be longer than budget period for which it is made.

3.20.4.1 Budget is more concrete and it covers only a period of 12 months. Many a time, capital expenditure will be spread over a number of years. In that case, the amount that should be allocated to the project should be included in the budget. Timing of new assets to be brought and new projects which start during the year under consideration should be included with specification of date. Profitability should be considered along with other factors like safety giving them due preferences in the budget.

3.20.5 Along with the budget forecast, there should be a cash forecast, so that relevant steps are taken to cover the cash requirements as they arise. On the basis of the cash forecast, a cash budget should be developed which shows from what source the expenditure will be financed. Once the source of finance is decided the cost of capital should be calculated. The screening and the selection from among the alternative investment are made only after calculating the cost of capital. It is here that the different methods of finding out the best investment alternative are used. Once the best investment decision is made, the accounting procedures are used to implement the decision.

3.20.6 Administrative and economic aspects should be taken into consideration. Amount spent for research and initial capital expenditure should be included. From the economic evaluation point of view, it should provide information that indicates the economic consequences of investment decisions.

The profitability of the selected projects should be given adequate consideration. There is a tendency to regard all capital expenditures as a class, but whenever a classification is possible it should be done, for there is no classification system of capital expenditures that exists now.

3.20.7 Any cost incurred on past decisions (sunk out) should not be included and only future cost should be taken. In a similar way benefits out of decisions could be both past and future benefits and this should be taken into account. It is preferable to compute the benefits after deducting income tax, for income tax is indispensable. Time value of money should be considered. Certain expenses will have to be incurred to stay in the business. They cannot be avoided capital expenditure evaluation systems are meant to help the firm, but it should never be overdone in the sense, that benefits derived should be more than the cost of analysis. Even though there could be a very systematic approach to such expenditure analysis this cannot replace good judgement. The most important rule that is often overlooked is not giving enough consideration to the human aspect.

As in the case of any process the financial planning process also needs information. Information runs throughout the organisation as blood in the human system. Decision making can be made much easier with the help of certain standardised statements. The standardisation of the statements is made according to the information needs of the undertaking. Even then certain standardised statements are available. The number of the statements and its content is left to the Finance Manager to decide upon.

The essential ingrediants of financial planning and control process are the following statements.

1. Budgets
2. Projected Trading Account and Profit and Loss Account
3. Projected Balance Sheet
4. Fund flow statements and
5. Capital Expenditure Programmes.

Titles and form of these statements will vary from company to company since budgets and flow statements are discussed in detail in Chapter four. Only projected trading and profit and loss account, projected Balance Sheet and Capital Expenditure Programmes are discussed here.

1. Projected Trading and Profit and Loss Account

The form of this statement corresponds to the form of Profit and Loss Account that the company uses in its regular financial reports. The figures are projected mainly on the basis of the forecast and those of the previous period. The achievements of the previous period are also stated along with this to provide an immediate comparison to the previous performance and to show the direction of the new trend.

The period for which the statement is prepared depends on the urgency of such a statement for the company and the magnitude of the control it wants to exercise. The period may be a month, six months or one year. The maxim is longer the period lesser the accuracy.

Undertakings manufacturing a number of products may prepare a product-wise or division-wise projected trading and profit and loss account for exercising better control.

This statement can be prepared only after estimating each item of expenditure and income and hence its reliability depends on the accuracy of the forecast. If the firm is in the habit or preparing comprehensive functional budgets and a master budget these statements can be easily prepared.

2. Projected Balance Sheet

Projected Balance Sheet basically has the same form and content of a regular Balance Sheet. But usually to facilitate easier preparation and interpretation it may not be as detailed as a regular Balance Sheet. A projected balance sheet may be prepared for a period of one month or six months and even more. The projected balance sheet should show the actuals of the previous period and estimates of the coming period.

Conclusion

Financial planning is total corporate planning and all the activity in an undertaking is interwoven by a common thread money. Any organisational strategy will reflect on the financial plan. Financial plan co-ordinates the other functional plans. Financial objectives give birth to strategy which in turn introduces tactics and finally the operating plan. Failure to see financial planning as corporate planning will likely to lead to lopsided growth.

CHAPTER - IV

FINANCIAL CONTROL PROCESS

4. Financial Control offers more of an overall control than a functional control. Where other functions such as sale, production and personnel are limited to operational control, finance provides management control as a whole. Since finance is the lifeblood of a firm, a control on its utilisation can affect other functions and hence financial control is called a co-ordinated control. Functional plans being reduced to a common denominator in terms of money financial control facilitates other functional controls. Financial planning and financial control in an organisation are like the heart and the circulatory system in the human body. Financial control techniques have improved tremendously during the past few decades. Financial management has become more and more complex owing to the sophisticated business environment, cut throat competition, inflationary conditions, governmental interference etc. To understand financial control in its entirety, one should know the nature and the process of financial planning and the financial control system.

4.1 Financial Control Process :

4.1.1 Planning Vs Control : Financial planning and financial control are aptly termed as the siamese twins of management functions. They are so inseparable like the two sides of a coin. The standard is the basic criteria against which performance is measured. In fact developing the budget is the first step in financial control process and the last step in financial planning process. Planning and control are inextrically interwoven. As a matter of fact control precedes planning and also succeeds planning. One cannot develop a realistic plan without taking into account the control measures available.

4.1.2 The difference between financial planning and financial control lies in the philosophy, attitude and pursuit. Steiner says "..... the way in which a manager may go about planning for a new automobile model will vary enormously from the way in which the production line is controlled when the manufacturing process begins. To fail to distinguish between planning and control conceptually and operationally may lead to a misunderstanding not only of the processes themselves but of ways in which they interrelates."[1]

4.1.3 According to Douglas S. Sherwin "The essence of control is action which adjust operation to predetermined standards and the basis is information in the hands of

managers".[2] But this definition is only partially true since deviations to the positive side will not be brought back to predetermined standards.

4.1.4 Meaning and Definition : According to Fayol "In an undertaking control consists in verifying whether everything occurs in confirmity with the plan adopted, the instructions issued and principles established."[3] Finance will make use of operational control to optimise the cash holding, borrowing, investing etc. But since finance management should have a total corporate approach, financial control should be management control. As Anthony says "The management control system is ordinarily built around financial structure"[4]. To know financial control in detail one should know the difference between operational control and management control, for the salient features of management control are the salient features of financial control as well.

4.1.5 The purpose of management control is for ensuring that resources are obtained and used effectively and efficiently as to the accomplishment of an organisation objectives. But operational control is the process of ensuring that specific tasks are carried out effectively and efficiently.

4.1.6 The process of management control and operational control differ from each other. "Management control is a

process carried on within the framework established by strategic planning. Objectives, facilities, organisation and financial factors are more or less accepted as givens. Decision about next year's budget, for example, are constrained within policies and guidelines prescribed by top management. The management control process is intended to make possible the achievement of planned objectives as effectively and efficiently as possible within these givens"[5]. The focus of operational control is, as the definition suggests, "on individual tasks or transactions, scheduling and controlling individual jobs through a shop as contrasted with measuring the performance of the shop as a whole, procuring specific items for inventory as contrasted with the management of inventory as a whole, specific personnel actions as contrasted with personnel management and so on"[6].

4.1.7 There are areas where only management control could be used. Consider the case of legal department of a company. It is difficult to measure the quality, or even the quantity of the legal service that constitutes the output of this department. There is no formula to show the amount of service the department should render or optimum amount of costs that should be incurred. The type of control necessary in this situation is management control.

4.1.8 Difference between operational control and management control :-

1. Management control covers the whole organisation, whereas operational control is limited to a sub unit.

2. Management control is difficult because of the absence of scientific methods, whereas operational control could be much more accurate;

3. Data in an operational control system are often obtained in time (ie. they are reported as the event occurs) and relate to individual events, whereas data in management control system are often retrospective and summarise many separate events.

4. Management control system gets only approximate data, whereas operational control gets more exact data.

Management control and operational control are not mutually exclusive. According to Tucker management control concept is based on the following premises:

"1. Any event or happening in any area of a company is not autonomous, nor isolated from the company's overall economy, nor is it absolute in value.

2. Any one event is always related to other events, it is affected by or affects other events.

3. Acting on isolated events is improper managing and can be harmful.

4. Business operation consists of infinite acts, events and circumstances of different sizes, velocity of change,

degree of impact, visibility etc.

5. Maximising in any one area can cause larger negations elsewhere in the company."[7]

4.1.9 There are different systems of financial control in business organisations and various techniques had been developed with varying effects in controlling financial operations. The major systems that assumed importance in recent years are ratio analysis, budgetary control, standard costing, higher management control, operations research, linear programming, funds flow analysis, programme evaluation review technique, critical path method etc. Out of these (1) funds flow statement (2) ratio analysis (3) standard costing (4) Budgetary control and (5) Higher Management control are being used for controlling the financial performance. Before discussing these methods it is necessary to enumerate the different steps in financial control process.

4.2.1 Financial Standards

Objectives, policies, strategies and budgets are standards against which the actual and the expected performance are measured. These standards can be expressed in physical terms or rupees as sales, cash, profits or capital. Standards provide a measuring point or yardstick for progress in attaining unit objectives. There is an upper-lower limit in control. "Objectives or standards are frequently stated in terms of range - minimum to maximum beyond

which conditions are not acceptable. Within these ranges there may be fluctuations and variations in results. The extent of tolerance depends largely on the nature of the activity, the cost of more careful efforts to compress the range, and the nature of the demands being made upon the organisation -" Farland, in these words emphasises the seriousness of the deviation.

4.2.2. Measurement of Performance

The most ideal concept of measurement of performance is futuristic. If deviations from the standards are detected in advance, one can prevent their actual occurrence. Many methods are used for the measurement of actual performances.

a) Personal observation

b) Management accounting

c) Management by objectives

d) Management audit etc.

4.2.3 Variance Analysis

Once the performance is measured it should be compared with the standards set. Such a comparison will show whether the deviation is favourable or unfavourable. Many have a feeling that it is only the unfavourable variation that needs attention. This is fundamentally wrong, for, equally important is encouraging the favourable deviations. The ability to yield better results depends on the

tactfulness with which control standard is set and procedures communicated to employees. There is always a possibility of measurement and evaluation being biased. This can have serious repercussions on human beings. Workers can have serious complaints about the standards if they fail to achieve the standards and hence their incentives are held up.

4.2.4 Correction of Deviation and Review

When performance is measured and compared there could be unfavourable deviations. Correction of deviations in performance is the point at which control is seen as a part of the other managerial functions. "The managers may correct deviations by redrawing their plans or by modifying their goals. Or they may correct deviations by exercising their organising function, through reassignment or or clarification of duties. They may correct, also, by additional staffing, by better selection and training of subordinates, or by restaffing or firing. They may also correct through better directing - fuller explanation of the job or stronger leadership."[9] Another aspect is that "An evaluation may lead to one of the following conclusions: the standards were set wrong, there is a need to 'tighten up' and obtain concurrence between standards and inputs or performance, new motivational technics are needed to gain compliance with standards, or maintenance of the current deviation should be attempted".[10]

Once the corrective action is taken, it is the duty of the manager to look into the problem whether such a corrective action was effective or not.

FUNDS FLOW ANALYSIS

4.3.1 Management has great need for a statement to show the sources and application of funds. This statement is prepared to co-ordinate the balance sheet and the income statement data. In so doing, it shows management the answers to such questions as to where the money came from and where it was spent. The accountant must remember that the manager will make decisions based on what he sees in the financial statement. The accountant must present financial facts in the form that suits the manager and at the same time present them clearly in order to prevent wrong decisions.

The flow of funds is a continuous process. For any funds used there must be a source. The assets side of a balance sheet shows the application of funds and the liabilities side the sources of funds. The funds statement show the flow of funds between two points of time.

4.3.2 Funds statement may be classified into three types as follows :

i) "Capital analysis which explains balance sheet changes and application of money provided by financing ;

ii) An analysis of funds provided and funds applied using cash balance approach.

iii) Analysis of funds provided and funds applied using the working capital approach".

Capital analysis:

Of the above three, the first one shows only whether there is any increase or decrease in assets or liabilities.

4.3.4 Cash Balance Approach

In this approach the flow is found from the opening balance of cash to closing cash balance. This statement explores where did the money come from and where did it go. The method of finding the fund flow under this method is:- 1) classifying net balance sheet changes that occur between two points in time into changes that increase cash and changes that decrease cash; (2) classifying from the income statement and surplus statement the factors that increase cash and the factors that decrease cash and (3) consolidating this information in a source and use of funds statement form.

Sources and applications of funds can broadly be indicated as :

Funds availed from	Funds used for
1. Share holders	Dividends
2. Loans and Deposits	Debt retirement
3. Sales, subsidies and inventory reduction	operating costs(materials, wages, expenses and taxes)

4. Disposal of investments Acquisition of investments

5. Disposal of fixed assets Acquisition of fixed assets

4.3.4.1 From the above statement one can draw some general principles regarding cash flow in a balance sheet.

A) An increase in any asset item is an application of fund;

B) An increase in any liability item is a source of fund;

C) A decrease in any asset item is a source of fund;

D) A decrease in any liability item is an application of fund;

In a similar manner, regarding income statements also some generalisations can be drawn.

"a) Sales ---- Cash in flow ----- Source of funds

b) Cost of sales ----- Cash outflow ---- application of funds

c) Taxes and Dividends ---- cash outflow ---application of funds

d) Profit retained----net cash inflow---Net source of funds

or

Loss-----Net cash outflow------Net application of fund."[12]

Depreciation is neither a source nor an application of funds:

But when income statements are analysed it should be considered as a source of fund and not an application. Once the income statements and balance sheet are classified according to uses and sources of funds they can be presented in statements called sources and uses of funds.(Sources and uses will tally). The difference between the first balance sheet and the second balance sheet is expressed with reference

to the increase or decrease in cash.

4.3.5 Working Capital Approach

Working capital statement is very similar to sources and uses of funds statement with the exception that the latter takes into account working capital instead of cash. As Van Horne says "the only difference between this statement and a funds statement on a cash basis is the omission of changes in the various components of current assets and current liabilities"[13]. Hence the difference between sources and uses of funds are taken as increase or decrease of working capital. In other words funds statement shows net increase or decrease in net working capital. If the net working capital increases it can be due to :-

a) Decrease in fixed assets (disposal of machineries, investments etc.,
b) Due to increase in long term liabilities (like additional debt, capital etc.)

If the net working capital decreases, it can be due to:

a) Acquiring fixed assets or
b) Repayment of long term loans.

Flow of funds could be in four different directions:

a) from short term sources to short term uses;
b) from short term uses to long term uses;
c) from short term sources to long term uses;

d) from long term uses to short term uses;

e) from long term sources to short term uses;

f) from long term sources to long term uses;

In essence, the funds analysis will show the flow of funds into the firm and uses for which such funds flow out during the same period.

4.3.6 Application of Funds Flow

1. The daily cash report (receipts and payments) can be expanded to include funds position giving the opening and closing balances of each fund item and of funds in total for the day and month to-date together with the notation at the bottom of coming requirements.

2. From funds statements the statements of funds generated by operations of each plants could be made and responsibility could be fixed.

3. It can be used in break even analysis to determine the minimum level of outlay of activity required where funds provided by sales will equal outlays.

The fund represents the firms cash, temporary investments in marketable securities and accounts receivables minus wages and account payable at any time. The concept employed therein is theoretical revolving fund.

The potential use of funds statement is as a tool for control of cash. Fund flow statements provide automatic

control over all the items if flow chart is drawn. If there is a fund flow statement projected for an year and if it carries monthwise balances the statement could be used in the same way as budgets are used for control. The fund flow statement will lead to exercising more control in capital investment projects by facilitating comparison of the projected cash flow and actual cash flow.

BUDGETARY CONTROL

4.4 If one looks into a giant corporation like Dupont, Ford, General Motors, Hindustan Steel etc., one will find there are thousands of activities with pre-determined targets. If the same person wants to measure the performance of all these activities compare these with targets, find deviations and suggest remedial measures, it is most likely that he will find that his life span is not enough to do the job. Management is not much bothered about the activities that follow according to the plan. It is neither worried about the insignificant activities that do not go according to the plan. It is really concerned with those significant activities that do not go according to the plan and only these activities are reported to the top management. Management of this nature is called management by exception which is the corner stone of budgetary control. The major drawback of management by exception is that many a time it overlooks the strategic points. Some activities which management

has left out as insignificant might have assumed strategic importance in the changing environment. These points might have already gained significance or could become a significant factor in the near future. To close the eyes to these points and proceed on the old lines would be suicidal for the organisation. A budgetary control system takes into consideration both the principles of management by exception while reporting the performance, and strategic points while drafting the budget. Thus budgetary control is both forward looking and strategy oriented. The process of budgeting and budgetary control is briefly described below in order to project its importance as compared to other control devices.

4.4.1 The English word budget stems from the French word 'Bougette' a leather pouch or a large sized purse, which travellers hand on the saddles of their horses. The finance ministers in France used to take their budget to the Parliament in such a leather pouch called Bougette.

Even in the 18th century, budgets were in use in England to control the power of the King over taxations which were the source for government revenue and expenditure. The budgets then used were nothing but appropriations. The use of budgets as a financial tool for business enterprises is of recent origin.

In the United States early budgetary principles adapted by the business clearly stemmed from the budget

techniques used in government. It was the scientific management movement which converted the budgets into a control tool for management functions. The depression years of the 1930's accelerated the growth of budgetary control techniques in the United States.

4.4.2 In Netherlands the budgetary control was introduced by a professor of business administration at Amsterdam University Th.Lumpery (1922-1950)[14]. He started teaching budgetary control in 1925. The Czhech Entreprenueur Thomas Bata (1876-1932)[15] improved this technique by introducing the Budgetary Control System in his Shoe Company. He divided his shoe making units into small separately run business units, and set individual budget targets for each unit.

4.4.3 Meaning and Definition

Budgeting and Budgetary control are the most widely used planning and control techniques. It may be said that the last step in planning process is budget creation. This budget is used as a control tool for the whole organisation. The function performed by a budgetary control system is very simple. A standard is prescribed, the actual level is recorded and variance between the two is noted. In this we have summarised the procedure for the preparation and implementation of budgetary control. Viewed from the systems point of view Budgetary Control is an open

system, having an environment, that is; it is related to other systems and communicates with them.

4.4.3.1 A good definition of budget is given by Welsch who says "A business budget is a plan covering all phases of operations for a definite period in the future." [16]

4.4.3.2 The Institute of Cost and Works Accountants, London, defined budget as "A financial and/or quantitative statement prepared and approved prior to a defined period of time, of the policy to be pursued during that period for the purpose of attaining a given objective". [17] It may include income and expenditures and the employment of capital. In this sense budget is a "formal expression of policies, plans, objectives and goals laid down in advance by top management for the concern as a whole and its various sub divisions." [18] To put it in a nutshell, budget is a blue print of projected plan of action of a business for a definite period of time in future.

4.4.3.3 According to Gerstenberg budget is "an estimate of future activities of a business especially of its resource and expenditure over a given period of time." [19]

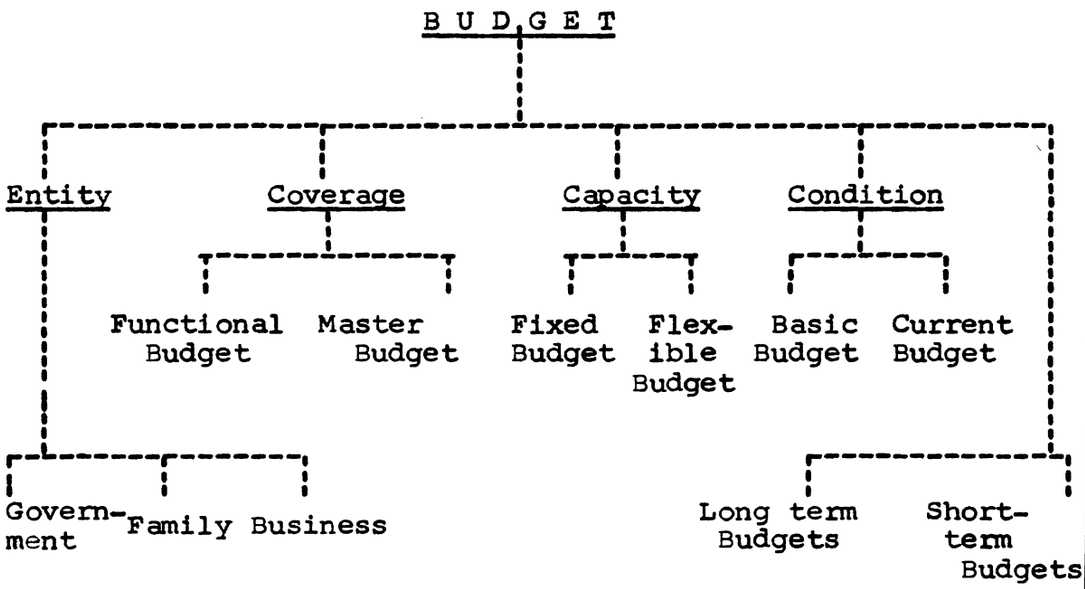
In fact all the three definitions are more or less same.

4.4.3.4 Kohler explains the budget as "any financial plan serving as an estimate of and control over future operations.

Hence any estimate of future costs. Any systematic plan for the utilisation of manpower, material or other resources."[20]

Welsch's definition is more comprehensive than that of others touching all the aspects.

4.4.4 Budgets can be classified in the following manner



4.4.4.1 Functional budgets are budgets which relate to the individual functions in an organisation eg. purchase, sales product, cash etc. After the preparation of various functional budgets they are consolidated into a final form, which is finally approved, adopted and employed. On the basis of this budget, Profit and Loss account and Balance Sheet are forecasted. Master budget is actually a summary of functional budgets.

4.4.4.2 Capacity budget is further divided into fixed and flexible budgets. A fixed budget is a budget designed to remain unchanged, irrespective of the level of activity. It is a self contained and self indentified signle budget. It depends upon the ability to predict income, sales or shipment with at least a reasonable degree of accuracy. This type of budgeting can be used with advantage in industries when demand is stable.

4.4.4.3 Flexible budget is on which is designed to change in accordance with the level of activity attained. It is constructed in anticipation of variation in sales or production. This tabulation is based on the recording costs of previous periods or on the standard costs that have been established. It recognises the unreliability of income or sales, production and expenditure in accordance with variations in sales. Through flexible budget management anticipates and systematically provides for change in business volume by computing the cost of operations for various volumes on the basis of standard costs. Because of its automatic adjustment to change in production volume, the flexible or (variable) budget is a more effective control device than fixed budget, which would require a revision for each major change in the volume of business during the budget period.

4.4.4.4 There are two types of condition budget namely basic and current. Basic budget is a budget which is established for use unaltered over a long period of time. It does not take into consideration the effect of external factors which is uncontrollable. Current budget is established for use over a short period of time related to current conditions. The budget will be corrected to current conditions.

4.4.4.5 Period budget can be divided into two, long-term and short-term budgets. Long-term budget is prepared for a period of more than one year. It reflects a perspective plan of the operating activity of the enterprise. It essentially consists of general estimates which help in the formulation of general operating plans and policies.(eg.) Capital expenditure budget.

Short term budgets are prepared for a year or even for a single month. Different targets are set in the budget to meet the ever-changing market conditions. Often this budget incorporates detailed estimates of operating costs and revenues so as to facilitate the comparison of actual performance with budgeted targets.

4.4.4.6 Budgets can also be classified into governmental, family and business, budgets.

4.4.5 Budgetary Levels

Budget may be prepared (1) at base level (2) at achievable level and (3) at ideal level. Base level budget is one on the basis of the past performance which does not expect any change in efficiency or growth. As a corollary to this, we can say no expenses are incurred to increase the efficiency and only the same efficiency is maintained. But this is not the real requirement. On the contrary the ideal level budget is prepared for a 100 per cent efficiency level when conditions are ideal. It is a level of maximum efficiency through maximum installed capacity utilisation etc. Conditions are never ideal in the practical world. In between these two levels a feasible level for budgetary operation is fixed. Then for achieving this level necessary ingredients are sorted out. This may call for additional incentives changing some machinery, reward and punishment etc. An element of growth is incorporated by this process which a base level budget neglects and an ideal level budget inflates.

4.4.6 Budget Committee

The budgetary control operation is left to a person or to a budget committee headed by the chief executive. Finance manager if there is one will be the convener of the committee and he will be coordinator of all the functional budgets. The major responsibilities of the committee are to

see that the budgets are prepared on a realistic basis, activities are carried out according to plan, review meetings are conducted and remedial measures suggested suggested promptly. Budgets will be revised where ever necessary. Budget committee should assess the reasons for variance and suggest the corrective action. It is all the more important to review the remedial measures implemented to assess their effectiveness.

4.4.7 Purpose of Budgetary Control

Budgets can correlate and coordinate the different activities. By delegation of authority without loss of control, it can ensure effective actions to reach the targets. Budget is compared with the records of business performance and the necessary action is taken to ensure efficiency and effectiveness.

4.4.8 Budget Centre

"Budget Centre" means a department or other division of a business for which a separate budget is prepared. In more specific terms it may be one of the following:
1) Profit Centre (2) Responsibility Centre.

4.4.8.1 Profit Centre

The essential requirements for a profit centre are (a) Considerable amount of independence for carrying the functions such as purchasing, production, control over

the assets employed ie., when profit centres are not fully autonomous the contribution and not profit should be the criteria for indicating the effectiveness of management.
(b) There should be at least one product made by the profit centre.

4.4.8.2 Responsibility Centre

When we cannot have essential conditions for profit centre allocation the next alternative would be to go for responsibility centre alternative. Responsibility centre is one where the responsibility for income and expenditure can be fixed and performance can be measured.

4.4.9 Performance and the Assessment

The level of performance will be measured on the basis of the following :-

1) Output of each product or volume as a whole
2) Cost incurred by responsibility centres
3) Gross profit or contribution
4) Division of costs into controllable and uncontrollable costs
5) Proper allocation of overheads.

4.4.10 Budget Manual

Budget manual will clarify all the doubts about budget preparation, submission, responsibility centres,

variances reports, time duration etc., of all the budgets. Budget manual, in fact, is the coordinating link inside a budgetary system. Budget manual should be sent to all the budget centres. Budget committee should go through the budget manual before issuing them.

4.4.11 Flexibility in Budgeting

It can be ~~s~~ said correctly ~~says~~ To freeze a plan and to put a dollar ~~sign~~ rupee sign on it is the essence of budgeting. But as soon as plans are frozen, the attitude and behaviour of every one concerned with the plans have a way of freezing too. Along the same lines we can hear the complaints regarding how the budgets take away the executive's freedom of action. Some might go to the extent of saying that if budgets are so clearly and in detailed manner spelled out all we need is a clerk and not an executive. How will we eradicate this ?

We know that it is the variable nature of cost that injects flex into cost: one way of dividing cost is through its variability ie., variable, semi variable and fixed. The following ways will be useful in making budget a flexible tool.

1) Managers should be instructed to think on the lines of flexibility. This can be brought by imparting proper knowledge to executives regarding the variable nature of costs. The concept of marginal costing is very important here.

As Steiner says "This is difficult but derives from effective planning, coupled with top management encouragement and acceptance of deviations from budgets, as may be appropriate." [21]

2) There should be alternative budgets prepared.

3) If contingencies arise and if appropriate supplemental budgets should be used it should be with the sanction from budget committee.

4) Top management should accept flexibility. After all there will be differences between anticipated and actual. As Steiner says about procedure of some large companies, "Top management's review of operations is based less upon the original budget than upon the original budget as it should be modified by actual events. Sometimes performance superior to that originally budgeted turns out to be expected, some times lesser performance is accepted without penalty". [22]

5) Flexible budgetary control system.

4.4.12 Basic Requirements of Budgetary Control System

For any system to be effective there should be an environment conducive to its growth. We know Management by Objectives (MBO) is a philosophy and unless this is accepted in the real sense the system will not work effectively. In the same way budgetary control system needs some factors that will contribute towards its effectiveness.

4.4.12.1 Top Management Support: In fact unless top

management takes sufficient interest in budget there is every possibility of budget remaining in paper alone. As Welsch says "in order to engage completely in comprehensive profit planning and control, all levels of management, especially top management, must:

i) Understand the nature and characteristics of profit planning and control;

ii) be convinced that this particular approach to managing is preferable for their situation;

iii) be willing to devote the effort required to make it operative;

iv) support the programme in all its ramnifications and

v) view the results of the planning process as performance commitments." [23]

It should emphasised that "No budgeting system can realise its basic potential value without the unqualified support of top management." [24]

4.4.12.2 Organisation Structure

For effective implementation of budgets each manager must have a clear-cut understanding of his authority and responsibility, his relationships with superiors and subordinates and his relationships with other organisational units. The organisational structure should classify the authority and responsibility. Delegation will be impossible without a clear-cut organisational structure. Responsibility centres should be further divided on the basis of cost, profit and investment.

4.4.12.3 Budgetary techniques should be taught. A thorough knowledge about the advantages and limitations of budgetary control should be imparted.

4.4.12.4 Responsibility regarding budgetary system, budget preparation and implementation should be clearly defined and fixed.

4.4.12.5 Cost consciousness: It should be pointed out that every manager is a cost centre. He is trying to optimise the revenue and expenditure. Cost consciousness should pervade through all the activities. Usually the finance department is alone aware of the cost. It can always differentiate between incomes and expenditure regarding each cost centre. But the man who incurs and accepts it is the line man. Only he can control the cost. Finance can only help him to fulfil his role. Finance man and top executives may be aware of the cost and incomes. But it should be brought down to the level of the supervisor and the worker who incur the cost and who alone can control it.

4.4.12.6 Budgetary control system can be rendered in effective by playing games like 'passing the buck' or 'padding the budget'. It often happens that the concerned executive may put his sales down and expenditure high while sanctioning the budget. This is done to get the necessary funds easily and to cover the sales without difficulty. At the end of the year the sales target will be covered with less

expenses than shown in the budget proving the efficiency. This is padding. As Steiner says "some understanding of and attention to budget gamesmanship should ferret out practices that should be much reduced or eliminated. Without detailing these the reader can easily write the lyrics to such song - titles as these "The year end joyride". "Honest Inflation"; "They are only estimates so why worry"; "Onus without bonus", "Agony without esstacy" "Mc Queeges Obsession etc."[25]

4.4.12.7 Participating principle: A participatory budget is always preferable than an imposed budget.

4.4.12.8 Budgets should not replace decisions: It is said that "Budgets are made to guide activities, they must be used not as clubs but as tools to achieve the objectives of the enterprise".[26]

4.4.12.9 Budgetary system should be made simple. The budgeting control reports should be short and lucid. It should be clear and straight forward, and unnecessary accounting language should never be used.

4.4.12.10 Responsibility accounting: "..... the accounting system must be built around the responsibility structure of the enterprise. In order to set up profit planning and control on a sound basis there must be responsibility accounting system - that is, one tailord first and forecost to the organisational responsibilities. Within this primary

accounting structure, secondary classifications of costs, revenues and other financial data that are relevant may be utilised in accordance with the needs of the enterprise".[267] It will not be out of place to differentiate between historical costs and responsibility accounting. The former finds the cost of the goods produced and provides relevant data for planning and control purpose whereas in responsibility accounting the order is reversed. It is planning and control that has major role to play.

4.4.12.11 **Time** factor: The period covered by the budget is an important factor and the other part is the timing of planning activities. "Since all managerial decisions are futuristic, each management is faced with the basic question of time dimension in planning and decision making."[23] Where the budgets are not properly prepared and activities planned and timed, the budgetary control system will virtually be reduced to be routine activity.

4.4.12.12 Follow-up: "This is the last step in budgetary control system. The reasons for the variance should be analysed. It should always be a constructive process rather than a detective and penalising process. The purposes of the follow-up are: 1) in the case of substandard performance, to lead, in a constructive manner, to immediate corrective action (2) in the case of outstanding performance, to recognise it and perhaps provide for a transfer

of knowledge to similar operations. (3) to provide a basis for better planning and control in the future."[29]

4.4.13 Master Budget

The revenue and capital budgets should be presented in a summarized form called master budget. This includes the preparation of forward or projected financial accounts, manufacturing and operating accounts, trading and profit and loss account, the appropriation account, a cash forecast and a balance sheet. Master budget is a summation of other functional budgets. Many companies prepare it for different time frequency. Master budget is the basis for the preparation of the projected balance sheet and profit and loss account.

4.4.14 Revision of Budgets

It may often happen that performance not conforming to the budget estimates. If it agrees then it gives rise to the suspicion that budget has been contrived to make it easy of achievement. But there are genuine cases where a budget revision is called for. Two of such situations are (1) discovery of errors in the compilation and (2) dominance of external circumstances to make them impracticable of achievement (government intervention, floods or other natural calamities or disasters may call for a revision).

4.4.15 CONTROL THROUGH BUDGET

4.4.15.1 Sales Control :

Budgetary Control is the minimum in the case of sales. Since innumerable factors affect the demand side or more specifically consumer behaviour, sales forecast seldom come true and so sales budget cannot offer much effective control. The controllability will be maximum if the products enjoy monopoly and minimum if it is a highly competitive market. A firm enjoying a running contract with other firms also could use sales budget that are controllable. Notwithstanding these, sales budgets could be used effectively to check the performance of the salesmen and sales executives. If the sales budgets are received periodically it also can improve the control feature associated with it. Another general benefit that could be provided by the sales budget is on the sales expenditures. Eventhough it cannot measure the effectiveness of sales promotion activities, advertisement etc., it can control other routine expenditures like transportation, packing etc.

4.4.15.2 Personnel Control :

Personnel budget is usually an expenditure oriented budget. It can be prepared with accuracy for it just spells out the activities that the personnel department is intending to carry out in the coming period. The personnel budget

control is exercised by checking whether the activities are carried out according to the budget and whether expenditures associated with them are according to the plan. Favourable deviations should be welcomed and encouraged and unfavourable ones should be analysed further and corrective action should be taken. The review of the corrective action should be done during the next budget committee meeting.

CONTROL OF WORKING CAPITAL

4.4.15.3 Control of Cash :

Actual cash transactions might be different from the budget due to (a) lack of cash control (b) changes in operations and (c) other factors affecting cash. This can be overcome by : (a) daily evaluation of cash position, (b) continuous cash budgeting and (c) systematic planning of long and short range flow of cash.

It is not uncommon to find that an expected change in operations may create difficult cash positions. This can be overcome by (a) postponing capital expenditures (b) reducing stock (c) streamlining receivable collection (d) reducing cash payments and (e) postponing credit payments.

As far as cash is concerned, it is necessary to have planning, evaluation and reporting. In fact we have seen under Higher management control system how cash position

is reported. Each month's cash position report should include a reprojection for next month or in otherwords continuous budgeting. Cash position needs frequent check and analysis - once in a week or so - for conditions change very quickly. In this regard past should be given the least importance for history very seldon repeat itself.

The liquidity position can be assessed through liquidity ratios and the current ratios. But it will be foolish to stick to these ratios alone. In order to know the cash position the factors that accelerate the conversion process should be anticipated and cash budget should be prepared accordingly. Cash budget serves as the best controlling device for cash position.

4.4.15.4 CONTROL OF CREDIT

Two things a finance manager realises when a sudden squeeze or urgent need for cash comes are that (a) working capital is highly dependent on future accounts receivables and (b) accounts are filled with dead accounts or chronically slow payers. One of the main reasons for the tight cash position is the failure to collect debts in time and make use of early-warning systems such as ratio analysis for trade receivables and collection period. Prompt payment can be assured to a certain extend by allowing discounts. Often customers do not consider either discounts or interest as necessary inducement. If you offer discounts and are

strong enough to prevent customers from taking the discount when the account is overdue, or if you should be strong enough to enforce interest payments, then you should be strong to enforce payments by the due date.

Steps to be taken to overcome such a situation are :-

a) Speeding up the invoice

b) Basic system of reminder letters.

c) Open system of accounts. A mechanical remedy to the problem of lengthening credit is to employ an open system of sales ledger accounting to give a breakdown of each account by invoice and age of individual rolls. The straight forward method of balances brought forward disguises the age of debts and therefore increases the risk of the debt going bad.

d) By selling debts to a factoring firm.

Thorough knowledge about the customer regarding his (a) intention to pay (b) ability to pay (c) past performance (d) distribution of credit sales under various headings monthly, instalments and revolving credit basis would help to reduce the collection period.

4.4.15.5 CONTROL OF CAPITAL EXPENDITURE

There cannot be more of control over capital expenditure than that done at planning stage. A well planned capital expenditure is a beautifully controlled one. Once,

the investment decision is made, to revoke that decision is an impossibility: As Welsch says "Control must rest upon sound management planning that restrict expenditures to economically justifiable additions, yet guards against stagnation in the maintenance, replacements and acquisition of capital assets."[3c] Many a time a major capital expenditure decision will be a strategic one. One way of controlling capital expenditure is to find out whether the actual money spent is more than what is allotted. This can be done by dissecting a capital expenditure into small fractions and controlling them. For control purpose, capital expenditure should be divided into major capital expenditures and minor capital expenditures. Capital expenditure should be sanctioned only by a competent authority. Some one should be in charge of it. Timely data should be gathered about cost and other aspects so that control decisions can be implemented. Capital expenditure evaluation should be done by top management with regard to money and the quality of work done. Time taken to complete the work should be given the greatest importance. Capital expenditure of one project should not be allowed to be offset by another project unless sanctioned by top management. If it is a long time project it should be preferable to conduct studies on the original decision and gather information for future decisions. In short the only thing that comes out of a capital expenditure decision that does not click is that you learn a good lesson.

4.4.15.6 CONTROL OF OVERHEADS

4.4.15.6.1 Selling and Distribution

Selling covers all costs and responsibilities which affect demand for products and services in dealing with consumers. Distribution expenses usually include the costs of packaging, transporting and delivery.

The best way to control selling and distribution cost will be dividing it to different groups either on the basis of responsibility, function or by work units.

Classification by responsibility will be on the basis of despatch and warehousing, transport and delivery; credit control and publicity. Classification on the basis of functions will be (a) area (b) products (c) order size and (d) methods of distribution. Classification by units may be fixing a standard for a day or a mile. As examples we can take the travelling allowance per mile, dearness allowance per day etc.

The cost should be classified as those from which immediate benefit is expected and those which do not produce immediate benefit and therefore should be charged to a future budget period.

There is no scientific way to set up a standard for either selling or distribution expenses. The only sources could be the past data. This is a field where

control can be made much effective through managerial involvement. There could be external as well as internal factors that affect the control in this field. The first step to control is to identify the causes as quickly as possible.

An effective way of exercising control of selling and distribution expenses is through variance analysis. Classify the variances into (a) sales quantity variance (b) sales margin variance (c) selling price variance and (d) sales mixture variance.

In the case of over heads there are four different methods to control :

1. With the help of standard costing and budgetary control.
2. By authorising the expenditure.
3. By educating managers.
4. With the help of an effective organisation.

4.4.15.6.2 Administration Cost Control

In recent times the administration costs have tended to multiply at a tremendous rate. As a result, there have been pressures brought to bear on those responsible with a view to reducing costs. In large concerns electronic data processing and new management techniques have been developed and applied.

Usually controlling overheads will be through the help of budgets. For this purpose costs are classified

according to their nature. Employ work measurement is done wherever possible. Administrative overhead should be authorised by a competent person. Control will be exercised through proper supervision. Variances are analysised and profitably employed for this purpose.

4.4.15.6.3 Manufacturing overhead control

Control of manufacturing overhead necessitates the identification of controllable expenses with specific responsibility centers. It is desirable that service usage be controlled on the basis of units of service, wherever possible rather than on the basis of rupee cost of services. When rupee cost is taken the using department should be charged at standard rates rather than actual rates. Cost allocation generally is inconsistent with effective control.

For exercising control and assigning responsibility the primary requisite is to trace the costs to cost centres and to products. Authorities may differ with regard to cost allocation.

1) In absorption or total cost approach all the costs should be absorbed by products.

2) Marginal costing approach differentiates between variable costs and fixed costs. The fixed costs are transferred to profit and loss account.

The steps followed in controlling overheads are:

1) All the possible direct charges are allocated to a product;
2) The use of the service department by other departments is ascertained.
3) All the service costs are transferred to production centres.
4) Products are charged without the overhead costs.

From this a standard can be developed. Standard overhead rate by which the products or the units are charged will absorb all the overheads. This is called apportionment of the overheads. For this a standard rate is developed. Usually the standard rate is developed on the basis of a percentage of materials if the overhead is closely related to the consumption of materials. Usually there are 3 basis for estimating factory overhead. In raw material oriented industries

a) Direct material rate = $\frac{\text{Overhead} \times 100}{\text{Direct material cost}}$

In labour oriented industries

b) Director wages rate = $\frac{\text{Overhead} \times 100}{\text{Direct Labour cost}}$

If raw material and labour both are equally important

c) Prime cost rate = $\frac{\text{Overhead} \times 100}{\text{Prime cost}}$

Budgeted overhead and actual overhead will give the difference or overhead variance.

4.4.15.7 CONTROL OF LABOUR

Significance of labour will be more if it is a labour intensive undertaking. Labour cost consists of all the expenditures incurred by the firm on those who are employed in the firm. The first step in controlling labour is to classify them into direct and indirect. By direct labour we mean the wages paid to those employees who are directly engaged in specific productive tasks. Another way of looking at it is that labour that can be identified and allocated to particular operations or processes are considered as direct labour. All other labour costs are clubbed under indirect labour cost.

Direct labour budget prepared on the lines of production requirements is the most important tool for controlling the labour. Actual work done is compared with the budget and the variance is found out which will lead to control decisions.

Control of labour is not easy. This necessitates dealing with the labour force and their unions. This involves cumbersome and often unpleasant evaluation and specification, union negotiations, performance evaluation and wage, salary revision etc. These are all areas which affect the employees' basic problems and hence friction and conflict are likely to arise.

In controlling labour cost two basic elements that will have to be controlled directly are the time and rate of payment. The ability of the management lies in extracting the maximum yield. It is not easy to have all the activities done through costing department alone. In fact control of labour calls for co-operation and co-ordination between all departments. In short it is a combined activity.

Control of labour, to a considerable extent, is done with the help of standards. Labour hour standard is usually fixed by the industrial engineering department. There are four different ways of constructing a standard.

1) Time and Motion Study : This is the most scientific way of doing it.

2) Standard Costs : This is a standard developed from cost accounting system. Here the standard labour hour multiplied by the number of units will give the standard.

3) Statistical method : Historical rates is the yardstick. This method is usually used when productive departments process several products simultaneously.

4) Estimates by Supervisors : This is a matter of judgement, and often the past records will form the basis. It is not unusual for the supervisor to call on subordinate staff to help him in this regard.

Inside the department the time utilisation is maximised with the help of time keepers or some other device and with various records and statements. Labour control constitutes two different functions.

1. Employment and remuneration.

2. Accounting and control of labour costs.

There are 3 ways of paying the worker. 1) Time rate (2) Piece rate (3) Incentive wages. Among incentive schemes we have the individual and the group incentive schemes. The usual incentive plans are of Halsey, Rowan, Gantt task etc.

For controlling labour cost the organisational set-up should make sure (a) that labour force and wage bill be authorised by a competent persons (b) remuneration paid is actually received by the worker (c) that labour has been efficiently utilised.

Another method of labour costs control is methods improvement, which assumes certain pre-requisites as (a) engineering know-how, creativity and questioning attitude on the part of labour force (b) Large scale and continuous production (c) adequate financial resources and (d) Standardisation.

4.4.15.7.1 Job Analysis and Job Study

Job analysis is a method of identifying each job, its objective, its specific tasks and the physical, mental, and emotional demands imposed by the job on the worker. Job analysis is consummated in a job desired pattern. At the time of hiring this helps to matching men and jobs.

Job study which includes job analysis, determine the following (a) Governing working conditions (b) types of

materials processed (c) inspection requirements (d) machine tooling used (e) handling method.

4.4.15.7.2 Job Evaluation

After job analysis and job study, job evaluation follows. It is the process of evaluating each element of the job and fixing rates for them. Usually the job evaluation committee studies the job description and evaluates the job. It also leaves provisions for evaluation of new jobs. Job is evaluated by any of the four methods given below, two are non-quantitative and the other two are quantitative.

a) Non-quantitative methods :

1. Ranking method
2. Classification method

b) Quantitative methods :

1. Point Scale method
2. Factor comparison method

Under ranking method all jobs are ranked and placed in the descending order. Under classification method the series of job level classification or brackets is set up by management or by the committee charged with the function. Under point scale method a scale is constructed or a standard scale is employed. Under factor comparison method some 15 to 20 jobs are selected (key jobs) and studied. This is used as a standard and compared with other jobs. After job

evaluation a wage scale is constructed after giving due importance to such other factors as : (1) supply and demand (2) cost of living (3) productivity (4) governmental wage controls (5) contract negotiations (6) industrial factors and (7) regional factors.

Accounting for labour cost is the function of cost accounting department. This involves (a) Division of labour into direct and indirect (b) Allocating direct labour as production cost (c) Treatment of indirect labour as an overhead.

The study of the variance between the actual and the budget, report preparation and consequent action are dealt with under variance analysis.

4.4.15.8 CONTROL OF MATERIALS

The main objective of management is profit maximisation leading to growth. In some industries, especially in process industries, the cost of raw material may go up to 70% of the total cost. This gives an added importance to material management and control. Materials are goods and are real assets rather than fictitious assets. "The essential nature of inventories thus lies in these two traits - tangibility and short life. They distinguish inventories on the one side from services, which cannot be accumulated, and on the other side from plant and equipment, which can

be accumulated but which will not be entirely used up within a single accounting period"[31].

4.4.15.8.1 Goods may be produced on customer orders or they may be produced and stocked. It is imperative that any firm for that matter will have to keep some quantity as inventory holding. "For the three reasons - the necessary passage of time, the discontinuities of the economic process, and the need to expect the unexpected - any business firm that hopes to stay alive will hold some quantity of goods in inventory"[32].

4.4.15.8.2 Problem of pricing the materials either with Lifo or Fifo or any other method can be solved by the policy of management depending on the nature of business. The flow of the money will be somewhat semi variable, depending on the need to keep the minimum amount of inventory and to cope with the production and sales plans. Many formula had been developed to bring down the amount of money tied up in inventory. "Businessmen are told that their main concern is to keep the stock/sales as low as they can, or to keep its reciprocal, the inventory turnover ratio, as high as they can. If this advice were taken literally, inventories would be reduced to zero, to give a stock/sales ratio of zero and a turnover ratio of infinity. This is not what the consultants really mean or what businessmen will consider seriously any way"[33].

4.4.15.8.3 Sound management of materials will help to improve the productivity of capital by reducing material costs, preventing large amounts of capital being locked up for long periods and improving the capital turnover ratio. Sound materials management will lead to economical consumption of raw materials and ancillary supplies to finishing products. The objectives of materials management are to (1) ensure uniform flow of materials (2) increase the productivity (3) bring down the capital tied up in inventories (4) reduce the material costs by scientific techniques (5) save foreign exchange and to (6) create a good relationship between buyer and seller.

4.4.15.8.4 Eventhough materials management is a staff function it needs an integrated approach. In a manufacturing concern close co-operation between the design department and the materials department is required. Sales forecast will be the basis of inventory holding. The degree of urgency for the materials should be assessed. Safety stock level should be derived. Economic order quantity should be determined. Materials department and purchasing department should go hand in hand so that quality and price also go hand in hand. Finance Department, like a watch dog, should safeguard the money investment in inventories.

4.4.15.8.5 ABC analysis (Always Better Control) and value analysis are two useful concepts for materials control. By

ABC analysis the total inventory is divided into 3 classes. A items will include 10% of the total inventory in quantity but 70% of cost. B items will include 20% of the total quantity but 20% of the cost. C will be only 10% of cost but 70% of the quantity. The purpose of ABC analysis is to separate the predominant few, from the point of view of annual consumption value from the vast majority of items whose annual consumption value is very low. For control purposes, expensive and cheap items should not be given equal attention. ABC analysis is a selective inventory control technique influence by the policies and procedures of the concern. Under ABC analysis the A items will be reviewed closely and frequently and C will be checked at definite intervals of time.

4.4.15.8.6 Value analysis is directly concerned with reducing the materials cost. It is designed to substitute indigenous materials for foreign ones without sacrificing the qualities of the material. The difference between value analysis and cost analysis is that the former takes into consideration the quality and prestige value of the material. This is expressed as a ratio.

$$\text{Value} = \frac{\text{Worth to you}}{\text{Price you pay}}$$

"Value represents that combination of quality, service, and price, which ensures the greatest ultimate economy or satisfaction to the buyer; and value analysis is a technique

which systematically helps to determine the combination. Value analysis aims at the greatest value in return for money spent. It involves a continuous supervision of value at all stages - design, purchase, manufacture, packing, transportation and sale"[34]. Value analysis should take into consideration functional utility and its overall contribution by giving due weightage to time and other economic considerations. It should see whether this can be produced cheaper and what would be its cost. It should also see whether there is any other substitute or any other source of cheaper supply. Value analysis can be further improved by making use of Matrices.

4.4.15.8.7 Codification :

In large concerns there will be a number of items to be stored. In order to avoid confusion and to facilitate identification of a particular material it is common to install some system by which this can be done. The components may be identified by their function. They can be identified by machines or they may be identified by their names or serial number given to them. One way of doing it is to classify them as purchased or primary materials. Another method is to group them under different classifications and finally to give them a numerical code.

It helps the purchasing department, as well as the stores in that it facilitates easy identification and

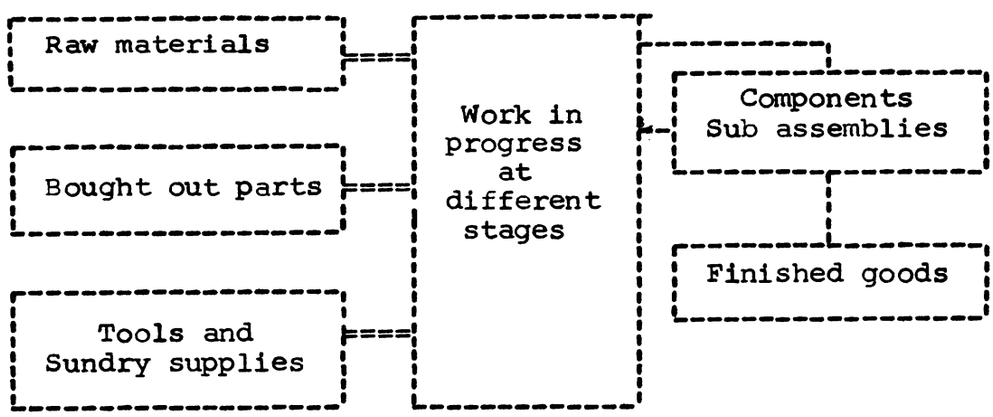
and hence uninterrupted flow of production. Standardisation and simplification are two other steps that help to control materials. Standardisation results in economy in terms of human effort and cost. It helps to maintain quality standards. Relevant information is collected regarding :

"1. the frequency of demand for each type in terms of quantity.

2. the proportion of standard items in all stores purchased;

3. the proportion of standardisable items"[35]. Frequency distribution of demand is found out and control is exercised on that basis.

INVENTORY CONTROL



4.4.15.8.8 "Inventory control is a planned method of determining what to indent, when to indent, how much to indent, and how much to stock so that purchasing and storing costs are the lowest possible, without adversely affecting production and sales. Inventories comprise raw materials, general

stores (or supplies), machinery parts, components purchased, or manufactured for stock, works-in-progress and finished goods.[136]

Usually inventories form the major part of working capital. Unless it is properly controlled it may lead to heavy draining of working capital or money being tied up unnecessarily. Inventories should provide against external influences. Proper inventory control may lead to reduced cost of production, better sales and low investment.

Selective inventory and perpetual inventory are two methods of controlling inventory. Selective inventory is ABC analysis in effect. Many a time both are used together. Perpetual inventory is otherwise called continuous stock taking. Bincard system, safety stock and economic order quantity are other tools that help the inventory control.

4.4.15.8.9 Stores Control and Materials Handling :

Stores activity consists of securing section, stores keeping, issue of stores and stock verification with the help of adequate records. Stores location is important, whether it is located or supplied from depots. Stores can be divided into sub sections depending on functions performed like general stores, equipments, raw materials, finished parts etc. The most important function of the receiving

section will be accepting them against order, receiving them and inspecting them for quality and quantity. In many organisations there are separate quality control departments. After inspection both for quantity and quality they will be affixed with a tag so that they can be identified. All issues should be done only against requisition slip. Usually there will be a material requisition slip against which materials are issued. Stock is verified by perpetual inventory and the annual stock taking. Efficiency of stores control is measured on the lines like (a) cost of the department (d) uninterrupted flow of materials (c) proper recording of stores (d) extent of deterioration (e) good house-keeping and (f) methodical storage.

"The American Materials Handling Society has defined materials handling as the art and science involving movement packaging, and storing of materials in any form by means of granery, manual effort or power-actuated machinery"[87]. A good material handling system will reduce the handling time and cost of process, reduce the human cost, keep a uniform flow of material, ensure more productivity and less idle time and above all reduces the wastage.

There are a number of ways of finding out the performance of inventory management. Usually they are done with the help of ratios - past and present. This can be a good indicator. For example inventory turnover ratio,

$\left(\frac{\text{Sales}}{\text{Purchasing}}\right)$, $\frac{\text{Purchase}}{\text{Consumption}}$ etc., can be very helpful in assessing the efficiency in inventory management.

4.4.15.8.10 The vital importance of Management control are (1) "Technical - the selection of the correct materials for the product having regard to the purpose of the article, its requirement of strength and appearance.

2) The allowances of correct quantities necessary to manufacture each unit.

3) The establishment of a flow of materials to ensure continuity of production.

4) The contracting for supplies at a price which is most economical having regard to delivery and quality requirements.

5) The correct inspection, handling and storage of materials, to avoid losses outside the manufacturing processes, and to prevent delivery of substandard and deteriorated materials.

6) The constant review of stock balances, in order to detect slow turnover of materials and bought in parts or assemblies thereby reducing the occurrence of redundancy.

7) The issues of standard specified quantities for each production order, ensure the economical and planned use of materials.

8) The checking of good production against each issue of standard material allowance.

9) The control of an extra issue to make good wastage in excess of the standard allowance.

10) The recovery and reclamation of waste and faulty work[38].

RATIO ANALYSIS

4.5 A system of analysis of financial statements by means of ratios was made in 1919 by Alexander Wall. He published an article in whichhe criticized the bankers who based decisions in regard to granting of credit on current ratios alone. He pointed out that in order to get a complete picture, it is necessary to consider relationships in financial statements other than that of current assets to current liabilities. It can be truly said that the present form of ratio analysis had its humble origin from financial statement analysis. This humble beginning was accelerated by Stephen Gillman. It is said that no serious criticism of ratio analysis appeared in print until 1925, when Stephen Gillman offered the following four objections:

1) A change in ratio can be interpreted only in the light of changes in each of the two variables the relationship of which it represents (2) It is difficult to comprehend the connection of the ratio with the balance sheet from which it was computed (3) the ratios give an unwarranted impression of finality and (4) the ratios do not give a comprehensive view of the balance sheet relationships. Gillman proposed a substitute for the ratio technique - one in which

the analyst divides the magnitude of significant items or groups of items in each of a series of statements by their magnitudes in one year in the series selected as the base, thus obtaining a series of trend percentages or relatives to the base year."[39]

It may be said that around 1925 the present system of ratio analysis was developed.

4.5.1 Ratio analysis from the point of a business organisation can be said to be a process of determining the relationship between two figures either from trading account, profit and loss account or balance sheet. According to Robert N. Anthony, "A ratio is simply one number expressed in terms of another. It is found by dividing one number, the base, into the other. A percentage is one kind of ratio, in which the base is taken as equalling 100 and the quotient is expressed as per hundred of the base".[40]

Simple numerical figures are misleading. A profit of Rs.one lakh may appear, by itself, to be quite a satisfactory position. But when this is compared with other figures relating to the organisation it may provide a completely different picture. Ratios provide us an opportunity to compare and express relationships in a relatively simple form. Even ratios do not give us a clear picture unless we have a standard or some other quantitative expression to compare with.

4.5.2 There are many ways of grouping ratios. Any two figures taken from a Balance Sheet, Profit & Loss Account, Trading Account or a Budget can give a ratio. Usually "Financial ratios can be grouped loosely into these categories (a) tests of profitability (b) tests of liquidity (c) tests of solvancy and (d) overall ratios".[41] There are many other names and classifications such as turnover-ratios, structural ratios, profitability ratios and so on.

4.5.3 The main purpose of finding a ratio is to compare, figures and arrive at some definite conclusions. This comparison can be made with past ratios relating to the same organisation or with ratios of the industry or with standard ratios such as quick ratio or current ratio. Many publications giving the ratios of the industry, standard ratios from taxation committee report, etc., are available. Almost all the ratios are computed from a balance sheet or revenue account. But in order to find out the efficiency of operations, the standard taken may be the budgeted ratios.

4.5.4 Since ratios are usually found out from balance sheet are revenue account it will not be surprising to find that the limitations of the latter influence the former as well.

4.5.4.1 Balance sheet and Revenue Account are prepared on the basis of conventions. For example, as far as stock valuation is concerned it is valued based on the accepted

norm -"cost price or market price whichever is lower."

4.5.4.2 According to Myer "Accounting is based on some postulates called permanency postulate, the monetary postulate and the realisation postulate. Permanency postulate says that the assets of the company are shown as a going concern and are not to be liquidated. Monetary postulate says that the value of money remains constant. Realisation postulate assumes that a sale is realised as soon as it is over."[42]

4.5.4.3 Personal Judgements :-

Asset valuation involves a lot of personal judgement. As an example the valuation of inventory whether it ought to be on the basis of lifo, fifo, etc.

4.5.5.4 Financial statements never take into consideration the technical problems of the industry, market conditions, unfilled orders of customers etc.

4.5.4.5 Contingent assets and liabilities are not given any weightage in financial statements.

As the limitation of financial statement Myer asserts that :

A: Net income shown in income statement is not absolute but relative.

B: Statements cannot show the true financial position.

C: The assets shown in the balance sheet are largely unexpired or unamortized costs.

D: Net income shown is relative not absolute.

There can be doubt regarding why limitations are discussed in the beginning without writing what it is. The reason is that, of all the control tests, ratio analysis is the most dangerous one. To make use of it without understanding its limitations will be disastrous.

4.5.5 Difficulties in comparison

4.5.5.1 Ratios never take into consideration the time value of money. Therefore, the comparison between two figures belonging to two different time spans will be misleading.

4.5.5.2 Situational difference

"No reasonable person would expect a one year old boy to run as fast as a nineteen year old athlete. In judging the boy's performance we attempt to compare his speed with that of other boys of the same age and with similar training".[43] Even if we compare the performance of one company during one year with its performance in the previous years conclusions drawn may be unwarranted: "The task is more difficult when attempting to compare one company with another, even if they are both of the same size and in the same industry, and it becomes exceedingly difficult if the two companies are in different industries or if they are of substantially different size."[44]

4.5.5.3 Difference in definition. Different authors and practitioners use different terms eg. profits, capital employed, capitalisation, equity, etc.

4.5.5.4 There is no guarantee that past will be repeated and there is no yardstick to determine whether the past activity was efficiently done. Past can hide inefficiency to a great extent.

4.5.5.5 Balance sheet shows the financial position at a particular point of time. This may be at the peak of the busy season or it can be at the base of alack season. The ratios out of these statements can be misleading.

4.5.5.6 Proper base for comparison

"Subject only to minor qualifications, a boy who runs a mile in six minutes (or expressed as a ratio, ten miles per hour) is a better runner than a boy who runs a mile in seven minutes. In business there are many situations in which one cannot say whether larger number represents better performance than what a smaller number does."[45] For the current ratio the accepted standard is 1 : 2. During the peak season it is foolish to rely upon this for, when the season is over it will come down.

4.5.6 Improving Financial Ratios

For a long time management had been trying to overcome the inadequacy of ratios as a tool of analysis and

control. As Batty says "To keep a watch on changes in the financial structure without blunting the attack of management calls for special methods".[46]

4.5.6.1 The first task would be to reduce the number of headings in a balance sheet into a fewer groups.

4.5.6.2 "Special attention needs to be paid to the return on the capital employed at the base year and the return on additional capital employed as expansion proceeds, and an estimated return reported at the same time as other management data may prove helpful".[47] The accountant in this context should focus his attention on balance sheet ratios and see whether the numerator or denominator is the more likely to yield better for management action.

4.5.6.3 Stage of the company or the product is important - take, off, peak or decline, and this should be given due weightage. This is because different stages impose different constraints on the working of the firm.

4.5.6.4 Whether possible ratio analysis should be supplemented by marginal costing details.

4.5.7 Ratios are of interest to : (1) owners (2) Investors (3) creditors (4) financial executives and (5) acadamicians. The information needs of these parties are different. Many ratios may be useless for some group and meaningful for the other group. As was said in the beginning there are

innumerable ratios and there are many ways of classifying them.

4.5.7.1 Ratio of Solvency

Distrinction between solvency and liquidity is necessary to arrive at proper conclusions. "As liquidity refers to current obligations, solvency refers to company's ability to meet the interest costs and repayment schedules associated with its long term obligations".[48]

The liability side of balance sheet can be divided into capital and debt. A ratio can be found by relating any of the items on liability side to any asset on the asset side. The most commonly used ratios among these, are debt to equity, equity to fixed assets and net worth to equity.

4.5.7.1.1 Tangible Net Worth to Equity :

Tangible net worth means the money that will be left to the share holders in case the company is wound up. This is found by deducting from the total assets, the outstanding liabilities (both) current and long term liabilities). This amount divided by the equity (usually equity plus reserves) show how much money the share holders will be getting. Higher the amount the better is the solvency position. Suppose the outstanding liabilities are more than the total assets, it means that the company is theoretically insolvent. To arrive at such a conclusion, this

ratio should be watched over a period of time.

4.5.7.1.2 Debt to equity :

There is no generally accepted principle for computing the debt and the question whether current liabilities are to be included or not still remain unsettled. The debt bearing capacity of the firm rests on various factors. "From the company's standpoint, the greater the proportion of its capital that is obtained from stockholders, the less worry the company has in meeting its fixed obligations, but in return for the lessened worry, the company must expect to pay a higher overall cost of obtaining its capital. Conversely, the more funds that are obtained from bonds, the more the company can trade on the equity, that is, it can use funds obtained at relatively low interest rates in the hopes of earning more on these funds for the stockholders"[49].

4.5.7.1.3 Equity to net fixed asset :

This ratio will show how much capital is locked up on fixed assets. Looking at it differently, this will show how the fixed assets are financed. The usual norm is that the fixed assets should be financed by equity capital and the fixed portion of the working capital too should be covered by the equity capital. This ratio will show who really owns the company.

4.5.7.2 Tests of Liquidity

Liquidity refers to the firm's ability to meet its current liabilities. "The liquidity ratios therefore have to do with the size and relationships of current liabilities, which are the obligations soon coming due, and current assets, which presumably provide the source from which these obligations will be met".[50] The common ratios coming under this head are current ratio, quick ratio, receivables to sales, average collection period and inventory turnover.

4.5.7.2.1 Current ratio:

This ratio is found out by dividing the current assets by current liabilities. The common standard is 1:2. It means for every debt of 1 rupee there should be two rupees in current assets to pay it off. "It is not only a measure of the company's liquidity but also is a measure of the margin of safety that management maintains in order to allow for the inevitable reverses in the flow of funds through the current assets and liability accounts."[51]

4.5.7.2.2 Quick Ratio :

This is a slightly different from the current ratio. In this case, from the asset side, only current assets excluding stock are taken. The reason behind excluding the stock is that it takes much time to convert it into cash. The accepted standard for quick ratio is

1:1 ie., for every rupee of debt there should be one rupee of quick assets.

4.5.7.3 Tests of Profitability :

Four ratios could be used for this purpose. They are

a) $\frac{\text{Net profit}}{\text{Sales}}$ (b) $\frac{\text{Sales}}{\text{Cost of goods sold}}$

c) $\frac{\text{Sales}}{\text{Capital employed}}$ (d) $\frac{\text{Net profit}}{\text{Capital employed}}$

Sometimes instead of capital employed the term investment is used. Both capital employed and capital invested means the total assets of the company.

4.5.7.3.1 Net profit to sales shows the ratio of net profit generated by the organisation out of the sale effected. This ratio is found out to see how much net profit is generated for sales effected. In order to come to any conslusion this ratio should be found over a period of time and should be compared with the individual ratios. This ratio will be more meaningful if the analyst find whether the sales were effected by increasing the sales price or the quantity sold.

4.5.7.3.2 The ratio to sales and cost of goods sold shows to what extent the cost is covered by the sales. An increasing trend in the coverage can be taken as an indicator of

profitability. Here also due weightage should be given to such facts as decrease in the cost, or increase in the selling price etc.

4.5.7.3.3 The ratio of sales to capital employed signifies whether the company was able to generate more sales out of the capital employed. Before taking the ratio as an indicator of efficiency it should be noted whether the increase or decrease in the ratio was due to decrease or increase in capital employed.

4.5.7.3.4 The ratio of net profit to capital employed or return on investment (ROI) is the most significant ratio, for it can show the overall efficiency of the firm. "ROI refers to the relationship between the net income of the company (or one of its divisions) for an accounting period and the total assets of the company (or one of its divisions) for that accounting period(The total assets of the company (or its divisions) made available to management to produce the net income)."[52] This ratio shows the productivity of owner's capital. To some extent it can also show the overall effectiveness. "From the owner's standpoint, return on invested capital shows the success of the business and the effectiveness with which it has invested its money compared with probable returns from investment in other securities. If one wishes to find the ratio which will most closely indicate the level of protection to the creditor of the

business and insure against insolvency, this ratio will fill the bill.[953] The other factors indicated by ROI are the following :

a) Suppose ROI is low and net profit high this indicates increased investment in current assets.

b) For fast growing industries this ratio is important for this can tell them the amount of additional capital needed to expand.

c) This ratio shows the operating efficiency of the firm.

d) If the profit is high and ROI low it shows that sales is low for the capital invested.

Limitations of return on investment are many. In fact this was expressed by Batty as follows :-

"1. Intensity of use of assets varies from one industry to another.

2. In the short period it may be more profitable to lease rather than own. This may be detrimental in the long-run.

3. Some companies use historical costs, and others replacement cost for valuing assets - results are not comparable.

4. It ignores what may be national or company policy eg., full employment, which intensive mechanisation may not provide.

5. The standard ROI can be fixed on company or its divisions.

6. When dealing with multi-product and multi division business the allocation or apportionment of assets, costs and sales revenues present formidable problems.

7. Greater significance is attached to fixed assets and other material cost".[54]

Even though the return of investment has many limitations, if it is used intelligently and along with other ratios it will help to make sensible conclusions regarding the profitability of the concern.

4.5.7.4 Cost Ratios

Generally speaking any item of expenditure taken from trading account or profit and loss account divided by total cost could give a cost ratio and computed over a period of time can indicate the trend of the cost element. Before computing cost ratios, one should first compute the ratio of sales to total cost. This ratio will indicate to what extent cost is covered by sales and the direction of cost coverage by sales over a period of time. The maxim here is "more the coverage the better is. Cost ratio should be computed in the order of their significance and the significance varies from company to company.

4.5.7.4.1 Material Cost to Total Cost

This ratio shows the material usage efficiency, if computed over a period of time. Care should be taken to see whether production had increased or decreased along with the increase or decrease in the material cost. Again price fluctuations should also be noted. The cost might

have increased only due to price and there was no increase in consumption. Giving due significance to production, quantity and price, if the ratio shows a decreasing trend it specifies that the material usage efficiency had increased. If this ratio is found out it would indicate the Material cost part in the total cost.

4.5.7.4.2 Labour Cost to Total Cost

This ratio show the trend in labour efficiency, if it is computed over a period of time. From this ratio, the extent of the labour cost in the total cost could be assessed. This ratio could be made more meaningful by assessing the relationship between total production and labour cost. Many a time there will be no relationship between production and labour cost, for labour cost may keep on increasing according to the long-term agreements between the unions and management. Again, whether there is any change in the total number of employees or whether there are any incentive systems in operation, should be looked into. If the ratio is computed over a period of time and the ratio shows a decreasing trend it may indicate increase in efficiency.

4.5.7.4.3 Factory Overhead to Total Cost

This ratio shows the extent of factory overhead in total cost and its efficiency. Factory overhead is directly related to production and hence due weightage should be

given to the quantity produced. Care should be taken to see whether the company had provided enough depreciation. If power and fuel are used and they form a major part of overhead they should be segregated and the influence of price on this should be given adequate weightage. If the ratio is computed over a period of time and if it shows a decreasing trend, in the light of the above factors it can be concluded that the efficiency in factory overhead utilisation has increased.

4.5.7.4.4 Administration overhead to Total Cost

Administrative overhead seldom forms a major cost element. Administrative overhead should include the salaries paid to the administrative staff. Computed over a period of time the ratio would show the efficiency level and the extent of its dominance in total cost.

4.5.7.4.5 Sales Overhead to Total Cost

Sales overhead is directly related to sales. Items included in the sales overhead should be analysed to see the influence of time factor. The apportionment of certain items of sales overhead over periods of time should also be justifiable. The ratio computed over a period of time can indicate the efficiency and the extent of sales overhead.

These are not the only ratios that can be computed. Ratios of individual items of cost to total cost can also be

rewarding.

4.5.7.5 Asset Ratios :

Assets can be classified into fixed assets and current assets. If assets are compared with the sales or production the efficiency of the asset utilisation can be ascertained.

4.5.7.5.1 Sales to Fixed Assets

If this ratio is computed over a period of time and the ratio shows an increasing trend it could be taken as an indicator of increase in the efficiency of fixed assets utilisation. Care should be taken to see whether the increase in the ratio was due to decrease in the fixed assets. It is possible that fixed assets depreciate continuously. Again, it should be seen whether the increase in sales was due to quantity sales or increase in sales price. The maxim is "higher the ratio more the efficiency."

4.5.7.5.2 Sales to Current Assets

Current assets are more closely related to sales than fixed assets. Current assets are also called circulating assets. Hence more the turnover of the current assets better is its utilisation. If the ratio is computed over a period of time the trend could be compared.

Current assets could be split into individual items and the individual ratio could be computed to find which current asset is fast moving.

4.5.7.5.3 Sales to Receivables

This ratio will show whether the receivables are collected without time delay or not. Higher the ratio better is the collection. It should be borne in mind that the increased sales might have resulted in increased receivables also. In that case debt collected period should be found and maturity of debts also should be looked into. If the debt collection period is more, this will directly influence the working capital position.

4.5.7.5.4 Sales to Inventory

Here again, higher the ratio better is the turnover of inventory. But care should be taken to see whether the company is having sufficient closing stock.

Again the nature of the company is also significant. The company which produces only against orders need not have much inventory when compared to a company which is engaged in continuous production. Again the period for which the ratio is computed is important. During the peak season it is usual for a seasonal industry to have large inventories.

4.5.7.5.5 Raw Materials consumed to Average Stock of Raw Materials

A higher ratio signifies a better turnover and hence more efficiency. Here also the nature of the industry and the time are significant. If the industry has to import its raw material, it is usual to find a considerable quantity of raw material stock, for any war or any other disturbance outside the country could affect the company's production. The time is also significant. During the season, while raw material is available in bulk quantities the company might store a considerable quantity of raw material to tide over the off season.

4.5.7.5.6 Sales to Cash Balance

A high turnover ratio may mean better utilisation of cash or idle cash is minimised. But before coming to such a conclusion care should be taken to see whether the company has sufficient cash balance. This could be assessed by matching the cash balance and direct costs.

4.5.7.5.7 Cost of Goods Sold to Net Working Capital

This ratio shows the utilisation of working capital by calculating its turnover. Net working capital can be found by subtracting current liabilities from current assents. If the current liabilities are more, it means that current liabilities are used to finance fixed assets

which is very bad for the financial health of the company. If the ratio is high it means the working capital utilisation.is more. Care should be taken to see whether the company has sufficient working capital.

4.6 STANDARD COSTING

Costing is a slippery concept. It is associated indiscriminately with several quite different meanings that the reader or listener is put into quite embarassing situations that he finds it hard to understand it. Costs can be divided on the basis of (a) Variability (fixed and variable) (b) Controllability (controllable and uncontrollable (c) identification (direct cost and indirect cost) (d) Time (standard cost and historical cost) etc. Therefore it is absolutely necessary that one must know what standard costing is before it is put in practice.

4.6.1 The chief limitations of historical costing are :

4.6.1.1 "Prices of raw materials, wages, factory capacity and efficiency are matters which are constantly changing and a comparison of this year's gigures with those of last year disclose mainly whether the expenses have increased or decreased."[55] In other words conditions do not remain static and control cannot be properly exercised.

4.6.1.2 The installation of new machinery, changes in methods of production etc., will affect the manufacturing

overhead which historical costing fails to take into consideration.

4.6.1.3 "The expenditure of the previous years may have been extravagant or abnormally low, due to a variety of factors which no longer apply."[56]

4.6.1.4 There could be changes in money value, purchase tax, customs duties etc., which historical cost fails to include.

4.6.2 Standard costing in this context refers to a method of accounting for unit cost by which such costs may be controlled with reference to standards of what they should be. Taylor emphasises that standard costing involves estimation and this estimation is time bound.[57] In other words standard cost is futuristic in nature. Here he does not give much emphasis on the method of estimation. "Standard costs are the scientifically predetermined costs of manufacturing a single, or a number of units of products, during specified period in the immediate future. Standard costs are the planned costs of a product under current and or anticipated operating conditions. They are based on normal conditions of efficiency and volume, particularly with respect to factory overhead. Materials and labour are usually based upon current conditions allowing for alterations of process and rates."[58] Even though the word manufacturing is used it should not be taken that its applicability

is limited to manufacturing organisations. In fact standard costing has got universal applicability. "Standard costs may be applied to individual work orders, to batches, to contracts, to numbers weights or other measurements of production or service."[59]

4.6.3 Standards and Performance Level Assumptions :

There are three levels of performances usually described as base level, achievable level and ideal or maximum level.

4.6.3.1 "Standards are set for the level of operations expected for the coming year. Variation due to inefficiencies, waste or errors will still occur and cannot be eliminated entirely.

4.6.3.1 "Standards are set for the level of operations expected for the coming year. Variation due to inefficiencies, waste or errors will still occur and cannot be eliminated entirely.

4.6.3.2 Standards may be set for level of operations regarded as 'normal'. Normal standards represent an average figure intended to smooth out fluctuations due to economic cyclical cause. Such standards are primarily applicable to overhead absorption. Materials and labour standards are generally set on the basis of expected performance. The quantity of materials and labour to be used and the prices to be paid

2. Valuing inventories.

3. Setting selling price

4. Simplifying costing procedures

5. Promoting and measuring efficiencies.

Standards can be divided into basic standard and current standard. Basic standard means the basic requirements needed to keep that level, whereas a current standard means "a standard for a certain period, for certain conditions and for certain circumstances".[62] Standards can be developed cut of past accounting records or it can be scientifically determined by conducting studies like time and motion study. In the latter method more reliability and accuracy could be expected than in the former.

Standard product cost consists of the following cost elements.

4.6.6 Standard materials cost

4.6.6.1 The quantities of direct materials that are deemed necessary, on the average, to manufacture one unit product multiplied by pre-selected or standard material prices.

4.6.6.2 Standard labour cost

The quantities of direct labour that are deemed necessary, on the average, to manufacture one unit of product multiplied by pre-selected or standard wage rates;

4.6.6.3 Standard Overhead cost

The amount of factory overhead to be absorbed by the production of a unit product.

Some authorities do not consider administrative and selling and distribution overhead in this respect. "An indirect cost cannot be directly associated with the production of a cost unit or with the activity of a cost centre. It has to be apportioned to the cost centre or cost unit on a suitable basis."[63] One good basis for allocation is volume of production. Once this is allocated a standard cost sheet could be made on the basis of which control could be effected. A copy of the standard cost sheet should be supplied to the person who is responsible for the costs.

4.6.7 Setting up standard costs

The first step in this direction will be to set up standard costs for every type of material that is purchased. Next step is to calculate standard rates for direct labour and manufacturing overhead. This can be done as follows : "Data for the past few years from each department should be obtained. On the basis of these data and from estimates of future conditions the accountants fix the total labour cost and total hours, worked under normal conditions of activity in each department. By dividing this pay roll figure by the normal number of hours, a standard direct labour rate per standard direct labour hour for each

department can be derived.[64] The calculation of standard manufacturing overhead rate is a bit complicated, since all the servicing departments' costs are to be allocated to producing departments. "The first step is to calculate from past accounts the total cost of each of the service departments at normal volume. A suitable method can be used to allocate the service departments' costs to the producing departments. For example, the total cost of the boiler room is allocated to the producing departments according to the number of square feet of floor space taken up by each. The maintenance men normally work for each producing department. After the cost of the servicing departments are allocated to the producing departments it is necessary to calculate the manufacturing overhead cost that are normally incurred within each producing department. The sum of the allocated and the internal costs gives the total manufacturing overhead cost for each department under normal conditions. These totals are divided by the standard number of direct labour hours for each producing department. In this way, a manufacturing overhead rate - per standard direct labour hour can be obtained for each department."[65]

4.6.8 Advantages of Standard Costing

4.6.8.1 "A ready method is provided of comparing actual costs with the costs considered capable of achievement.

4.6.8.2 The cost of deviations from standard and the amount attributable to each cause is disclosed.

4.6.8.3 The management is provided with the information on the aspects of the business which are not proceeding as planned, so that the corrective action can be taken promptly to remedy losses or inefficiencies.

4.6.8.4 By highlighting the monetary transactions which are not proceeding as planned management by exception is made possible. The time of management is saved because close attention need not be given to the majority which have proceeded smoothly.

4.6.8.5 A means of control is provided whereby management can safely delegate responsibility and yet remain informed of the success or otherwise with which the tasks of subordinate levels of management are carried out.

4.6.8.6 The effect of fluctuations in output, sales or profits due to the incidence of unrecouped fixed costs are disclosed.

4.6.8.7 A forward looking mentality is encouraged at all levels of management."[66]

4.6.8.9 Standard costing could be helpful in inventory valuation too because the wastage could be adjusted by this elaborate system of inventory control.

for materials and labour are ordinarily related to expected conditions.

4.6.3.4 Standards may be set for level of operations regarded as the theoretical (ideal or maximum) level of efficiency. These standards reflect conditions and performances which can rarely be attained and never be sustained. Because of their 'Tightness' they are apt to create a demoralising effect upon the working force. As a yardstick or guage they have rather limited usefulness for management.[60]

4.6.4 Budgetary control and standard cost

Both standard costing and budgetary control have the same objective - management control. A budgetary control system without standard costing figures can seldom lead to proper exercise of control. The difference between budgetary control and standard costing is that "a budget emphasis the volume of business and the cost level which should be maintained if the firm is to operate as desired. Standards stress the level to which costs could be reduced. If costs reach this level, profits will be increased".[61] Standard is fixed for units of production, whereas the budget is prepared for the whole of the organisation.

4.6.5 Purpose of a standard costing system

The purposes of standard costing systems are :-

1. Controlling and reducing costs.

Standard costing system becomes complete only when the variance analysis techniques is used along with it.

4.6.9 Variance Analysis

Variance analysis is an accounting technique often used as a basis for appraising performance by the comparison of actual cost with standard cost. The variance which is the difference between actual cost and standard cost is taken as the 'prime facie' indication of good or poor performance, depending upon whether the variance is 'favourable' or 'unfavourable'. Although such presumption is not completely correct, some inferences can often be made by a careful analysis of the variance."[67]

Comparison between actual results and standards form an important part of the control process. Usually the variances are found month by month even though there is no hard and fast rule. Variance analysis sheet is an important document of control reporting. If the variation between the budgeted and the actual is significant it may indicate the need for management investigation to find out the underlying causes. Variance analysis by itself cannot improve efficiency. The manager who studies this can do many things. Variance analysis is quite useless if the standard set is unrealistic.

4.6.9.1 The most important step in variance analysis is the division of variances into controllable and uncontrollable ones. The variance, however, may not directly reflect performance since it may result from a mixture of factors, some of which are controllable by the supervisor and some which he cannot control. There are, however, techniques for analysing variances and to separate at least approximately the controllable costs. Variance analysis has wide applications especially in financial reporting. This technique is frequently used in the following situations.

1. Investigation of variations between actual results of the current period with the actual results of a prior period (the prior period being taken as base).

2. Investigation of variations between actual results and standard costs (where the latter is treated as the base).

3. Investigation of the variations, between actual results and budget goals (the latter being treated as the base).

4.6.9.2 Variance analysis should be done systematically. It should be easy to find out the variance and hence pinpoint the responsibility. As we know a good system of variance analysis can put a fullstop to the game of 'passing the buck'. There are seven principles to be kept in mind while developing the variance analysis system.

1. Managers and other employees concerned with cost control should understand the variances they should take appropriate remedial actions promptly as soon as possible.

2. Negative variances should indicate the reasons for the failure to reach the normal level of efficiency.

3. A "feed back" system should be incorporated into the system.

4. Management by exception should be followed.

5. An integrated approach should be adopted emphasising the interrelationship which exist between the different variances.

6. Controllable and uncontrollable variances have to be pin pointed and recognised.

7. Control has to be exercised at the point of deviation from the standard expenditure incurred or tasks performed.

4.6.9.3 There are numerous ways to investigate the variances and determine the underlying causes. A few of them are:

1. Discussion with members of the responsibility centres
2. Analysis of work situation.
3. Depth studies
4. Personal observation
5. Investigation by staff or by line
6. Audit.

Another approach to variance analysis is on functional basis. Functions are classified under,

1) Sales management
2) Production management and
3) General management.

The variances may be expressed in physical or financial terms. It is better to show it in both physical as well as in financial terms. If it is not possible then it should be in terms of money(as this forms a common denomination). Equally important is the division of cost into controllable and uncontrollable and normal and abnormal. In fact the first one will lead to the second one. This does not mean that everyone should be given a change to explain and escape but on the contrary this should lead to pinpoint the responsibility centre. There will be times when adjustments are needed for co-ordination. Absolute control may not possible and co-ordination should not be smothered. Another aspect is the installation of budgetary control system to achieve high level of efficiency. The costs are prescribed on the basis of a particular level of efficiency.

A variance can be found for any budgeted figure when the actual is measured. In sales variance we can find out the variance between the budgeted sales price and actual sales price. There could be another variance on budgeted

quantity of sales and actual quantity. There can also be variances on sales promotion, advertising and other sales expenses.

On the production side there could be quantity variance as well as cost variance. This can arise out of material, labour, overheads and so on. For areas where standards cannot be developed or where there is an allocation of fund the only variance that can be found could be between budgeted and the actual.

4.6.9.4 Direct Labour Variances

Variances are calculated depending on the nature of the business. Standard cost can be employed where the processes and products are fairly standardised. The depth to which the variance should go depends upon the purpose. Expenses on labour can be traced to (a) Training (b) Waiting time (c) Overrated labour (d) Excess inspection etc. (e) Piece-work supplement.

The main classification of labour variances are

1) Labour efficiency variances
2) Wage rate variances.

If products and conditions cannot be standardised, standard costs cannot be employed(There may be some difficulty in extracting the information relating to operations or products). A budgeted allowance for a stated activity

should be there for controlling the direct labour costs.

If standard hours had been calculated, this multiplied by the number of standard units produced will give the standard time that should be taken to produce them. This multiplied by the rate will give the labour cost. Due consideration should be given to the standard (whether it is of original standard or current standard). Some companies use both standards. The efficiency should be found accordingly.

Usual formula for labour efficiency variance:

= (AH - SH) x SR

Where AH = Actual hours taken SH = Standard hours for the work done SR = Standard rate

Wage Rate Variance (AR - SR) x AH

Where AR = Actual rate SR = Standard rate, AH = Actual hours taken.

If wages had been increased or decreased a revised variance will have to be found out. If incentives are in operation there may be time allowance given to weak workers in order to catch up with the fast workers. If there is any serious problem in the production system it may be necessary to attract additional workers, and to do this a higher rate than the standard fixed may be paid. Labour variance can occur due to change in labour mix as well.

4.6.9.5 Direct Material Variances

Material variances can occur due to material price, material usage, material waste, material mixture, material yield material substitution etc. Problems relating to material variance can originate out of a number of causes - controllable, uncontrollable, normal and abnormal wastage, shortage, faulty material, scrap, difference in mixture and other reasons. Two important variances in use are :-

4.6.9.6 1) Material usage variance

$$(AQ - SQ) \times SP$$

where, AQ = Actual quantity of materials SQ = Standard quantity of materials and SP = Standard price.

4.6.9.7 2) Material price variance

$$(AP - SP) \times AQ$$

where AP = Actual price SP = Standard price AQ = Actual quantity consumed

The Purchase Department should be assigned the responsibility for price variances. The main objective of this variance is to find out why such a variance arises. Of the many problems, the time lag between standard price fixation and actual materials purchase is perhaps the most important. Emergency purchase can cause price variance.

4.6.9.8 Overhead cost variance

Overhead cost variance is a problem field :

1) There is the problem of exercising control over overheads in production centre and the service centre.

2) There is a wrong notion that any reduction in overhead cost should increase profit by the same amount.

3) It is difficult to set up a realistic standard for overhead.

4) Overheads do not change in proportion to wages and so it cannot be allocated on that basis.

5) Expenses do not vary with production, and so difficult to allocate on that basis.

Overhead can beclassified as under :

4.6.9.9 I. 1) Volume variance

a) Seasonal
b) Calendar
c) Capacity usage

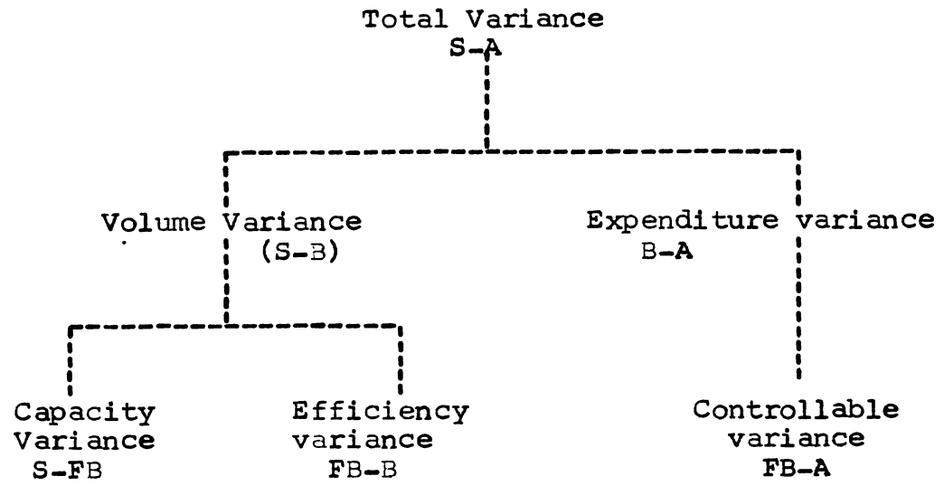
2) Expenditure variance

a) Price
b) Efficiency
c) Utilisation

II. 1) Overhead volume
2) Overhead efficiency
3) Overhead budget

General Management	Variance analysis By Function (General, Production & Sales)	(Controllable and uncontrollable variance) Controllable	Uncontrollable
	Return on capital employed Profit or Loss Variance Profit Target Growth % Dividends, Budget Profit	Controllable by Board of Directors and concentrated action of Managers	Not directly controllable by departmental Managers
Products	Primary Cost Variance Direct material Director Labour	Material Usage Labour Efficiency	Material prices Wage Rates
	Overhead Cost Variances Budget or expenditure volume (or capacity) Efficiency	Efficiency is spending under-recovery of overheads. Excess cost for actual production	Price variances Ideal capacity
	Sales Variance Budget value Actual value		Sales margin variances
	Sales margin variances Sales Margin Selling prices Sales Allowances		Depends on circumstances Change in selling price
	Sales Mix	Discounts and rebates allowed by salesman Failure to achieve sales	External factors making sales mix impossible to achieve.

The first is the most popular classification. We can depict it in a diagram -



Cost Variance = Volume variance + Expenditure variance

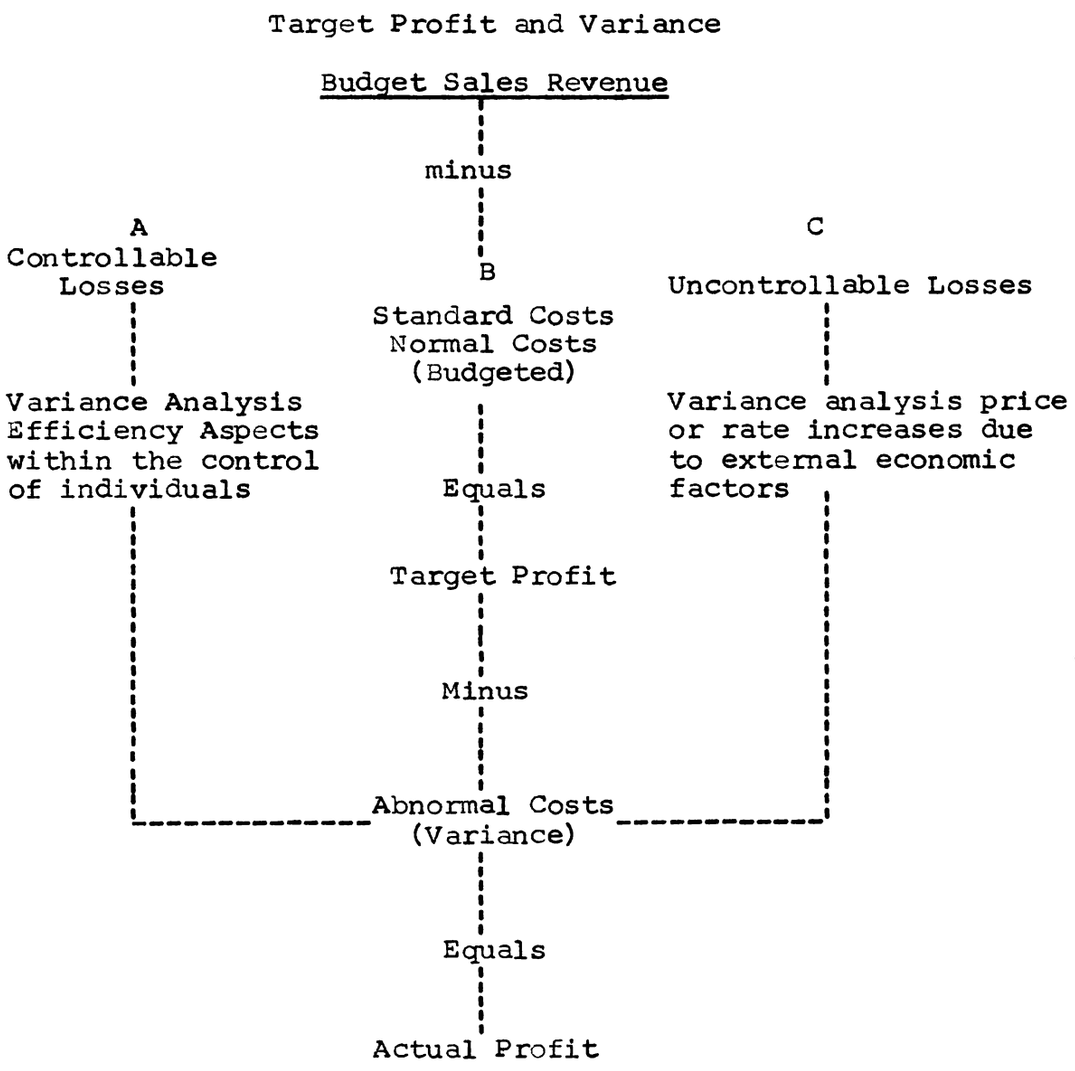
Controllable variance + Efficiency variance + Expenditure variance

Volume variance = Capacity variance + Efficiency variance

(Where A = Actual, B = Budget, S = Standard,

FB = Flexible Budget)

4.6.9.10 Variance Analysis an integrated Approach:



The variance analysis is a monitoring device for taking care of the results as indicated by the profit achieved. But comparing actual profit with standard profit is of limited value, if the comparison is made too late in time (once the profit earned is known, then corrective action can only apply to future periods). A further weakness is that when the

organisation becomes more complex a detailed knowledge is essential at all levels of management.

This is the reason why three tire structure variance analysis is used. Basically the process is divided into (1) Profit (2) Costs and (3) Output. All the activities are integrated as shown in the above diagram.

4.7 Higher Management Control System (Rase's System of Control)

According to Rose there are four main objects to kept in mind while developing a control system.

"a) The isolating of all vital facts connected with the welfare of the concern, so that nothing of importance can occur without attention being drawn to it.

b) The assessment of the relative value of these facts by the managing director for control purpose.

c) The illustration of those facts both in their current monthly and their trend results by simple line charts which provide an instantaneous picture of the position.

d) The reduction of the whole to dimensions which can be clearly understood by the managing director in the course of not more than half an hour, no matter what the size or complication of the concern may be".[68]

Figures speak about what happened. It cannot tell us the inter personnel fights, jealousies and loyalties.

Since the activities of these people can be interlocked so can the data arising out of their activities be arranged and controlled.

4.7.1 About figures Rose says :

"In control statistics there are to be found three distinct types of figures, each showing a different origin and purpose. These are known as direct figures, built up figures, and desired figures.

4.7.1.1 The direct are those which are taken directly from the various Board Returns, and record and current result for the period under review. The built up figures are those obtained by relating the direct and built up figures of one activity to those of another, or to a period of time.

4.7.1.2 The direct and built up figures provide the data from which the derived figures can be obtained, and a large proportion of the data used in management control is obtained from these derived figures, as they provide the continuous straight comparison of one period with another."[69]

Again figures can be grouped as point figures and period figures.

4.7.1.3 "A 'point' figure is one which cannot be cumulated. It is a snap shot standing by itself, of the position of that item at the time of review. Since the balance sheet is a snapshot of the assets; liabilities, and not

worth at the time of review, so that the progress of affairs can be noted." [70]

4.7.1.4 "Since these two types of figures are of a basically different nature, they can only be related to each other for management survey purposes by finding derived figures by which a point figure can be obtained from the period figures and the two types therefore brought on to the same basis.

4.7.2 Managing Director of a concern is not interested in the day to day figures. He does not want to know so much as where he is as where he will be. The natural yardstick with which he measures his performance is the result from last financial year. For him the monthly figures are milestones. If the M.D. wants to know his true position he should be able to visualise that position on an annual basis of some kind. Even in the case of sales, figures may vary with much fluctuation from month to month. So it would be sensible if it can be assessed on the basis of three months."

4.7.2.1 For the Managing Director's control purpose Rose advocates moving annual total. "A moving annualtotal is made up by taking the results at the close of the financial year (or any complete series of twelve months or thirteen periods) and at the end of the new month adding the results for the new month and subtracting the results for the corresponding month of the old year. In this way a twelve

months' total is again obtained, ending with the first month of the new year. As the year proceeds, each new month's result is added to the previous total and the corresponding month of the old year subtracted".[71] In this way, month by month, managing Director is able to assess his present position to his position at the end of the last financial year.

4.7.2.2 Fagal was the person who analytically saw control function. Following his thoughts, Rose says, "If we accept this theory, we can see that the 'Control' of an undertaking has two aspects, not one. The first is on the setting up of a plan, and the creation of an informatory structure which will present reliable data as to what is going on in the business; the second is the action to be taken, on the basis of the information so attained, to maintain the progress of the business towards the desired result for the working year," by "direction and command of the managing director."[72]

The basic framework[73]

General Management

Activity	Efficiency	Profitability	Security
The business position	The technical position	The trading position	The financial position
Orders Received Invoice Issued Orders outstanding	Personal data Product costs Equipment data Development data	Matters arising from the profit & loss account dealing with income and expenditure	Matters arising from the balance sheet, dealing with the movement of the money in the business

4.7.3. "Higher control, to put it as briefly as possible, could be defined as the general management of a business on a planned basis, the adherence to the plan being watched by a monthly survey made from the business, technical, trading and financial viewpoints which are known as the four positions." [74]

According to Rose to control any form of activity requires three definite steps

"1. A decision on some objective to be attained within a definite time period.
2. The setting up of a framework of information from which it can be seen whether a satisfactory progress towards that objective is being maintained throughout that time period.
3. The taking of management action when, from the information, it is seen that the progress towards the objective is unsatisfactory". [75]

4.7.4 In the four positions shown, business position watches the activity of the business, technical position efficiency of business, trading position profitability of business and financial position security of business.

Returns that are sent to the board are the following for the business position :-

B.R.I. Order received, invoices issued and order outstanding.

B.R.2. Such datas as may be specified by the Managing Director relating to personnel, equipment and development.

B.R.3. Product costs (orders closed and costed)

For the Trading position -

B.R.4. Statement of account, current

B.R.5. Statement of account, cumulative

B.R.6. and 6A, Expenditure details sheets, current cumulative.

For the Financial Position -

B.R.7. Balance sheet

B.R.8. Cash forecast.

4.7.4.1 The information requirements of the control system can be summarised as :

"a) Asset on monthly schedules, known as the Board Returns issued from the sources responsible for the preparation of the figures they record.

b) A standard checklist for each of the four positions; consisting of items requiring a regular check each month in order that the movement of affairs can be watched. Non-standard items can be added to the checklist at the Managing Director's wish to suit the particular business in which higher control is being installed.

c) A working book, into which the monthly Board returns are copied, thus forming a permanent central statistical record which are called the built-up and derived figure

necessary for proper review each month of the situation."[76]

Any management control should have a predetermined framework. We can say management should decide how much profit is needed. Managing Director's first job will be to decide the margin or profit, considering capital that is employed in the business.

4.7.4.2 Second stage is to survey the four positions as it stands. This will show the difference between the target and the actual. Third step is called the program stage. At this stage all the targets are again split into four positions, which will tell us about the action stage ie., the growth stage. These four stages can be shown in a tabular form.

4.7.4.3 Assembling the data

The data is collected for four different positions. Of this, business position is the most important, for its information comes from two important functions: production and distribution. The data covered by the business position is divided into three sections:

1) Orders received, which summarize the results of the external activity.
2) Invoice issued, which summarize the results of the internal activity.
3) Orders outstanding, which record the relations between the first two at the end of the period."[77]

Whatever be the way the orders are accepted whether it be a social or more profitable manufacturing organization the orders show the desire of the outside world to take advantage of the services offered. The extent to which the sales records are used depends on the energy of the organization. If sales categories are not established they must be established for control purpose. Control system should be able to pinpoint when the order comes. The data should be fed to the credit department to get their sanction. Cancellation should be watched; for such a cancellation will affect the current, cumulative and moving annual total figures. The efficiency of the sales department will depend on the record of actual value of orders received. Records for the control purpose are : "The gross current figures records the actual total of orders received in the month, the net cumulative and moving annual total figures record the correct position for the period and for the year. The net current figures is only used to make up the net moving annual total".[78]

A daily record of invoices should always be submitted to the M.D. along with the target for the month. A daily watch on invoice is important, for cash for company's payments, depends on them. In a manufacturing

concern it will point out the emergency situation. Invoices issued should be tabulated under different categories and also as a total. On the last day of the month it should be cumulated. At the end of the twelve months invoices issued and sales turnover will emerge as one. Orders outstanding should be given due weightage. Order book should specify whether the production is under job, batch, or for stock purposes alone.

4.7.7 The Technical Position

Technical position brings business, trading and financial positions together. "There are two reasons for this. Firstly, all of these activities are carried on with a purpose, and all purposes aim at the prosperity and security of the business. It is, therefore, as important to watch over these indirect activities some of which may seem on the surface relatively unimportant, as it is to watch over the more obvious ones, such as the sales turnover or the profit. Secondly, almost all such activities are of a nature that can be closed off as far as statistics or reports are concerned by the last day of the month. Consequently their results can be studied on the first week of the month . . . . ."[79]

"Since Higher Control is, after all, only a matter of gathering together the facts and figures relating to any form of corporate activity, presenting them in a form which enables those in charge to see without difficulty what is going on, and explaining the situation to them as simply as possible; it follows that the method can be adopted, when suitably arranged, by any form of undertaking. The word, "technical" therefore, may appear at first sight somewhat misleading, but it is used here to cover all those matters of interest within that corporate activity the condition of which is not directly shown by sales records, the P & L Account, or the B/S."[80]

4.7.7.1 The factors discussed under the technical position are :

"1. The human element, the men and women who make up the total personnel being paid by the company for their services.

2. The cost of goods and/or services produced by that personnel as a group.

3. The technical efficiency of the equipment which is directly concerned with that production.

4. The progressive development and technology of the products of the undertaking, whether goods or services."[81]

4.7.7.2 In short we can say " . . . . . technical position serves to collect all those aspects of the activity of a working community which are not directly part of the business, trading and financial positions. Far from being a secondary collection, it is perhaps for control purpose almost the most impostant of the four, since it is from the interplay of the four, 'Common factor' in it that the results recorded in the other three productions come about. It possesses more loose ends" than the others, which are under the direct supervision of the sales manager, the works manager, and the accountant. Most of the aspects of the technical position need personal contact with the managing director, and as his time is invariably occupied with the multitude of other matters which need his attention, "technical" problems - apart from the product costs - tend, sometimes, to go by the board, which is a pity, since keeping an eye on them can be very rewarding".[82]

4.7.8 The Trading Position

Accounting department is supposed to handle the trading position in its professional framework. Results of the trading activity are shown under three separate headings : Trading account showing gross profit, Profit and loss account showing net profit and appropriation

account showing profit appropriations.

4.7.8.1 Items coming under the trading position are :-

1. Opening stock, which should constitute finished goods stock, work in progress and raw materials stock. Permissible stock will be fixed. In the case of mass production contingencies should be anticipated. Fluctuations should be established on the basis of past data.

2. Sales turnover : When this figure is assembled the following factors should be incorporated:

i) The customers may take cash discounts for quick payment, if these are offered.
ii) There may be contra-accounts which will cancel out some part or all the debt.
iii) Credit and return allowances for goods delivered in previous months may have been brought in.
iv) Where carriage outwards is paid by the customers the amount will inflate the invoice value.
v) Trade discounts may greatly reduce the actual value of the sales, if the gross figure be taken at the start".

3. Direct materials purchased.
4. Direct labour.

5. Factory on cost. This term means the cost incurred in running the factory as a complete unit. This cost for control purpose should be divided into :

4.7.8.2 i) Indirect material
ii) Indirect labour
iii) General charges
iv) Standing charges
v) Closing stock variation
vi) Cost of goods sold
vii) Gross profit
viii) Company overheads
ix) Exceptional Trading Expenses
x) Fixed charges
xi) Net trading profit
xii) Sundry income
xiii) Net profit or loss on going concern
xiv) Special charges
xv) Final profit or loss before adjustments.

4.7.9 Financial Position

Even if the trading position, technical position and business position are bright, there is a chance of the company going under liquidation. In fact "Important as the first three control aspects may be, it is really upon the fourth, the financial control, that the fortunes

of any company will depend. Yet it is this aspect which receives the least attention, until increasing difficulties make it impossible for the movement of the money to be any longer ignored."[83] Rose advocates horizontal statements for the control purpose. Aspects he discusses under the financial position are assets, liabilities, reserves and provisions, net worth, fixed capital problems and cash forecast.

The most important aspect of assets is its liquidity position. Fictitious assets are really not assets. As far as the liabilities are concerned they should be "divided into

a) Accrued, or maturing within 3 months

b) Maturing 4 to 6 months ahead

c) Maturing 7 to 12 months ahead".[84]

Reserves and provisions should be brought under different categories. As for the net worth this includes issued capital, general reserves and the carry forward from profit and loss account. In a well managed company there should be a steady increase. As for cash forecast he says "Every company should have a carefully estimated cash forecast for three months ahead, setting at the top the opening cash position and under that will be entered the cash that will come in during the month, from sales

debtors or sundry income or any other source of funds. This total at the point will show the total cash available during the month." [85]

4.7.9.1 Appraising the Monthly Results

The man behind this activity is chiefly the control assistant and according to Rose his duties are :-

"1. Re-arrangement, covering the redrafting of any original documents sent to him so that they conform to the control lay out. This stage usually occurs at the beginning only if the installation of the method, before the Board Returns have been drafted. After that no further arrangement should be required.

2. A deputation, covering all sub-arrangements, combinations and calculations required in order to obtain the information needed for control purposes.

3. Analysis, covering the study of that information in order to ascertain what has occurred since the last control survey.

4. Diagnosis, covering the study of the reasons why those movements have occurred.

5. Explanation, covering the Control Reports, which must summarise the position of affairs as disclosed by the diagnosis." [86]

Orders received analysis summary is the basis for appraising the review of salesmen's performance by the sales manager. Works manager also reviews this, so that he is sure that none of his effort's results are robbed off. He specifically looks whether there was any delay in invoicing. Both the sales manager and works manager will sit together and chalk out a programme for the coming year.

4.7.9.2 For the appraisal of the technical position four reports are asked from (1) personnel (2) costs 3) equipment and (4) technical. These reports will clarify the work done, requirements and problems of each department.

Trading position (profitability) is assessed with the help of management accounting. ". . . . . Management accounting consists of two separate stages : Firstly the arrangement of the data in such a manner that the information required can be readily seen, and secondly the analysis and interpretation of that information so that it can be used effectively in guiding and controlling "the company's affairs".[87] Here budget is the most important document. It should show factory on costs at a fixed amount permissible per week and for the residual charges at a fixed amount permissible per month.

4.7.9.3 "The survey of the financial position is perhaps the most intricate of the four. We have to determine the movement of money in the business - where it has come and is coming from how it is being used, and whether the situation of the company, from the vital standpoint of its financial security, is getting better or worse".[88]

This is done with the help of

1) The asset variation statement
2) The movement of funds statement
3) The working capital investment statement and
4) The financial data sheet.

Asset variation sheet should show the movement of money. For this purpose two balance sheets are arranged in a special manner, so that the variations are clear. This will also bring into sharper focus how much additional money is wanted. On the basis of this how the required finance can be brought out also is visible; whether by bank loan, fresh issue of share capital and debentures.

The movement of funds statement is fund flow statement. The working capital investment statement shows the difference between current assets and current liabilities and how it is invested. This statement is shown on a monthly basis. Ratios are quite useful for this purpose.

Rose also advocates financial surveys. According to him "Surveys of the financial situation of a company are of two kinds, each having an entirely different objective.

5) Control surveys, dealing regularly month by month with the balance sheet figures at the end of each period.

6) Isolated surveys, dealing with an annual balance sheet, or with a comparison between two concerns, or with a special financial investigation of some kind." [89]

4.7.10 Board Level Control

Duties and responsibilities of the directors vary widely according to company. Any way a director has two problems. Firstly, the difficulty of assisting his company to make headway against the endless trade obstacles, and secondly to make sure that the company is managed efficiently. In this critical juncture he cannot transfer his ultimate responsibility to the members of the board even though he can ask for their advice. The difference between the general management and functional management is that in general management it is from top downwards whereas functional management sees it bottom upwards. Managements have three functions, technical, functional and general. Technical management is that

exercised by individual in relation to his personnel duties. Functional duties are duties in relation to other functions in the going concern. General management function is in relation to the concern as an individual. For this purpose he needs both external and internal information. 'Control', Rose says, should follow the following lines.

"1. Only to accept as truth what was known to be such".

2. To divide difficulties into parts so that they can be studied.

3. To start by studying the simple points; then only by degrees work upto the more complicated ones".[90]

4.7.11 Defects of Rose's system of control

1. This system is meant for only small companies particularly for sole proprietory concerns.

2. It does not take into consideration departments like R & D personnel and administration for control purpose.

3. Control gives heavy emphasis on the past; and quite often inefficiency is concealed, whereas what is needed is a forward-looking control

Conclusion

In brief financial control is total corporate control which includes both management control and operational control. Financial planning and financial control are inseparable since one forms the basis for the other. Several tools and techniques have been developed for higher management controls. Since each activity is ultimately planned and controlled through money the financial control is of supreme importance.

CHAPTER V

Functional Problems of Public Sector Undertakings in Kerala

Changes that have occured in financial theory and practice in recent years have been discussed in some detail in part I. Different devices used and techniques applied to sharpen and revitalise the functions of finance manager is also dealt with. Part II is completely devoted to the empirical study undertaken by the researcher in respect of 18 out of 21 State industrial undertakings in Kerala.

An attempt is made in this chapter to dig deep into the major functional areas of management in these concerns to unearth the root causes of a variety of financial problems involving financial decisions. In the process the critical problems in the areas of sales, production, personnel and finance are highlighted. The discussion starts with the area of Sales.

5.2 Sales

5.2.1 Dependency

Many of the companies depend on a single customer or a limited number of customers for their products. So sales depend on their demand.

Seven companies (K.E.L., K.S.D.P., Premo Pipe, Pallathara Bricks & Tiles, Forest Industries, United Electricals and Traco Cables) depend mainly on a single customer each. Three companies (K.E.L., United Electricals & Traco Cables) depend mainly on Kerala State Electricity Board, Pallathara Bricks on Kerala State Construction Corporation, K.S.D.P on Kerala Health Services, Premo Pipes on Public Health Engineering Department and Forest Industries on the Kerala Government. Due to this dependence, the following defects are found. Table 71 shows the unsteady profit and loss due to the unsteady sales. Forest Industries had shown profits in alternate years. Premo Pipe had shown loss for three years continuously and then profit for three years continuously and again loss in 1977-78. In the same way F.I.T had shown loss for 1968-69 to 1972-73 continusouly and profit in 1973-74 and again loss in 1974-75 and then profit in 1975-76 and 1976-77. This is mainly due to the fluctuation in sales. It is a fact that the above companies did not have to depend on one customer. Practically no effort is made to expand their market.

5.2.2 Dependency on few customers leads these companies to accept the conditions dictated by the customers specially when there are competators who can offer the same commodity on more favourable terms. For K.E.L. and United Electricals, the main customer is Kerala State Electricity Board, and the Board has not accepted the price fluctuation clause and they are not ready to give advance for their orders. Owing to the dependency and lack of diversification these companies are making losses in spite of considerable increases in sales. Table 9 clarifies the point. In spite of the fact that Pallathara Bricks and Tiles had increased its sales from Rs.3.17 lakhs in 1972-73 to Rs.21.8 lakhs in 1976-77, it was not able to make a profit. In the case of K.E.L., even though the sales had increased from Rs.144.65 lakhs in 1975-76 to Rs.220.91 lakhs in 1977-78 it has not made any profit. The performance of United Electricals is also not any different from this as shown in table 9 .

Another defect of depending on one customer, is the total stoppage of orders for the products. An example is T.P.I., which is dependent solely on Kannan Devan Company. According to the sales executive "Kannan Devan was a foreign concern which enjoyed some privileges from the government and in turn they used to take our product. Kannan Devan was taken over by Tata Finlay Group and then they broke off their relationship with us. Now we find it hard to push the product in the market."

5.2.3 Forest Industries depend mainly on government departments to sell its products. Orders for the year are received late and the company has to pay overtime and other incentives to complete the work in time. To quote the executive "We have little production in the first half of the year. We hardly produce more than 10 lakhs in the first half. In the second half of the financial year bulk orders will come. Even about this we are not sure. We are forced to give overtime and incentive to cover up our orders in the second half. Orders land here from departments after four to five months after the commencement of the financial year."

5.2.4 Another defect of such a dependency is that if these companies cater only to one special customer, they probably fail to identify other potential customers.

5.2.5 Selling Price

In the case of companies enjoying monopoly rights, they have the ability to dictate the selling price irrespective of quality or efficiency. This is one of the major reasons for profits in profit-making companies in Kerala. Out of 18 companies five have accumulated profits. (K.S.D.P, T.T.P., K.M.M.L., Traco Cables and Premo Pipe) Titanium Products and K.M.M.L enjoy monopoly. Traco Cable enjoys monopoly for their Telephone Cables. In fact it was after the introduction of P & T Cables in 1974-75 that the

company started showing regular profits (1975-76 = Rs.13.82 lakhs, 1976-77 = Rs.33.64 lakhs and 1977-78 = Rs.18.28 lakhs). Premo pipe and K.S.D.P have got informal arrangements with their major customers, namely Public Health Engineering Department and Kerala Health Services respectively, by which the selling price is fixed above the cost of production leaving a margin of profits. Table 8 shows the financial results of these companies.

5.2.6 In some companies (K.E.L and T.P.I) selling price is fixed with an informal understanding with the private sector. K.E.L fixes the selling price for the transformers with an informal understanding with T.E.L.K, Indian Transformers etc. T.P.I fixes the selling price for the products with an informal understanding with Southern Plywood Manufacturers Association. According to the executives of both the companies the selling price so decided apply only for the government companies. Private companies undercut or increase the prices according to the customer and their demand.

5.2.7 Contracts

A few companies (K.E.L., Traco Cable, United Electricals and T.P.I) enter into contracts with their customers and pay damages for not executing them in time. These companies were not able to get the benefits of escalation clauses even though wages and raw material prices

have gone up in the mean time. To quote the marketing executive of K.E.L "We never completed any order or contract on time. Everyone here is interested in having a fat order book. The result of this is two fold. We lose the customer and the whole activity ends in loss." Since the company fails to fulfil the contract ontime many a time the companies are forced to pay the penalty according to compensation clause.

5.2.8 Cost of Production and Selling Price

The finance executives of some companies (K.E.L., K.C.L., T.R.W., T.C.C and United Electricals) have said that they have sold products below the total cost of production for years continuously. Finance executives of K.C.L. and T.R.W were of the opinion that they have products which are sold even below the variable cost. This is one of the major reasons for these companies making losses. For example in T.C.C the cost of production of Sodium Sulphide is much above the sales realisation.

The following table shows the cost of production and sales proceeds for this product for a period of three years from 1974-75.

Table 8 b

Year	Cost of Production (Rs. per tonne)	Sales Realisation (Per tonne)
1974-75	3,579	2,935
1975-76	4,119	3,061
1976-77	4,567	3,222

The company has not realised even 75% of the cost of production during the concerned years.

Regarding K.E.L., the Comptroller and Auditor General had commented in his Report for 1974-75 as follows:-

"A test check (June 1975) however, revealed that the company had been generally selling the motors at prices below the cost of production and the losses incurred on this account during the three years to 1974-75 was Rs.2.05 lakhs as indicated below :-

Year	No. of motors sold below cost of production	Total cost	Sales Value	Loss
1972-73	70	1,14,626	53,562	61,044
1973-74	151	2,74,281	1,51,573	1,22,706
1974-75	171	2,83,166	2,62,249	20,917

It can be seen from the table that the number of motors sold below the total cost were increasing year after year. It is this phenomenon, that makes all the loss-making units perpetually handicapped.

5.3. Production

5.3.1 Installed Capacity

In this regard three different phenomena had been noticed. According to the production executives of K.C.L.,

T.T.P and K.F.C the installed capacities are very high as compared to market demand and hence they are having high idle capacity. (The percentage of actual capacity utilisation had been 0.05% (in ice plant) and 40% respectively. See tables 39, 48 & 54. In three companies (K.C.L., T.P.I. and T.T.P the installed capacity mentioned in the project reports are wrong. According to them the above-said installed capacity cannot be achieved unless new balancing machines are purchased. With regard to Unit-I of T.P.I and Premo Pipe Factory the managements are not aware of the installed capacity and they are not revealed in the financial statements also.

5.3.2 Capacity Utilisation

Owing to low capacity utilisation, cost of production per unit remained high. Cost per unit could be brought down only by increased capacity utilisation. Table 38 shows the capacity utilisation in various companies. The installed capacity of K.F.C. is 10950 tonnes, against which in 1975, 1976 and 1977, the capacity utilisation was 97 tonnes, 347 tonnes and 471 tonnes respectively, recording only a capacity utilisation of below 1%. The maximum capacity utilisation in T.T.P was 35% (in 1976-77). Capacity utilisation in Kundara Division of K.E.L and Kaolin Division of K.C.L were 33% and 25% respectively. Capacity utilisation in T.P.I was 70% and in T.C.C it was 50%. In United Electricals and Traco Cable the capacity utilisation was 33%. It

was only in Trivandrum Spinning Mill that the capacity utilisation reached 100%.

5.3.4 Product Planning

Some of the companies making losses try to diversify their products and reduce the losses. But often it so happens that even the new products are found to be making further losses, once commercial production is started. This invariably results in further losses, usually the additional capital required for the diversifications is secured as loans at a high interest rate. This practice increase the financial charges and tighten the financial position of the concern. For example K.C.L introduced Kaolin Division in 1974-75 when the company had a good amount of accumulated losses. Even in 1974-75 the company had a loss of over Rs.14 lakhs. After the introduction of this division till 1977-78 this company has not made any profit. In 1977-78 the company had a loss of Rs.53 lakhs. Losses of K.E.L after introduction of Brushless Alternators had been over Rs.44 lakhs, 23 lakhs and 45 lakhs from the years 1975-76 to 1977-78 respectively. The company has an accumulated loss much more than Rs.235 lakhs (against the capital of Rs.55 lakhs) and the company has been planning to produce scooter tyres.

5.4 Personnel

5.4.1 Promotion Policy

As far as promotion is concerned there is no definite policy laid down. In K.S.I.E appointment to higher posts had been mainly from outside. In other companies promotion is internal and on the basis of vacancies. Any way promotion is not at all planned and many a time, it is seniority rather than the talent that is considered for promotion. In companies like K.M.M.L and Premo Pipe the vacancies are filled by deputation. Regarding the workers, it is purely on the basis of the experience.

5.4.2 Indiscipline

In a majority of the companies workers have well organised Trade Unions. Trade Union activities are controlled and directed by persons from political parties. Often unreasonable demands are placed before the managements resulting in strikes and lock-outs. Sometimes demonstrations, strikes and gheraoes culminate in man-handling of executives.

5.4.3 Resistance to Change

Workers' resistance to change or allergy towards new methods have been pointed out by the executives as strong reasons for not improving the production methods. In fact in order to improve production inthe porcelain

division of K.E.L., management wanted to introduce the incentive system. As a production executive of K.C.L said "We even offered 100% incentive according to the plan. But the workers resisted. They feel in due course we will take away incentives and force them to do the same amount of work." In K.S.O they wanted to conduct a work study. It took three years to make the workers accept it. Finally, it was only in the last long term agreement, as a part of the bargain for increasing the wages that they agreed to it. In K.E.L even now the workers have not accepted the idea of conducting a work study. Another point is that during the time of work study the workers deliberately go-slow as they have done in K.C.L and United Electricals.

5.4.3 Multi-Unionism

Multi-union rivalry is a feature of today's industrial society particularly in Kerala. The basic reason behind multi-unionism is the political parties' competition for leadership. When one union makes a demand, the next union is ready to put up more demands. It is this thirst for leadership gives birth to new unions. This is felt more at the time of long-term agreements. Long-term agreements are entered into avoid repeated strikes. Now multi-unionism stands in the way of arriving at definite decisions and agreements. Just because one union has accepted the agreement another union might disagree without looking into the benefits of the agreement.

5.4.4 Grading

In these companies, the workers are classified according to either skill or grades. Usually there are three grades like skilled, semi-skilled and unskilled. The basis of this classification according to the executives is "mainly experience." The executives agree that it is least scientific. In fact the main reason for this state of affairs is that these units were either departmental undertakings or sick units taken over, and hence details regarding the workers are not readily available, the workers are not given any training before or after their classification into grades.

5.4.5 Deputation

Top executives and sometimes even subordinate staff are mainly drawn from the government departments on deputation ranging from one to three years. For example, all the executives in K.M.M.L are on deputation except the accounts officer. In Premo-Pipe Factory most the executives are on deputation (except the Finance Manager). These executives coming on deputation are not aware of the problems of the organisation. Many a time deputation from the Ministry of Industries, Finance etc., is just to create a promotion opportunity in that department. There are cases where the Managing Director is in charge of more than one company.

For example the Managing Director of K.M.M.L is the Managing Director of Travancore Cements also during the period 1976 to 1979. This kind of deputation often adversely affect the regular functional activities of the companies; for they even spoil the morale of the employees. There are cases where the period of deputation had been extended upto 10 years as in Chalakudi Refractories. On the other hand if the top executives are appointed on an adhoc basis, they may not have permanent interest in the organisation. There is no incentive to make the organisation more efficient and profitable.

5.4.6 Recruiting

In the field of recruitment or selection adhoc policies are adopted. In the 18 companies under study vacancies are advertised in the newspapers. Opportunities for advancement of the internal applicants depend on their service and experience. No scientific methods are adopted for selection.

Executive development programmes are not conducted by any of the companies. But persons are selected on an adhoc basis by the management and sent for training and participation in workshops and training centres conducted by other institutions. But the exposure to such facilities do not usually bring any visible benefits to their own organisations. Often the knowledge they get may not have any

relevance to the internal set-up of these organisations.

5.4.7 In many of these companies the employees are not given written instructions (except K.S.I.E) about the duties they have to perform. Workers follow the tradition and custom and they have no concrete ideas of their duties and responsibilities. There is no proper delegation of authority. Usually there is no definite limit for span of control. Sometimes the span of control of different executives overlap. Very often this results in disharmony and conflicts in the organisation.

5.5 Finance

5.5.1 Capital Structure

All the companies studied follow debt financing. There is nothing wrong with this so long as the debts are within limits and earns more than the interest for them. But, in these companies debts increase year by year without repayments of either interest or principal. For example; the debt of K.F.C was only Rs.228 lakhs in 1973-74, in the following years it increased to 317 lakhs, Rs.346 lakhs and Rs.454 lakhs (1973-77). In the same way the long term debts of T.R.W were Rs.187 lakhs , Rs.186 lakhs and Rs.254 lakhs from the years 1975-76 to 1977-78 respectively. (Refer Tables 61 & 66) The normal ratio of debt to equity is considered as 1:1. But in these companies the ratios of debt to equity were far above the norm. The debt to equity ratios

of T.R.W were 2.59, 2.93 and 4.33 in the years 1975-76, 1976-77 and 1977-78 respectively. Debt to equity ratio of K.C.L for the years 1975-76, 1976-77 and 1977-78 were 1.98, 2.28 and 2.67 respectively. For K.F.C, the ratios were 2.77, 3.54 and 3.72 respectively in 1974-75, 1975-76 and 1976-77. Thus the debt financing has no relationship with the ability of the company, to pay it back and they have a highly distorted capital structure.

5.5.2 Financing Charges

Financing charges form an important item of expenditure of these companies. Often it has ranged between 10% to 25% of the total expenditure showing an increasing trend over the years. For example financing charges of T.C.C has increased from Rs. 21 lakhs (in 1972-73) to Rs.158 lakhs in 1977-78. TABLE 60 In K.C.L it was only Rs.4.42 lakhs in 1971-72 which went upto Rs.19 lakhs in 1977-78. TABLE 63 Similarly in K.E.L it was only Rs.5.98 lakhs in 1971-72 which increased steadily to Rs.23.52 lakhs in 1977-78. TABLE 64 The main reason for increase in financing charges is the increase in debt. The same condition prevails in all the companies and this is due to the lack of proper long-term financial planning. Majority of these companies are in such a situation that they are neither able to pay the interest nor the principal. Default in interest payments results penal interest rates. For example in Premo Pipe Factory,

loans aggregating Rs.49.59 lakhs were obtained from government (between February 1964 and September 1971) carrying interest at the rates varying from five to seven per cent per annum, repayable in 13 to 17 annual instalments, commencing from the third year after the receipt of the loan. Penal interests were to pay at rates varying from 7% to 9.5% per annum on overdue instalments of principal and interest. The company was not repaying the instalments of the principal and interest regularly from September 1970 onwards. The over due instalments of principal (Rs.20.67 lakhs) and the interest exceeding the principal (Rs.24.28 lakhs) with penal interest on delayed payments (Rs.7.98 lakhs) amounted to Rs.52.93 lakhs at the end of 1976-77.[2]

In the case of T.P.I it was observed that "Loans aggregating Rs.114.76 lakhs obtained from the State Government from February 1964 onwards were outstanding as on 31st March 1975. The loans bear interest at rates varying from 5 to 8 per cent per annum and are repayable in 15 to 20 annual instalments. The company (T.P.I) has not yet (January 1976) paid the interest (Rs.35.88 lakhs) as well as the overdue instalments of principal (Rs.23.84 lakhs). The default in the repayment of principal and payment of interest has resulted in the accrual of penal interest (at 2% over the normal rate in respect of over due instalments of principal and at rates ranging from two per cent to ten and half per cent in respect of over due interest) amounting to Rs.5.90 lakhs.

The total amount of interest outstanding as on 31st March 1975 was Rs.41.86 lakhs.[3]

5.5.3 Standard Costing

Majority of the companies have not even tried to introduce a costing system. With the prevailing set up in these companies it is not possible to introduce or set up costing system. Only three companies in Kerala have got cost accountants (K.S.D.P., T.C.C and K.C.L). This post had been lying vacant in K.E.L., T.R.W and K.C.L for years together. In majority of the companies there is only one executive to look after the finance function. To satisfy the government there are so many formalities and procedures that he has to look into, and he hardly gets any time to think about anything else. To quote the Finance Manager of K.C.L. "I am sure there are a good number of products sold below the marginal cost in porcelain division. But to look into this matter we do not have qualified persons." Again to introduce a standard costing system there should be standards for cost elements. We have already found that there is no labour standard inmany of the companies and the existing standard is not made use of. This calls for a thorough change in the organisation of the finance management function.

5.5.4 Cost Ascertainment

Regarding the cost ascertainment three important

facts have been noticed.

a) There are five companies (Forest Industries, Pallathara Bricks and Tiles, Traco Cable, K.E.L. and Trivandrum Spinning Mill) which do not assess the cost.

b) K.M.M.L and Chalakudy Refractories assess the cost in order to value the closing stock.

c) The rest of the companies assess the cost of production on the basis of actual cost.

In two companies (Trivandrum Spinning Mill and Pallathara Bricks and Tiles) the executives said that the reason for not finding the cost of production is that the selling price is decided on the basis of the market price. This argument is baseless because controlling the cost and cost reduction are two ways of increasing the profit or reducing losses. In the case of these companies it is more significant, since they are accumulating losses year after year.

Three companies (Traco Cables, K.E.L and Forest Industries) ascertain the cost of production when they enter into contracts. The quotation for the contract is prepared adding direct labour, direct materials and percentage of overhead. In fact these companies have no work standard in order to ascertain the labour cost. A percentage of overhead is added to the material and labour cost.

The finance manager is not involved in the preparation of quotations. As a result, it is difficult for the company to know how much overhead remains unabsorbed. A common feature of these three companies is that they do not bother to find out whether the particular contract has resulted in a loss or a profit.

In the case of K.M.M.L and Chalakudy Refractories, the cost is ascertained at the end of the year in order to value the closing stock. This is against the accepted norm of "cost of production or market value whichever is lower". Chalakudy Refractories is a continuously loss-making unit due to selling their products below the cost of production.

The rest of the companies ascertain the costs on the basis of actual cost after they are incurred and this cannot be used for any cost control measures.

5.5.5 Cost Consciousness

Cost consciousness is one of the most important requirement for controlling cost. Every executive should be considered as a cost/revenue centre. He incurs expenses and gathers revenues. But in these companies, the executives other than those in finance department are least aware of their role as a cost centre. When questions were asked about direct costs overhead the answers were "Finance will tell you". Finance executives can tell only the cost

incurred which they cannot control. Cost should be controlled by the persons involved at the point of occurrence. Many a time these executives are forgetting the proverb "little drops of water make the mighty ocean". Only an executive who knows the nature of the cost could know how to control the cost and reduce the cost and increase the revenue.

5.6 Expansion

5.6.1 Untimely expansions and diversification

Diversification or expansion plans cannot be considered as strategic plans but are only crisis plans. When the company is back to the wall with all its capital eroded they think of expansion or diversifications. The major reason for such expansion and diversification is to keep the people employed because the government cannot afford to close down the companies. In the process they expect to reduce losses and increase profit.

For example, Pallathara Bricks had planned a project for diversification. This idea was conceived when the company had an accumulated loss of Rs. 24 lakhs against an equity capital of Rs.18.58 lakhs in 1977-78.

Chalakudy Refractories started its expansion programme when the company had an accumulated loss of Rs.9.17 lakhs against a paid-up capital of Rs.6.63 lakhs. T.C.C is

about to enter on the 5th stage expansion. The company had all its capital eroded during the third stage and 4th stage expansions. This company had an accumulated loss of over Rs.6.5 lakhs against its paid up capital of Rs.6.3 lakhs in (1977-78).

For all these expansion schemes, fresh investment will be necessary which they get as loans. Here expansion is taken as a device to get liquid cash and give added life to a dying organisation.

5.6.2 Time Delay

In a number of companies in the state sector, plans for expansion and diversification are implemented only four or five years after their finalisation. For example in Pallathara Bricks & Tiles the report of the Board of Directors (1977/78) states as follows : "In the last two reports you were informed that the Board is taking concrete action in the matter of diversification of production activities of the company. In this direction the company had obtained letter of intent for the manufacture of calcium carbide."[4] Even now ie. in 1980 the company has not started its diversification programme. During these years the company had been incurring losses and it had been accepted that company cannot exist unless it diversifies.

5.6.2.1 In the case of Chalakudy Refractories the Board in its financial statement in the year 1975-76 said

as below: "As you are aware, Government of Kerala have approved a scheme of expansion and modernisation of the company to manufacture quality refractories. We may mention that the implementation of the project has already been commenced and is expected to be completed within a short span of 18 months."[5] In 1977-78 ie., after two years, the Board said : "It is expected that the company will be able to avail the above loans shortly after executing necessary agreements with them. The government has also agreed to provide necessary guarantee towards security for these loans pending execution of the agreement, M/s. Kerala State Industrial Development Corporation was pleased to sanction an amount of Rs.5 lakhs as bridge loan. If the above funds are forthcoming as anticipated your directors are sure that we will be able to complete the long awaited expansion scheme within the time stipulated for it."[6] Even now the expansion programme is not over.

5.6.2.2 The fourth stage expansion of T.C.C took four years. During these years four lakhs of rupees were locked up. Against this we have K.S.D.P which took only 18 months to construct and commission its new plants. In business time is money and time delay is costly.

5.6.2.3 The financial statement of T.P.I for 1966-67 says "As you are aware, the company has been granted a licence for the establishment of a new unit for the manufacture of

superior varieties of plywood, black-board, flush doors etc. .... other things being favourable the new unit will commerce functioning early in 1969."[7] Financial statement of 1971-72 says "The second boiler for the new units was also commissioned in September 1971. The construction of quarters for Managing Director and three numbers Officers' quarters have been taken up and the construction is almost completed. The items now remaining in the expansion programme are the procuring of a few imported and indigenous machinery and construction of a spacious administrative blcok and another log pond."[8] In fact the expansion scheme was completed in 1973-74 which proves the time delay involved in completing expansion.

5.6.3 Expansion on the basis of Unreliable Data

In some companies expansion programmes are very expensive in the sense that the amount of money spent is large. Expansion is supposed to bring out a synergic effect (2 + 2 = 5). If the expansion programme is wrong the result is in the opposite direction (-2 + -2 = -5). A clear example of this is the 4th stage expansion of T.C.C.

The company doubled its capacity for caustic soda. According to the authorities the expansion was envisaged to meet requirement of the Velloor Paper Mills. The paper mill has not been commissioned even in 1981. The expansion of T.C.C was completed by the end of 1974-75. In 1974-75 the

company incurred a loss of Rs.14.34 lakhs. But the losses during the subsequent three years were Rs.134 lakhs, Rs.267 lakhs and Rs.258 lakhs respectively. It was owing to this expansion scheme that the whole capital investment in the company was eaten up.

5.6.4 Improper Investment

It is a common feature of these companies that they have invested in machinery which is not used. This investment forms a part of the fixed cost which has to be absorbed by the manufactured products. The depreciation charges of these un-utilised machinery inflate the total cost. As it is a dead investment the money invested do not earn even the interest.. It causes two-fold loss.

5.6.4.1 For example, in the case of K.F.C. "Between June 1970 and April 1973, the State Government transferred to the company indigenous trawlers. The design of these trawlers constructed by a consortium of boat builders in the country at the cost of Rs.59.14 lakhs, was finalised by Mazagon Dock Limited, Bombay, A Government of India Company and the construction was supervised by the Mercantile Marine Department of the Government of India. Trial runs were found to be satisfactory. However, after taking over the trawlers, the company found that there were frequent breakdowns which rendered fishing operations with the trawlers uneconomical.

The company therefore claimed (May 1973) from the Government, reimbersement of losses (Rs.8.58 lakhs) sustained between 1970-71 and 1972-73 on the operations of the indigenous trawlers. Government sanctioned (May 1973) a loan of Rs.6 lakhs (repayable in 13 annual instalments) to meet the depletion of working capital caused by the operation of the indigenous trawlers. None of the indigenous trawlers was sent out for fishing since March 1974 and the crew were idling. Idle wages paid to the crew and the staff of the fleet section during 1974-75 amounted to Rs.4.25 lakhs.

As the trawlers were found to be of defective design, government ordered in August 1974 that all the trawlers be leased out or sold and the crew retrenched. The crew of the trawlers were retrenched in December 1974 on payment of retrenchment compensation of Rs.1.31 lakhs. Attempts of the company in September 1974 to dispose of the trawlers (costing Rs.54.14 lakhs) proved unsuccessful. Two trawlers were transferred in February 1976 at their cost to the State Port Departments. The remaining four trawlers (cost Rs.35.80 lakhs) were lying idle (March 1978)[9].

5.6.4.2 Another example is T.P.I. "T.P.I commissioned, in June 1968 a Veneer Slicing Machine (capacity 1800 square meters or 1.08 cubic metres per shift of 8 hours) costing Rs.1.61 lakhs for the manufacture of decorative panels. Another machine of the same capacity costing Rs.2.93 lakhs was

imported in February 1968 and commissioned in August 1970. As orders for decorative panels were not received as anticipated, the first machine was not utilised at all during 1971-72 to 1976-77. The second machine was only sparingly used during the period from August 1970 to March 1976 and was not utilised during 1976-77."[10]

5.6.4.3 In the case of K.S.O "With a view to increasing production of soaps the company imported in April 1971 an automatic plant (value Rs.12.27 lakhs) with an annual capacity for the manufacture of 3600 tonnes of soap. This included a cartoning machine (cost Rs.0.45 lakhs) for automatic vertical packing of soap. Though the automatic plant was commissioned by the end of 1975 the cartoning plant has not been put to use so far (March 1978) and packing is tobe done manually."[11]

5.6.4.4 Premo Pipe Factory is another case in point. "In pursuance of a scheme for rehabilitation of repatriates from Burma, Sri Lanka and other countries formulated (August 1976) by the Government of India, Premo Pipe proposed (November 1968) at the instance of the State Government (September 1968) an expansion of the existing plant at Chavara, and setting up of new units to manufacture R.C.C. poles and pipes, at a total cost of Rs.27.55 lakhs. The original proposals sent to the Government of India by the State Government in May 1969 were served in April 1971 and was approved in May

1973. The revised proposal envisaged expansion of the existing plant and setting up of a new unit for the manufacture of R.C.C pipes (but not poles) at a cost of Rs.27.55 lakhs). It was anticipated that on completion of the facilities in May 1972, employment to 250 repatriates would be provided.

Based on the assurance from the Government of India that loans would be provided, the company went ahead with the proposed scheme and spent Rs.17.50 lakhs (Rs.14.88 lakhs on the purchase of machinery and Rs.2.62 lakhs on land) between October 1969 and April 1973, out of its working capital."[12]

All these examples clarifies the point that the money invested in plant and machinery amounts to dead investments which amounts the idle investment of money and loss of the interest and the cost of capital.

5.7 External

5.7.1 Political Intervention

Many of the decisions regarding companies' location, expansion, diversification etc., are political decisions rather than based on sound business principles. An example Indian Telephone Industries, Palghat. According to the project report the project is for Rs.2.5 crores. Only Rs.50 lakhs were invested in Palghat and the 2 crores project finally went to raebareli. Another example is Kerala Drugs

and pharmaceuticals. According to the members of the organisation there was a controversy between the then Industries Minister who was from Alleppey and the Health Minister who was from Trichur. Health Minister had a hold because all the products of K.S.D.P are absorbed by the Kerala Health Services. Industries Minister wanted it to be in Alleppey because he was from that place. Finally it was started in Alleppey where pure water is not available. Thus decisions regarding location are not generally based on business principles but the product of political motivation.

5.7.2 Location

Location is of paramount significance in conceiving a project since profit is influenced to a great extent by this single factor. As was said earlier, location, to some extent, is influenced by political motivations. Many a time there is no scientific basis behind such locational decisions. Mannum Sugar Mills in Kerala, provides a very good example.

This sugar mill is located at Pandalam. Sugarcane is grown in Munnar region. In the area around the company sugarcane is not cultivated enough to meet the company's requirements. Sugarcane cannot be stored since it has to be crushed within 24 hours after cutting. The company does not work for a major part of the year due to nonavailability of raw material.

5.7.2.1 Pallathara Bricks and Tiles

This company is located in a far off place called Ottappana. Even from Ottappana to reach the factory, a person will have to travel miles along an unpaved village road which is too narrow even for a lorry to pass. The product of the company is white bricks. It is true that the company has the advantage of white sand available in plenty in Alleppey. The other main raw material namely shell should come from far off places. Since the company does not have a transporting arrangement for the finished product and since no selling outlets exist, it often finds it difficult to find customers. This situation is quite detrimental to the growth of the company, since they have to compete with the red bricks available everywhere. Procuring other consumables like furnace oil and coal at reasonable price is a real problem. This, to a great extent, reduces the company's competitive strength. The result is evident. Company had an accumulated loss of Rs.21.56 lakhs in 1976-77 whereas the paid up capital was only Rs.18.56 lakhs.

5.7.2.2 K.S.D.P

K.S.D.P is on the National Highway 47 near Alleppey, and this is an industry which needs pure water. Alleppey is coastal area, where pure water is a rarity. Transportation is also another problem. This company will have to face these problems squarely as it is contemplating

an expansion.

5.7.3 Sick Companies' take-over

It can be said without exaggeration that one of the fundamental mistakes that the government has committed is that it took over the sick companies without looking into its commercial feasibility. Government took over these companies in order to keep the workers employed in these companies. This had some serious drawbacks.

5.7.3.1 It has become a natural phenomenon now-a-days to start a company, make use of all the available loans, run the company for some time and make it sick. Government is always there to take over.

Pallathara is one such company. The company was started by a private individual. Soon after production was started, it became a sick unit.

5.7.3.2 Government even took over the companies that were not meant for commercial activity. Examples are K.S.O and K.C.L. In order to teach the technology of soap making K.S.O was started. K.C.L was started in order to encourage the traditional art of pottery making.

5.7.3.3 Almost all the sick companies that were taken over were first handed over to the departments. Departments ran these companies as departmental concerns rather than commercial organisations. This alienated the customers and the

the companies have found it hard to push up their sales.

Conclusions

The above discussion reveals that the areas of sales, production, personnel and finance are suffering from basic problems, which forms stumbling blocks for proper financial planning and control process. The external factors multiplies these problems and expansions result in adding fuel to fire as far as these serious problems posed by these undertakings are concerned.

6.1 The effectiveness of any system depends on the awareness of and the interest in the system as such of the members of the organisation who are involved in the process. To evaluate the involvement of the managerial personnel, a survey was conducted in six companies, coming under Kerala State Industrial Enterprises. The reasons for selecting these companies are (1) that they come under K.S.I.E. specially formed to take over these companies (2) they are operating on professional management lines (3) they give a cross section of small and medium industries of the state and (4) the same system of financial planning and control is in existence in these undertakings. All the executives involved in the financial planning control process were interviewed. A pre-tested schedule was finalised and administered.

6.1.1 Out of a total number of 91 executives only 85 were available, and out of which 10 were found to be not involved in the financial planning and control process. Hence the result of the interviews with 75 executives only are taken into consideration. (See Table 9a)

6.1.2 Planning

Out of the 75 persons interviewed all have answered that their companies prepare the Plan for a period of one year. This plan is the budget and the budget is for a period of one year, coinciding with the financial year. None of

these companies had a continuous long-term plan. Owing to this, they were not able to say where their companies will be after five years. These companies are often unable to make use of their potentials and favourable environmental factors.

6.1.3 Objectives

From the answers regarding the questions on objectives it was clear that they were not aware of the objectives of their own companies. Several answers they gave revealed grave misconceptions of the objectives of their company. The main reasons for this is that the Government has not laid down the financial, economic and social objectives of public sector enterprices so far. Sample answers given by them indicate that for some of the executives of these companies the objective was providing employment and for some others it was profit making. Some of the executives have mentioned the broad objectives included in the object clause of the Memorandum of Association without indicating the particular objectives for which they operate. This clause is worded in a comprehensive way to provide the necessary flexibility in its operation. But there should be specific objectives evolved within this wide framework, for a company to operate efficiently. For example Kerala Ceramics has 48 clauses included in the object clause of its Memorandum of Association.

Some of the executives have identified the motto of their company as the objectives of the organisation. Eg. K.S.D.P. For them the motto K.S.D.P. (the initials of four words for Kwality, Service, Dependability and Progress) stands for the objectives of the company. These answers are not really the objectives of the company but only what they think as the objectives of the company. This evidence the fact that very few executives are aware of the objectives of their organisations.

6.1.4 Policy

Out of the seventy five executives, sixteen were of opinion that it is the Government which evolves the policies. Eighteen believed that the Board of Directors formulates the policies and ten felt that the holding company evolves policies and the rest 'didn't know'. The answers show that these executives were not aware of how policies of their company were formulated.

Twenty executives in two companies (in T.R.W. and K.E.L.) out of a total 26 said that their policies changed according to the policy changes of governments and these changes were often contradictory. Out of seventy five executives forty nine said that they could perform better if the policies were clearly defined.

The answers to the question, "to mention a few important policies of the organisation" were as follows: 'Employment', 'same as objectives' and (object clause of memorandum of association.' These executives were vaguely aware of the policies of their companies.

6.1.5 Authorities and Responsibilities

Three questions were asked in the form of statements on authorities and responsibilities and they were "(1) If only authorities and responsibilities were clearly defined we could perform better, (2) Since authorities and responsibilities are not clearly defined every one blames the other and (3) A clearly defined authorities and responsibilities should tell us to whom to report and discuss." Fifty three out of seventy five executives said that they could perform better if authorities and responsibilities were clearly defined. Sixty one out of them said that since authorities and responsibilities were not clearly defined everyone blames the other. Fifty six executives said that clearly defined authorities and responsibilities could tell them to whom to report and discuss. From the answers it is clear that in these companies authorities and responsibilities were not clearly defined and as a result they were not able to perform better and the general tendency was to blame each other. As the majority opinion was that clearly defined 'authorities and responsibilities' could tell them to whom

to report and discuss, shows that they have problems with regard to reporting.

6.1.6 Organisational Structure

More than two-thirds of the executives interviewed said that there were no frequent changes in the organisational structure. But in two companies in K.E.L. and T.R.W. there are instances of shuffling the functional heads, which adversely affected the performance.

More than three-forth of the executives (Sixty four out of 75) said that inter-departmental conflict was not common in their companies. It may be assumed that inter-departmental conflicts did not stand in the way of the plann-. ing and control processes.

6.1.7 Decision-making

Twenty out of the seventy-five interviewed, said that the major decisions were taken by the Managing Director alone. Thirty replied 'Managing Director and top executives were responsible for making decisions. Ten answered that the 'Managing Director and the executives of the functional area' were making decisions. The rest said that they did not know it. So it can be seen that the major decisions are centralised even though it does not necessarily amount to one man show.

6.1.8 Participation

Fortynine out of seventy five interviewed said that their departmental boss discussed with them regarding the decisions, which shows that, according to the majority, decisions were made in consultation with subordinates. According to forty executives, the decisions were taken after discussions, but there the actual decisions were taken by the boss. Twenty answered that the boss discussed the matter after the decision was taken and according to the rest, the task of decision making were left to them but the boss suggested the alternatives. These answers again showed that to a considerable extent, participating decision making was practised in these organisations on unequal basis.

6.1.9 Evaluation of alternatives

According to thirty executives the method of selecting from among the alternatives was on the basis of experience, according to twenty five, it was on the basis of cost involved and according to twenty it was on the basis of managerial insight. But this practice suffers from the following drawbacks:

(a) Experience cannot be taken as the method for selecting from the alternatives, because history may not repeat.

(b) Managerial insight is a way of blind decision-making and can cause disaster;

Even though the cost method is not the best way, the fact that they had used it is to be appreciated.

6.1.10 Limiting Factors in Budget Preparation

The answers for the question regarding the limiting factors that are considered while planning for the company are the following: (Answer from each company is shown separately; for this is quite a significant step in the planning process.)

K.S.O.

1) Raw materials and machines (2) Workers and time (3) demand for product (4) Raw material, season and demand (5) Demand, production and skilled workers (6) & (7) Market and production capacity of the plant (8) & (9) Raw-material and labour.

K.E.L.

1) Raw material and labour force (2) Raw material and market (3) Demand and production (4) Skilled workers and raw material (5) Product limitations and market limitations (6) Resources and other constraints (7) Available manpower resources (8) Capacities (9) Convincing the board of directors.

T.R.W.

1) Raw material and market (2) Working capital (3) Production (4) Labour, raw material and overhead (5) Machine capacity, demand and labour (6) Other constraints

(7) Orders in hand and anticipated orders and production capacity (8) Capacity limitations (9) Workers and raw materials and product demand (10) Present trends and other constraints (11) Labour and overhead.

K.C.L.

1) Wages, raw materials and product demand (2) Wages, raw materials and overhead (3) Market and raw materials (4) Kiln capacity and demand (5) Finance and equipments (6) Kiln capacity and increasing processing expenditure (7) Market constraints, production constraints and government budget (8) Demand, raw material and skill utilisation (9) Raw materials, quality and plant limitations (10) Labour, raw materials and other constraints.

T.P.I.

1) Finance and market (2) Production and market (3) Working capital and raw material availability (4) Present trends and production requirements (5) Timber availability and employees (6) Machine capacity and other resources (7) Raw materials and available orders (8) Present orders.

K.S.D.P.

1) Future trends and past performance (2) Market trends and possible performances (3) Plant utilisation and purchase indent of Kerala State Department of Health Services (4) Maximum production and market (5) Plant utilisation, raw materials and labour (6) Raw materials and sales

(7) Labour, plant and sales (8) Other requirements of organisation and possible performance (9) Production and sales (10) Working capital and sales (11) Raw material, labour and sales (12) Production mix and resources.

The diversity of answers reveals that the executives who were the members of the budget committee were not even aware of the limiting factors for preparing the budget in their organisations. It is quite possible that these opinions were formed from the topics which came for discussion in the budget meetings. It is evident that the members of the budget committee had very little idea about the process of budget preparation. The knowledge with regard to the budget factors is inadequate and misleading.

6.1.11 Nature of Budget

For the statement 'each year's budget is different from the previous year by: Twenty said 'last year's budget with some modifications here and there,' Nineteen replied 'as 20% over last year's actual.' Sixteen said '10% over year's.' Thirteen said 'not much difference' and rest said 'I do not know'. From the answers it is clear that these executives have not taken the budget preparation seriously. It seems that in these concerns, budget is only an unavoidable ritual without any forecasting, planning and control. Budget preparation for them is as simple as increasing the

previous year's actuals by 10% or 20% without much consideration for actual achievement.

6.1.12 Features of the Budget

To the statement 'in my opinion, the general nature of the budget is', 31 answered that 'it is not realistic', 20 said 'it is a routine affair'; 14 said 'budget is strictly adhered to'; 10 said 'it is to meet the government requirements'. From these answers it is clear that even according to the executives the budget is not the product of a systematic thinking process. Thirtyone out of 75 said that the budget is not realistic at all. For a good number (10) budget is prepared not for implementation and increase in efficiency but to meet the government requirements. The contention that the budget is not taken seriously is again justified by the opinions given by these executives.

6.1.13 Union Interference

For the question 'Do unions interfere with your planning and control process', fiftyone out of 75 answered in the negative. But in T.R.W. nine out of 12 executives said that the unions interfere with their planning and control processes. This shows that only in one company out of the six, the planning process is affected by union's interference.

6.1.14 Government Interference

For the question whether the planning process is affected by government interference, all the 75 answered in the negative. From the answer it is clear that government does not stand in the way of planning and control processes in any of these companies.

6.1.15 Information

Three questions were asked about the information system, the content and the time. Forty out of 75 said that the reporting is neither timely nor sufficient. Twenty three said it is timely and sufficient, 8 said it is timely, but not sufficient and the rest said it is sufficient, but not timely. All the executives in T.R.W. said that their reporting system is neither timely nor sufficient. Regarding the clarity of information all the 12 executives in TRW said that the information available is neither clear nor relevant. Out of the 75 executives 39 said that the information available is neither clear nor relevant. Only 10 said the information is relevant and clear. From the answers it is clear that the information available is not clear and relevant enough to take timely decisions. It is amplified by the fact that in TRW all the executives were unanimous in pointing out that the information made available to them is neither timely and sufficient nor clear and relevant. Thus the

information system is the weakest link in these organisations.

6.1.16 Deviation

The answers to the question 'how the seriousness of deviation between the budget and the actual is decided' show that these executives were indifferent towards such deviations. In fact out of the 75 executives 38 said that they are indifferent to such deviations, 18 said it is on the experience that the seriousness is decided, 12 said 'above 10% is considered serious' and the rest said 'it is assessed on the basis of the previous year's actuals'. From the answer it is clear that right now there is no uniform method of deciding on the deviation and the deviation assessment does not lead to proper corrective action.

6.1.17 Corrective Action

In fact the answers to the question 'in this company corrective action is done by Board, Top management, M.D. or any other' the were: out of the seventy five, 26 said that no one in their company is bothered about the corrective action; 23 said that the corrective action is limited to showing displeasure and the rest said that the corrective action is taken by revising the standard. The answers show that much significance is

not given to the corrective action; and revision of the standard is done only in the case of deviation of more than 25% from the budget. Hence it can be said that these companies do not give much emphasis on the analysis of the reason for variation and the corrective action.

6.1.18 Review Meetings

In K.S.I.E. companies the reasons for the deviation are analysed at performance review meetings. It is in these meeting that the corrective actions have to be decided upon. But the seriousness with which such matters are dealt with is questionable. The executives have taken them lightly and they spend their time to discuss irrelevant things. In fact out of seventy five, 34 said that the performance review meeting is a routine affair, 13 said they discuss irrelevant things during this time, 21 said it is done seriously and the rest said it is a time to play games and to do such other things. The reason for the ineffectiveness of their review discussions is that(even though some executives do it with all seriousness), the majority believes that these review meetings cannot bring forth the desired results.

6.1.19 Commitment

The answers to the question "why these executives are indifferent", reveal that there is no motivation for

these individuals. The answer to the question what will happen 'if I achieve the target or not' explains why there is no motivation. Forty two out of 75 said that they do not gain or lose anything if they achieve the target or not. Twelve said if they achieve the target they have a mental satisfaction and the rest said that the boss might show the displeasure. In a situation where you do not gain anything or lose anything, there is every likelyhood that the people will be indifferent. In other words it can be said that it is the lack of reward or punishment that make these executives disinterested in the whole system.

6.1.20 Cost Reduction

The above said indifference is found in cost reduction too. Forty two out of 75 said that in their companies they are indifferent to cost reduction and only 17 said that they put conscious efforts to reduce the cost and the rest said the only method used for cost reduction is reducing the waste. From the answers it is clear that none of these companies makes use of any systematic approach towards cost reduction. In fact out of the 6 companies only one is a profit making unit and the rest are continuously running into losses. (Among the five that are loss-making, four have accumulated losses of more than their paid-up capital).

6.1.21 Misconception of Management

The major objectives of public sector undertakings are expressed by majority of executives are providing employment and other social objectives. But when the companies' performances are assessed for the past few years one finds that the most important social objective should be 'not to remain as a social parasite.'

Many of these companies have lost almost all their equity capital. The government is forced to keep on pumping money into them. To cite an example the Mannam Co-operative Sugar Mills which has incurred a record loss of Rs.271 lakhs upto 1976-77, and its paid-up share capital is only Rs.41,78,060. This means that the accumulated loss is nearly seven times the capital invested. For the years ending June 1976 and June 1977 the company had incurred loss of Rs.21 lakhs and Rs.23 lakhs respectively, which was nearly half the capital investment.

Similarly T.C.C. has got an accumulated loss of Rs.651 lakhs against a capital investment of Rs.634 lakhs as on 31st March 1978. For the year ending 31st March 1977 alone it had made a loss of Rs.393 lakhs. During the year 1976 it incurred a loss of over Rs.168 lakhs.

6.2 The financial performance of public sector enterprises in Kerala, as elsewhere, is evaluated and controlled solely through the budgetary control device. Only three of the eighteen undertakings studied this system is not in use. There is no financial planning and control.

The budgets are intended to serve as a plan of action and as a control device. In majority of these undertakings it merely serves as a blueprint for future action. Only in K.S.I.E. group of companies well thought out budgets are prepared and implemented but control is not exercised. There is some resemblance of control in the form of review meetings. Variance sheet is prepared but no variance analysis is made and no effective action is taken to remedy the defects. In four companies, the quarterly performance statements are discussed in the Board of Directors' meeting. But no corrective action is taken. In two companies the evaluation of the past performance is made for forecasting and preparing the budgets. In the rest of the companies not even the evaluation is made.

6.2.1 Preparation

The Budget in these undertakings can be broadly classified as follows :

Companies preparing functionwise budgets and also a master budget (Eleven companies).

Companies preparing budgets in the form of projected profit and loss account and balance sheet with no functional budgets to support it (four companies).

Companies prepares cashflow statements alongwith functional budgets (Six companies K.S.I.E. group).

Companies preparing detailed budgets for production and sales (Nine companies).

Budgets are prepared as a routine matter. Even at the time of preparation, it is not intended to be a control device.

6.2.2 Budget Organisation :

Every enterprise should have a budget organisation to prepare the budget and to enforce it. Budget objectives and policies should be clearly defined before its preparation. In nine out of eighteen companies studied there is no separate organisational set-up for preparing the budget. But in K.S.I.E. units there is an informal arrangement for doing this. The functional heads will plan and prepare their budgets individually and discuss and coordinate them in their meeting specially convened for it. There is no budget manual and budget information system to guide the preparation of budget. Budget period is for twelve months in all the undertakings, coinciding with the financial year except in the case of Trivandrum Spinning Mills. A kind of feed-back is

effected in the review meetings of K.S.I.E. units and in four companies, review of the performance is conducted by the director board in the absence of functional executives.

Budget Factor

Budgets are prepared taking into consideration the limiting factor. In nine companies sales is the limiting factor; in four, availability of raw material, and in two, production. The K.S.O. products were facing acute competition in the market and in recent years company intorduced sales promotional activities to overcome this limitation. In the case of Travancore Sugars & Chemicals availability of sugarcane is the limiting factor and they have tried to overcome this by employing field staff (of 50 persons) to get necessary sugarcane. Sugarcane growers are given necessary loans, manure, seeds etc. The rest of the companies have not tried to reduce the influence of the limiting factor in any manner.

6.2.4 Forecasting

In the preparation of budgets, realistic forecasting is of critical importance. This basic fact is not given due weightage in these undertakings. In eight companies, budgets are prepared on the basis of past data and general guidelines given by the top executives. In two, forecast is on the basis of advance orders received and in the rest the finance managers prepare the budgets by adding a certain

percentage to the previous year's actuals, (which is not a forecast at all) without taking into consideration even the demand and supply aspects.

6.2.5 Budget Preparation

In eight companies, budgets are prepared by the top functional executives, after general discussions. They are consolidated by the finance manager. In the remaining companies, the finance manager himself prepares the budget.

All the budgets prepared are sent to the Board of Directors for their approval. And in those companies which prepare functional budgets, copies of these are sent to the functional executives.

6.2.6 Limitations of Budget Preparation

Budgets prepared by the undertakings many a time prove to be unrealistic due to the following reasons:

6.2.6.1 Unrealistic budget assumptions: Budget assumptions made by these companies while drafting the budget seem to be illogical, e.g. Budget assumption of K.C.L. for 1976-77 reads as follows :

"It is assumed that production plan of paper coating clay will be strictly followed as per schedule K-1". The schedule says the total production of paper coating clay will be 12,000 MT. Regarding the sales it says "It is expected

that 75 MT of paper coating clay will be sold in India every month. The export of 11,100 MT of paper coating clay is scheduled as follows:

Japan	..	8,700 MT.
Other countries	..	2,400 MT." [1]

This assumption is really illogical; for, in the previous year (1975-76) the company produced only 1,550 MT. of paper coating clay. In the particular year the company had produced only 3,820 MT against a budget figure of 12,000 MT. Again in 1977-78 the company had produced only 5,260 MT. Thus taking the 3 years (1975-76, 1976-77 and 1977-78) the company had produced only 9,639 MT. But the budget estimates for 1976-77 alone was 12,000 MT. Only 3 companies (K.C.L., T.P.I., and T.R.W.) prepare the projected balance sheet along with the budget. Even though the heading given is 'Balance Sheet', what is actually shown is source and application statement. It is true that one side of balance sheet is source and the other is application. But this preparation under the assumption that whatever sold is for cash and net loss constitutes an application. There are sizeable credit sales in these companies e.g. the credit sales of Trivandrum Rubber Works were Rs.13.75 lakhs, Rs.27.40 lakhs, 33.16 lakhs and 29.16 lakhs respectively in four years from 1974-75 to 1977-78. During the same period, K.C.L. had credit sales of Rs.9.65 lakhs, Rs.11.56 lakhs, Rs.13.19 lakhs and Rs.7.62 lakhs respectively. (See table 10)

According to the projected trading and profit and loss account, in K.S.I.E. units (shown as income and expenditure) there are no closing stocks. Budget is prepared under the assumption that whatever is produced is sold. In fact all these companies had closing stock worth lakhs of rupees. For example, T.P.I. had closing stock of over Rs.28 lakhs, Rs.43 lakhs, Rs.30 lakhs and Rs.25.72 lakhs for the years 1975 to 1978. The closing stock of K.S.D.P. were over Rs.6 lakhs, Rs.14 lakhs and 27 lakhs during three years from 1975-76. (See table 11)

6.2.6.2 Unrealistic approach: Budgets are prepared without any confideration to the past achievements. In many a case they are unrealistically prepared. For example in the case of T.C.C. & T.T.P. the budgeted production and actual production levels have no relation whatsoever. It reveals that budget is not realistically prepared. From table 12 it can be seen that a period of 5 years the budgeted production for Sodium Hydrosulphite is 1,200 tonnes. Similarly in the case of Sodium Sulphide budgeted production was 1000 tonnes and in the past three years it was less. During 1974-75 the budgeted production was 6000 t and the actual only 2343 t. In the subsequent year the budgeted production for 1975-76 was fixed at 9,046 t and the actual production was only 2,314 t, which was so close to the previous years achievement. Similarly in the case of T.T.P. the budgeted production was 6000 t. and in 1971-72 and 73 the actual production was only 5456 t, 5886 t and 4369 t. (See table 3)

6.2.6.3 Arbitrary Nature of Budget Preparation

It was said that in the case of some companies (K.M.M.L., K.F.C., T.T.P., Premo Pipe Factory and Kundara Division of K.E.L.), the finance manager prepares the budget on the basis of past performance alone, without consulting functional executives. He adds a certain percentage arbitrarily to the previous year's actuals. From table 14 it is clear that the finance manager has added a percentage to the production budget on the basis of previous year's actuals. In K.M.M.L. for the production of Illuminate the budget target of 25,000 t was fixed on the basis of 1975-76 actuals. During 1976-77 the actual production was 28,662 t. On the basis of higher production the next year's budget was fixed at 27,000 t, but the actual was only 22155 t (1977-78). In the same way the budgeted production for monozite was put as 110 t in 1975-76 and the actual production was 90 t. The same 90 t. was fixed as the target for the next year, but the actual production was only 43 t. The main reason for such deviations is that the persons who are to implement the budget are not involved in budget preparation and the finance manager who prepares the budget is not aware of the changes in the functional areas.

6.2.6.4 Insufficient involvement in Budget Preparation

Out of the 15 companies that prepare budgets, only in 6 (K.S.I.E. units) the executives are involved in budget

preparation. In some companies (Travancore Sugars & Chemicals and United Electricals), the participation is limited to functional executives alone, for the rest the finance manager alone is responsible. On the whole it can be said that the participation in the preparation of the budget is inadequate.

6.2.6.5 Lack of motivation

The effectiveness of budget depends on the performance of workers and the motivation given to them. In these organisations the majority of executives said that the budget is not realistic. For some, the budget is a routine activity to meet the government requirements. Only very few have taken it seriously. If the persons responsible for the implementation have such a feeling, it is natural that much cannot be expected out of it.

6.2.6.6 Lack of effort to achieve the target

One particular feature of the budget is these undertakings is that all of them are growth-oriented. It was said that the budget can be prepared for the base level, achievable level and ideal level. To increase the efficiency to the achievable level further efforts are needed. In these undertakings no real effort is made to increase the performance level to achievable level.

The question 'why the executives are indifferent in the budget implementation' was explained by a simple

reason "lack of motivation". Whether they achieve the target or not they do not gain or lose anything. In such a situation it is natural that the executives and the workers are indifferent. It is the lack of a proper incentive system that makes the executives disinterested in the whole system.

As far as the workers are concerned only 2 undertakings (T.T.P. and Trivandrum Spinning Mills) give production bonus. Unless the employees are motivated, it is rather difficult to implement the budget.

6.2.7 Variance Analysis

The budgetary control process varies from company to company. In K.S.I.E. group of companies, in their performance review meetings (once in a month) the difference between budgeted performance and actual performance in the case of production and sales are taken into consideration and significant differences are discussed but no remedial action is taken. In 4 companies, (United Electricals, Trivandrum Spinning Mills, K.M.M.L. and Travancore Sugars & Chemicals) the Boards of Directors review the performance once in three months but no further action is taken. In two companies (T.C.C. and Premo Pipe) budgeted performance and actual performance are compared once the financial year is over. So it is only a post-mortem analysis. In the rest of the companies not even this is practiced.

6.2.7.1 With regard to the companies where the actual performance and budgeted performance are reviewed by the board, it is found that nothing much comes out of it. For example in the case of illuminate of K.M.M.L. the actual achievement compared to the budgeted production and sales was less than 50%. (The budgeted sales was 45,000 MT.(1977-78)and the actual was only 21,634 MT.) Similarly with regard to Rutile, the budgeted sales was 2400 in1977-78whereas the actual sales was only 1737 MT. In the case of Zircon, the budgeted sales was 1000 M.T. and the actual only 377 M.T(1977-78) Again the purpose of the meeting of the board of directors is not to discuss the budget alone but they meet to satisfy the company law requirements and everything is discussed in the meeting. According to the executives of the organisations budgets are not discussed seriously; for no remedial measures are suggested by the board for the pit falls. In two undertakings budget discussion is only a postmartem analysis rather than a real performance review.(See table 6)

6.2.7.2 It can be said that none of these enterprises the most important purpose and function of budget namely, controlling the performance, is not achieved. Even in the case of companies where a full-fledged functional budgeting system is in existence budgetary control could not be exercised because of various functional factors. The following discussion is an attempt to identify these factors which are primarily responsible for this sad state of affairs.

SALES BUDGETING AND CONTROL PROCESS

6.2.8.1 Organisation

Sales budgets are prepared by different persons as the sales organisation differs from company to company. In some companies, the sales and related activities are directly conducted by the chief executives(Premo Pipes, Forest Industries, and Pallathara Bricks & Tiles). In some companies there are separate sales executives to look after these, assisted by an organised sales force (K.S.O. & Travancore Sugars & Chemicals). In two companies (Traco Cables and T.R.W.) there are commercial managers to look after the functions of both sales and purchases. Trivandrum Spinning Mills does not have any sales organisation and this function is left to Kerala Textile Corporation - their holding company. In K.S.D.P. this function is looked after by the administrative manager. In Traco Cables & K.E.L. there are liaison officers (in Bombay, Madras and Delhi) to look after the sales function also. T.T.P. does their marketing through another public sector undertaking (M.M.T.C.) In one company (K.E.L.) both marketing and production are looked after by one manager.

6.2.8.2 In general, in these companies no special effort is made to push up their sales. The only company which has introduced a fullfledged marketing division is K.S.O. The company introduced this by the end of 1977. Now it has got nearly 100 salesmen operating in Kerala, Karnataka, Andhra

Pradesh and Tamil Nadu. There are 9 sales officers and one marketing executive. It can be seen from Table given below that after the introduction of the marketing division, the sales had increased from Rs.57.58 lakhs in 1975-76 and Rs.137.78 lakhs in 1976-77 to rise again to Rs.165.66 lakhs in 1977-78. Now the company has turned to be a profit-making concern as it has earned a profit in 1978-79 and 1979-80.

Table 10a

Sales of K.S.O. from 1971-72 to 1977-78

Years	Sales
1971-72	26.77 lakhs
1972-73	31.52 "
1973-74	39.89 "
1974-75	81.18 "
1975-76	57.53 "
1976-77	137.78 "
1977-78	165.66 "

6.2.8.3 Market

In three companies (Pallathara Bricks & Tiles, K.S.D.P. & Travancore Sugars & Chemicals) the market is restricted to South India (T.C.C., Chalakudy Refractories, Trivandrum Spinning Mills, and Premo Pipe) and in five companies market is restricted to inside India alone, (K.S.O.,

K.E.L., United Electricals, T.R.W. and Traco Cables). The remaining six companies export their products (T.T.P., K.M.M.L., T.R.W., K.C.L., Forest Industries and K.F.C.). Two companies (namely K.M.M.L. and T.T.P.) are in sellers market. Premo Pipe enjoy patent right and as such there is no competition for its products. Traco Cables and T.P.I. project ISI mark to push their sales. Ninety percent of the sales of Premo Pipe and K.S.D.P. go to government departments such as Public Health Engineering Department and Kerala State Health Service. All the products of K.M.L., except silliminate are controlled minerals. With regard to these products, both producers and the consumers should obtain licences from the department of Atomic Energy, and should show the means of transport along-with the application for the licence.

6.2.8.4 Channels of Distribution

The distribution channels of these companies are the following :-

Eight companies do the direct sale to the customers (K.E.L., Traco Cables, K.M.M.L., K.S.D.P., and T.C.C.). In the other companies there are different channels of distribution.

1) Company - Depots - Consignment agent - Consumer (T.P.I., K.C.L., and T.R.W.)
2) Company - Stockist - Wholesalers - Retailer - Consumer (K.S.O. and K.F.C.)

3) Company - Selling Agents - Consumer (T.T.P., United Electricals and Trivandrum Spinning Mills)

None of these companies has any transportation facilities, and it forms a serious bottleneck with regard to marketing.

6.2.8.5 Sales Budget

Fourteen companies out of 15 prepare sales budgets. Trivandrum Spinning Mills does not have a separate sales budget as the marketing is done by Kerala Textile Corporation. Sales budget is prepared for a period of one year coinciding with the financial year. In 9 companies the sales budget is prepared on a monthly basis for each product and in others yearly budgets are prepared for all products together. In 3 companies (T.P.I., K.C.L. & T.R.W.) the sales target is fixed on the basis of the minimum off-take of each depot and the previous year's actual sales. If the depot fails to sell the minimum off-take they will have to pay penalty for it.

6.2.8.6 In the three electrical undertakings, the sales budget is prepared on the basis of the requirement of their chief customer namely the Electricity Board. In two companies (T.C.C. and K.M.M.L.) the sales budget is prepared by adding a certain percentage (from 5 to 20%) of the previous year's actuals. Traco Cable company prepares the sales budget on the basis of advance orders received. In the case of K.S.D.P. and Premo Pipe the sales budget is mainly on the basis of the demands of their chief customers. In the case

of K.S.O., sales budget is mainly prepared according to the market demand estimated by their sales representatives. In companies in which production form the limiting factor, the sales target is fixed on the basis of attainable production. (Sales budget control described elsewhere.)

6.2.8.7 Limitations

6.2.8.7.1 Market Study

None of the companies under study conducts a proper market study to prepare a sales forecast to base their sales budget. Even when new products are introduced, these companies do not conduct a proper market study. For example in the case of K.E.L. could the product 'Brushless Alternators' was introduced in 1975-76. During the three years, the company has failed even to achieve 50% of the installed capacity as shown in table

Table 6a

SALES OF K.E.L.'s BRUSHLESS ALTERNATORS

Year	Installed Capacity	Sales
1975-76	600	60
1976-77	600	199
1977-78	600	211

To quote an executive from K.E.L. "We have no production problem regarding the product but we produce only against confirmed orders. Railways, (the chief customer) does not

need much of the product as the supply is plenty in the market."

6.2.8.7.2 Another example is Kerala Ceramics Limited. The Paper Coating Clay of the Kaoline division, in this company

Table 6b

THE INSTALLED CAPACITY PRODUCTION AND CLOSING STOCK OF PAPER COATING CLAY FOR THE PERIOD 1975-76 to 1977-78

Year	Installed Capacity	Production	Closing Stock
1975-76	18,000 MT	1559	251
1976-77	,,	3820	194
1977-78	,,	4260	523

is not making use of ¼ of the installed capacity. According to the sales executive "This product 'Paper Coating Clay' is needed by 16 firms in India. We were of the assumption that they will come to us, for they have got to import otherwise. What happened in fact was they did not come to us as they did not want to give up Import Licence. We were expecting 50% of production for export. There also the market went against us."

6.2.8.7.3 The Market awareness

The sales executives are not aware of the competitors, their products, market coverage, etc., None of these companies has collected the information regarding the competitors' market coverage, speciality of the product etc. For example in T.P.I. one of the sales executives said "We are enjoying monopoly with regard to "Chequered Plywood". In fact in Kerala itself there is a company (Western India Plywood) which had introduced the same product much before Travancore Plywoods. Even the sales executive is not aware of the similar competing product in the market.

6.2.8.7.4 Unreliable Data

It was said that K.E.L. and United Electricals prepare their sales budget for transformers and Poly Phase Meters based on electrification schemes of the state. As these schemes are rarely implemented, the budget prepared on this basis also becomes unrealistic.

It can be seen from table below that during certain years there was heavy work and during the other years there was not much work. Budgets prepared on such data are rather useless.

Table 12

BUDGETED AND ACTUAL SALES OF TRANSFORMERS (K.E.L.) AND POLYPHASE METERS (UNITED ELECTRICALS) FOR THE THREE YEARS ENDING 1974-75

Year	Transformers Rs. in lakhs		Year	Poly Phase Meters Rs. in lakhs	
	Budget	Actual		Budget	Actual
1972-73	63.44	31.58	1972-73	73.09	65.99
1973-74	50.25	34.76	1973-74	55.20	52.74
1974-75	58.63	33.87	1974-75	62.31	65.64

6.2.8.7.5 Depot Sales

T.P.I., K.C.L., and T.R.W. sell their products through their own depots and K.S.I.E. depots (in Bombay, Madras, Vijayawade and Ahmedabad). The companies have fixed minimum annual off-take for these depots, failing which the depots have to pay penalties to these companies. But annual minimum off-take and previous year's data serve as the basis for the sales budget in these companies. But as shown in Table the depots have not sold the minimum annual off-take and the companies have failed to collect the penalty from the depots. As shown in table the shortfalls were more than 50% and as a result, the budgets of these companies remain unrealistic.

6.2.8.7.6 Special Services

In general it can be said that the activities, services and entertainment provided by the private sector are far beyond the comprehension of public sector executives. As the sales executives of Travancore Sugars & Chemicals said "If some one takes 24 cases of Indian-made fine liquor what we can maximum offer is a dozen glasses with a monogram on it. In a private company one could get a radiogram for it." According to the sales executive of T.P.I. 'Special services the private sectors offer like credit period, after-sales service, replacement etc., we cannot afford to do.' The marketing executive of K.S.O. said 'In private sector they are not accountable as we are and the entertainment provided by the private sector is self-explanatory."

6.2.9 PRODUCTION BUDGETING AND CONTROL

6.2.9.1 Production Department

Production organisation varies from company to company. Among these 18 companies there are a few even without an organised production department. (Forest Industries, and Pallathara Bricks & Tiles) In these companies the chief executives look into this function among the other functions he performs. On the other hand the other companies (United Electricals, K.E.L., Travancore Sugars & Chemicals) etc., have separate production departments headed

by production managers. There are companies with regular maintenance force (T.C.C. and T.T.P.) whereas there are companies without any maintenance force (Premo Pipe and Traco Cables). There are companies with industrial engineers and maintenance engineers. Six companies have quality control department and the rest do not have any quality control. The common production organisation is one where the production manager, reports to the chief executives and others such as industrial engineer and maintenance engineer report to the production manager.

6.2.9.2 Budget Preparation

In nine companies, production budget is prepared on the basis of sales budget and in four companies it is drawn out on the basis of raw material availability and in two it is based on the production requirements. In nine companies monthly productwise budgets are prepared. The chief production executive prepares these budgets. In the rest, these are prepared by the finance manager. The production budget is usually prepared for a period of 12 months.

6.2.9.3 Limitations

In T.C.C. and T.T.P. the budgeted production and the actual production reveal that the budgets are not prepared realistically.

From Table 12 it can be seen that throughout the period of 5 years the budgeted production for sodium hydrosulphate was 1200 tonnes. Similarly in the case of sodium sulphate the budgeted production was 1000 t., but the actual production was much less. During 1974-75 the budgeted production was 6000 t. And the actual was only 2343 t. the budgeted production for 1975-76 was 9046 tonnes and the actual was 2314 t. In T.T.P. the budgeted production was put as 6000 tonnes in 1971, 72 and 73 in spite of the fact that the actual production was never more than 4369 tonnes (1973). (Table 13)

6.2.9.3.1 In 9 companies the production budget is drawn out on the basis of the sales budget and since sales budget is unrealistic, the production budget prepared on that basis turns out to be unrealistic. Tables 18 & 20 show how unrealistic the production budget is. The production budget for toilet soaps (K.S.O.) was for Rs.62.51 lakhs and the actual was Rs.22.9 lakhs. The production budget for 1976-77 was Rs.110 lakhs (five times more than the previous year's actuals) and the actual was only Rs.81.9 lakhs. In 1977-78 the budgeted production was Rs.202.56 lakhs (more than twice the previous year's actual) and the actual production was only Rs.81.96 lakhs. Similarly the budgeted production for paper coating clay was Rs.127 lakhs and the actual was only Rs.71.45 lakhs. The next year's budgeted production was Rs.113.64 lakhs (10 times the actual in the previous year's)

and the actual was only Rs.33.15 lakhs. In 1977-78 the budgeted production was Rs.173 lakhs and the actual was only Rs.41.23 lakhs.

6.2.9.3.2 Similarly the budgeted production for Parentrals (K.S.D.P.) was Rs.51.31 lakhs in 1975-76, (the actual was Rs 29.55 lakhs) the budgeted production for the same in 1977-78 was Rs.40.93 lakhs and the actual was Rs.24.08 lakhs; the budgeted production for the year 1977-78 was Rs.29.79 lakhs and the actual was only Rs.18.37 lakhs. Thus since the production budget was based on sales budget which was unrealistic, the production budget also became unrealistic. (See Table 21)

6.2.9.4 Factory Overhead

Only K.S.I.E. companies are preparing a factory overhead budget. This budget is prepared on the basis of the previous year's actuals. Factory overhead budget is prepared by the finance executives while consolidating the other functionwise budgets. Even in these companies factory overhead budget is never used for control purpose after its preparation. There is absolutely no control exercised over it. For example resin is one of the major items coming under factory overhead in T.P.I. The table 22 indicates the details of the total quantity of resin used, glue spread obtained etc. For the three years ending 31st March 1977 "According to the Forest Research Institute, Dehradun, 110-120 grammes of Resin and planolformalde halye

resins would be sufficient for moulding a square metre of plywood of strength (computed with reference to the maximum limit of 120 Kg in 1974-75 valued at Rs.0.61 lakhs) 23,839 kg, 1975-76 (value Rs.2.8 lakhs) and 53,750 kg in 1976-77 (value Rs. 5.75 lakhs).

The companies which do not prepare detailed factory overhead budget also have standards for important elements of factory overhead like, power, fuel etc. But they are not making use of them. The table 23 shows the excess consumption of electricity for the production of caustic soda in T.C.C. The extra expenditure on account of excess consumption of electricity worked to Rs.0.96 lakhs in 1971-72, Rs.6.04 lakhs in 1972-73 and Rs.6.40 lakhs in 1973-74 based on the average coats per KWH of 3.5 paise, 3.2 paise and 3.5 paise for the years.

6.2.95 Maintenance

Maintenance is specially discussed because breakdown is one of the reasons pointed out for production variation. In all the companies which prepare budgets, a sum for maintenance is also included. This amount is calculated on the basis of the previous year's actuals, by the finance manager while consolidating the budget. But only in five companies (T.C.C., K.S.D.P., K.S.O., Travancore Sugars & Chemicals and Trivandrum Spinning Mills) there is planned and regular maintenance. In the rest of the companies there is only breakdown maintenance. In many companies there is

no section for maintenance and not even maintenance force. The reason pointed out by the production executives was that they will be losing the day's production when they shut down for regular maintenance. In fact it is the lack of maintenance that results in breakdowns and thereby loss of production.

In fact K.E.L. lost 7765, 5493 and 4040 hours respectively during the three years (1972-73, 1973-74 and 1974-75) owing to breakdowns. The Traco Cables lost 420 hours in 1974-75 and 1368 hours in 1975-76 because of breakdown maintenance. Regular maintenance is the only way to avoid breakdowns, which is not done by these companies. (See table 24)

6.2.9.6 Materials Budget

Only K.S.I.E. companies, T.T.C. and Travancore Sugars & Chemicals prepare a detailed materials budget. In the rest of the companies materials consumption is shown in total without breakups. The companies that prepare detailed raw material budget draw their budget on the basis of the production budget.

6.2.9.6.1 Four companies (T.T.P. - Sulphur, T.R.W. - Nichel, K.S.D.P. and T.C.C.) import raw materials in considerable quantities. This is done through the State Trading Corporation(S.T.C.) which issues the materials on the basis of quota. These companies find it very difficult to get the import licence and foreign currency and so they do not get enough raw materials in time.

6.2.9.6.2 Another aspect that directly affects the company is the amount of advance it has to pay to get the raw materials. A clear example is that of K.S.D.P. The company gets majority of raw materials from I.D.P.L. The company has to pay 60% of the price as advance and the rest on delivery. K.S.D.P. is a material-intensive company. Again if I.D.P.L. has got any item of raw materials in excess they force their customers to take that item also if they want to get the one they require.

6.2.9.6.3 Aluminium is one of the basic raw materials needed by the companies manufacturing electric equipments (Traco Cables, K.E.L. and United Electricals). Aluminium comes under controlled materials. Controlled materials are subject to the quota system. Quota is fixed on the basis of previous year's performance and if there were any strike or other problems, it is not taken into consideration by the authorities. This directly affects the companies' growth. To quote the commercial manager of Traco "Regarding Aluminium, our basic raw material, we are at the mercy of the government".

6.2.9.6.4 K.M.M.L., T.P.I., K.C.L., Pallathara Bricks and Tiles and Chalakudy Refractories get their basic raw materials from Kerala itself. T.P.I. gets their basic raw material from the Forest Department of the government.

6.2.9.6.5 Seven companies (K.E.L. Traco, T.P.I., T.R.W., T.C.C., K.S.D.P. and K.S.O.) are material-intensive units. The cost of raw materials consumed range between 40% and 60% of the toal cost of production. The cost of raw materials consumed had gone up many-fold. In K.S.O., the raw material consumption went up from Rs.47.13 lakhs in 1971-72 to Rs.94.94 lakhs in 1977-78, in Traco Cables from Rs.76.80 lakhs in 1970-71 to Rs.285.88 lakhs in 1977-78, and in K.E.L., from Rs.38.51 lakhs in 1970-71 to Rs.121.21 lakhs in 1977-78. (See Table

Even with this record, neither the material-intensive companies nor the rest are making use of material variance analysis. In fact the majority of the companies relax the materials specification by a certain percent and issue the materials. Many a time there is no fixed percentage even Table 27 indicates the norms fixed by T.C.C., the actual consumption and the value of excess consumption. The value of excess consumption had been for common salt Rs.18.63, 16.27 and 17.49 per tonne for Zinc dust Rs.136.08 and Rs.94.63 (per Kg) for sulphur di oxide Rs.76.22 and 43.26 for 1 Kg and for metol Rs.107.79, Rs.194.43 and Rs.177.5 per Kg of ZINC the years 1973, 1974 and 1975. According to table 26 the consumption of polyvinoyil chloride in power cable division of Traco cables was 3705 Kg and 8664 Kg and the consumption of led in PVC was 7388 Kg and 2902 Kg, in 1975 and 1976 respectively. Unless this element of cost is planned and controlled, the companies will find it hard to improve the present

position.

6.2.9.7 Labour

6.2.9.7.1 None of the companies under study prepares a labour budget. Out of the 18 companies, five companies are labour-intensive viz., K.C.L., Premo Pipe, T.C.C., Forest Industries and Chalakudy Refractories. In these companies, the labour cost ranges from 30% to 60% of the total cost. The remuneration to employees have increased many-fold and the trend still continues. In K.C.L. the remuneration to the employees had steadily increased from Rs.25.19 lakhs in 1972-73 to Rs.54 lakhs in 1977-78, in T.C.C. from Rs.63.43 lakhs in 1972-73 to Rs.116.85 lakhs in 1977-78. It can be seen from the tables 28 that even with the increase in the remune-. ration to the employees, the efficiency of the labour had come down since the ratio of remuneration to total cost had shown an increasing trend. The remuneration to the employees is shown on the projected profit and loss accounts by the finance manager by adding a percentage to previous year's pay roll. Labour is one of the major reasons pointed out by the executives for the production variation. Even then, none of the companies does manpower planning. No budget is drawn to that effect.

6.2.9.7.2 Over-staffing

Employment of more persons then required is a permanent handicap of all the public sector manufacturing units.

The executives of 17 companies have admitted that their companies are over-staffed. Only the executives of Traco Cable have said that they do not have the problem of over-staffing. According to the top executives of T.C.C. they had identified 154 persons loafing around without any particular work in (1977-78. In Forest Industries, 30 persons have practically no work. They work in the workshop of the company which was dismantled in 1976. Even now they have practically no work.

A work study conducted by the Kerala State Productivity Council during 1970-71 revealed that the production achieved in the various units at that time was much less compared to what could be produced with the then existing number of men. "The wages paid for the surplus labourers for the three years ending 1972-73 agregated Rs.20.89 lakhs."[2]

Regarding K.E.L., it can be seen from table 29 that during three years from 1973 to 1975 the company had 58, 49 and 65 surplus persons in the structural division and 28, 21 and 33 persons in Transformers Division respectively. The wages paid to the surplus labour in these years amounted to Rs.3.22 lakhs, 3.54 lakhs and Rs.6.04 lakhs respectively.

6.2.9.7.3 Work Standard

For production planning and scheduling no standard casting is in existence in any of these companies. Only three companies out of 18 have individual work standards.

They are the Porcelain Division of K.C.L., United Electricals and Trivandrum Spinning Mills. In United Electricals and Porcelein Division of K.C.L., the individual workloads were fixed after conducting work and motion study. In Trivandrum Spinning Mills the work standards are fixed according to the industrial standards, and standard costing is a useful control device. The individual performance or group performance can be ascertained and the reasons for variation could be analysed only if individual and group standards are fixed. This individual or group performance measurement could lead to the analysis of the reasons for the deviation in the total production. Companies like K.E.L., Traco Cables, Premo Pipe etc., are not having even individual work standards and hence the analysis of the reasons for variation in production is not possible.

6.2.9.7.3 Incentives

The incentive system has been introduced only in one company (Trivandrum Spinning Mills). The company has got an installed capacity of 25,000 spindles divided into 63 frames of 900 spindles each. The company works three shifts of 7½ hours duration and all the seven days of the week, and holidays are allowed on the basis of rotation.

The target for the individual is as follows:

40's	-	51.39 grams per shift
60's	-	37.00 grams per shift

80's - 26.91 grams per shift

100's - 18.9 grams per shift.

Incentives are given as follows :

For 85% the full wages are given and for 15% the incentive are given proportionally. According to the Mill Manager "We were able to produce to the installed capacity only due to the incentive system and in 1978 and 1979 we did not have closing stock. We receive the order to the installed capacity and we have got to hit it." Incentive system should be part and parcel of budget performance. To increase the production from the base level to achievable level incentives are necessary. But unfortunately only one company make use of this.

6.2.9.7.3 Overtime

Payment of overtime is a common feature in these companies. According to the Factories Act, double the normal wages are paid as overtime. Overtime is allowed with the good intention of increasing the production and thus making more profit. What happens in these companies is that overtime is created. If the work is to be finished by two persons, one person takes leave and the second man is engaged to finish the work. This is done on a rotation basis. Another reason for overtime is delay in production due to power-failure, raw material shortage, breakdown etc. If the work is to be finished in time; then overtime is the only

way out. The overtime paid is quite a significant amount. Tables 30&31 show the overtime paid by T.C.C. and T.T.P. The amount of overtime paid for administration staff in T.C.C. was Rs.1.36 lakhs, 1.64 lakhs and 2.32 lakhs in 1971-72, 1972-73 and 1973-74 which came to 14%, 18.57% and 20.33% in the respective years. During the same period overtime allowance paid to the Factory Staff came to Rs.6.35 lakhs, Rs.7.20 lakhs and Rs.9.18 lakhs in 1971-72, 1972-73 and 1973-74 respectively, which constituted 18.86%, 22.91% and 22.29% of the salaries and wages as shown in Table 31 . Overtime allowance to workmen in T.T.P. were Rs.4.40 lakhs, Rs.5.59 lakhs and Rs.7.88 lakhs in 1971, 1972 and 1973, whereas the wages paid were only Rs.24.09 lakhs, Rs.30.42 lakhs and 36.08 lakhs in the respective years. Thus, overtime, instead of being a device to increase production, has become a burden for these companies.

6.2.9.7.4 Payment of Idle Time

Idle time arises due to power failure, want of work, breakdown, deliberate idling etc. Deliberate idling is by wandering here and there, reporting late to the work, enjoying more time during tea-break etc. And the other reason is the lack of proper supervision by the executives. This is a common feature in all the companies. In fact the manhours available and utilised show the extent of the ilding.

Details of idle wages furnished (June 1978) by the management for the three years upto 1974-75 in respect of the motors and casting division at Kundara (K.E.L.) are indicated below :-

Table 31a

IDLE TIME

Year	Total labour hours available.	Idle time-hours	Power failure	Want of work	Want of repairs	Want of materials	Deliberate idling
1972-73	2,64,065	33,893	561	19,463	7,765	1,928	3,670
1973-74	2,58,391	48,364	1,699	39,171	5,493	--	2,001
1974-75	2,59,041	40,158	1,236	28,917	4,040	383	5,582

From this table it is clear that the idle hours come to a considerable percentage of the total labour hours available.

6.2.9.8 Production Level

Production level is fixed taking into consideration the demand, stock level, the availability of raw materials and seasonal nature of the industries concerned. In spite of the variations caused by these factors a constant labour force is employed. In the case of some companies, owing to lack of demand and stockpiling the production has to be curtailed. For curtailing production Pallathara

Bricks & Tiles declared lay-off, T.R.W. reduced shift and the rest of the companies could not do anything to meet the situation. Production level cannot be fixed scientifically as the labour force is constant. If increase in demand is noticed T.P.I. and Premo Pipe make use of the casual labourers to meet the situation.

6.2.9.9 Production Co-ordination

Lack of production co-ordination is a serious problem. In none of the companies machine utilisation budget is prepared, production plan chart is made or flow diagram drawn. Owing to this, production operation is not co-ordinated. Since allocation of work to the machinery is not scheduled, the men and machines remain idle. This is felt more in K.E.L., K.M.M.L. and Traco Cables Company where they have a single line production. If the work is not over at a particular place the rest of the machines will have to remain idle and as a result, assembling will also be a problem. Moreover in K.E.L. and Traco Cables they have pointed out that they were not able to supply any order in time.

6.2.10 FINANCE BUDGETING AND CONTROL

6.2.10.1 Organisations

Three companies under the study have no finance executives (Pallathara Bricks and Tiles, Chalakudy Refractories and Forest Industries (till 1978). In one company

(Trivandrum Spinning Mills) the General Manager looks after the finance function also. Only in two companies (T.C.C. and K.S.D.P.) there are Cost Accountants. Only four companies (K.C.L., K.S.D.P., K.E.L., and T.C.C.) have finance managers, accountants and clerical staff. In most of the companies it is the finance manager and the office staff who do the work. Only in two companies (T.P.I. and Premo Pipe) there are internal auditors. In general, it can be said that the finance department is understaffed wherever there is finance department. In companies such as K.E.L., K.C.L., T.R.W. etc., the post of the finance executive has been vacant for years. The company is not ready to offer attractive salary for the post. Again the executive turnover in these companies (in finance department) is high. Junior hands leave the organisation for better jobs when they get experience. As a result, the finance department is doing only the anxiliary functions such as answering the queries of government auditors, collecting the cash, preparing the pay roll, preparing the accounts etc. In a way, it is true to say that the finance department of these companies are very similar to the finance department of government offices. The corporate outlook required for the finance division of a business organisation is yet to be developed by these companies.

6.2.10.2 Cashflow Statement

Most of the companies do not prepare statements to show cash flow or funds flow. Only the K.S.I.E. units

prepare cashflow statements and send it to the holding company for working capital requirements. K.S.D.P. prepare cashflow statements for the whole year alongwith the budgets regularly. Many companies do not prepare cash budgets.

In order to assess credit worthness generally, the banks ask only for profit and loss account and balance sheet for three to five years. Even then a cash budget is absolutely necessary for it is only a cash budget which will reflect the nature of all other functions. It is true that major changes may not occur to equity capital or long-term debts in the course of an year unless there are some expansion and modernisation programmes. Nevertheless the cash budget is absolutely necessary to know when the company will have excess cash, so that it can be profitably employed elsewhere or when the company will need cash so that alternate sources can be found for it. One of the reasons pointed out by the executives for declining production was lack of cash to meet the immediate raw material requirements, etc. Again, all except 6 companies have accumulated losses running into lakhs of rupees. Only K.S.I.E. units are free from the working capital problems as the holding company takes care of this. In the rest of the companies the financial executives invariably said that they have working capital problems. Even so, these companies do not prepare cash budgets. It was said that the K.S.I.E. companies prepare cashflow statements every month. But it amounts only to cash planning.

This cash-flow statement is not used for any control purpose.

6.2.10.3 Projected Profit and Loss Account and Balance Sheet

Profit and Loss Accounts and Balance Sheets are projected in ten companies (K.S.I.E. units, T.C.C., K.M.M.L., Premo Pipes and Travancore Sugars and Chemicals). In some companies income and expenditure account takes the place of profit and loss account. Three companies (K.C.L., T.P.I. and T.R.W.) prepare projected balance sheets. But none of these companies statements are utilised for any control purpose. For example, the total of the projected balance sheet of T.R.W. for 1977-78 was Rs.377.88 lakhs whereas the actual was Rs.442.64 lakhs. Even the balance sheet total for 1976-77 (actual) was Rs.401.41 lakhs. They prepare the pro-forma statements regularly but once they are prepared, they are not utilized either for evaluating the performance or for controlling the activities. (See table 33)

6.2.10.4 Inventory Control

Inventory of raw materials as well as finished goods form a major item of expenditure in most of these companies. But none of these companies has a fulfledged invention control system. Finished goods stock of K.E.L. were over Rs.6 lakhs, Rs.10 lakhs, Rs.20 lakhs, Rs.12 lakhs, Rs.17 lakhs in 1973-74, to 1977-78 respectively. The average raw material stock of the company during the same period were

Rs.34 lakhs, Rs.39 lakhs, Rs.43 lakhs, Rs.42 lakhs and Rs.46 lakhs respectively. Similarly in the Traco Cable Company, the stock of finished goods were Rs.6 lakhs, Rs.6 lakhs and Rs.9 lakhs in 1975-76, 1976-77 and 1977-78 respectively. During the same period the company had average raw material stock worth just over Rs.28 lakhs, Rs.38 lakhs and Rs.57 lakhs. In the same way, all the companies (see Table 41)under study have a considerable amount of money locked up in inventory. Inventory control in these companies are restricted to year-end stock-taking alone. Modern techniques like ABC analysis and perpetual inventory control system is not used. Inventory carrying costs, economic order quantity, reorder level etc. are not taken into consideration. As a consequence, raw material procurement is delayed, money gets locked up unnecessarily and obsolescence to goods occurs. Tables 35 and 36 are illustrations. According to the table 35 the value of slow-moving and non-moving items of finished goods held in stock on 31st March 1977 was Rs.4.53 lakhs. Of these finished goods 1,133 items were held in stock for more than one year, 401 items for more than 2 years and 263 items more than three years. According to table 36, 122 items were in stock for more than one year, 65 items for more than 2 years and 333 items for more than 3 years. This has resulted in locking up of working capital, obsolescence of inventory etc.

6.2.10.5 Credit Control

Credit sale is a feature in all these companies but no special effort is made for debt collection. In all these companies receivables form the most important item (Value wise). Receivables of K.E.L. during the period from 1974-75 to 1977-78 were Rs.51.06 lakhs, Rs.52.32 lakhs, Rs.55.28 lakhs and Rs.86.66 lakhs and that of T.T.P. were Rs.80.14 lakhs, Rs.70.12 lakhs and Rs.93.82 lakhs during 1975-76, 1976-77 and 1977-78. Another feature of receivables is that they have been steadily increasing in almost all the companies under study. In T.P.I. it had steadily increased from Rs.12.19 lakhs in 1973-74 to Rs.34.11 lakhs in 1977-78, in T.C.C. from Rs.61.98 lakhs, in 1972-73 to Rs.133.95 lakhs, in 1977-78. Even then none of these companies has formed any policies regarding credit sale and debt collection. This is revealed by the long debt collection periods of these companies. The basic reason why there cannot be credit control is due to the dependence of these companies on government and government companies. According to the Finance Manager of T.R.W. "In some cases the government may take more than one year to pay." According to the Finance Manager of F.I.T. "Since our major customers are government departments the usual time to collect the debts are more than one year." (See table 37)

It can again be noticed from the statements that the days of debt collection varies from year to year which substantiate the point that there is no credit control in these companies.

6.2.10.6 Working Capital - Planning and Control

In most of the companies working capital requirements are not calculated in advance and no planning is done for working capital. Even where cash flow statements are prepared they are not made use of for control purpose. Gross working capital consists of inventory, receivables and cash. From tables 75 it can be seen that none of the companies under study has any cash planning and control, as the cash balance has been fluctuating very much. K.E.L.,. had a cash balances were Rs.0.16 lakhs, 1.06 lakhs, Rs.21.48 lakhs and 0.99 lakhs during the years from 1974-75 to 1977-78. In the case of T.T.P. the cash balances were over Rs.82 lakhs, Rs.261 lakhs, Rs.209 lakhs and Rs.205.04 lakhs during the years from 1974-75 to 1977-78. In the case of K.C.L. the cash balance for the years from 1972-73 to 1977-78 were Rs.0.02 lakhs, Rs.4.53 lakhs, Rs.0.31 lakhs, Rs.0.34 lakhs, Rs.0.41 lakhs and Rs.0.19 lakhs respectively. This variation of cash balance from year to year is due to the lack of proper cash planning cash management. In short in these companies there is no proper inventory control, no credit control and no debt collection control, no cash control and hence there is no

planning or control for working capital. In fact the three companies (K.C.L., T.R.W., T.P.I.) that prepare the pro-forma balance sheet alongwith the budget, show only a total figure for current assets without break-up or supporting schedules.

6.2.11 Manpower Planning and Control

Manpower Planning and Control is not done by any of these undertakings in a systematic manner. The total manpower requirements are assessed and estimated without proper study. Overhead expenses for personnel department are estimated on the basis of expenses of the previous year and sent to the finance manager. As compared to production, sales and marketing, personnel department is given the least importance. Even where there is functional planning, no manpower planning is done by any of these companies. In many of these companies there are no separate personnel departments. Complaints and grievances are haldled by the finance manager. In some others, even though there are personnel managers, they are not given the same status and salary as those of other departmental heads.

6.2.12 From the above discussion, it can be concluded that in these undertakings forecasting the first step in the budget preparation is not done properly. Actual performance has no relation to the budgets prepared. Budgetary control is conspicuously its absence. There are various hindrances for exercising control over finance management.

So the existing budgetary control system, is not at all effective in improving the financial performance of these undertakings, and it is one of the major reasons for accumulating losses every year.

CHAPTER - VII

FINANCIAL STRENGTHS AND WEAKNESSES ANALYSIS

Introduction

From the discussion in previous chapter it is clear that the budget preparation, implementation and control is not effective enough to bring out the desired results. In the chapter an attempt is made to analyse the financial strengths and weaknesses of each undertaking of a period of time in order to probe into fact whether financial planning and control were effective in exploiting the strengths of the undertaking while covering its weaknesses. It was made clear in theoretical chapters that financial planning and effective control is based on the basic premise of exploiting the financial opportunities using the financial strengths while covering the financial weaknesses and threats.

There is no adequate financial planning and control in any of the undertakings under study. In order to assess and evaluate their financial strength and weakness and financial performance, the technique of ratio analysis used. As they differ in most of the aspects all the 18 companies are taken separately and discussed. The performance analysis is made for a period of 5 to 7 years. As these undertakings are dissimilar in nature no attempt is made to make an interfirm comparison in investment size, products, customers etc. Although, there are several significant ratios, only five groups of ratios (profitability, cost, liquidity, turn over and solvency) are taken for this analysis.

Among the profitability ratios 3 significant ratios (Net profit to sales, Net profit to capital employed and Cost of goods sold to sales) are analysed. Five cost ratios namely raw material to total cost, remuneration to employees to total cost, factory overhead to total cost and administrative overhead to total cost are taken. Assets utilisation is assessed through the following turnover ratios :

1) Sales to fixed assets
2) Sales to current assets
3) Sales to receivables
4) Sales to finished goods
5) Sales to cash and
6) Cost of goods sold to raw material stock.

The liquidity position is evaluated through current ratio and quick ratio. The solvency position of the undertakings are analysed with the help of debt to equity ratio, financing charges to total cost ratio and tangible net worth to equity ratio.

One of the main defects of finance management in public sector undertakings is more or less the complete absence of cost consciousness. Cost data are not properly grouped and it is almost impossible to group them under proper heads from trading and profit and loss account figures. Cost sheets are rarely prepared. So, in the absence of reliable data, approximations are made under various assumptions. For example the cost of sales will include prime cost, factory overhead, administration overhead and selling and distributing overhead. As these expenses cannot be distinguished and reclassified from the available figures, the term 'total cost' is used for cost of production. Total cost is found out by deducting profit or adding losses to the total sales and by deducting the opening stock and adding the closing stock. A new ratio namely financial charges to total cost is also included, as in many cases, due to huge borrowings, interest payments formed a sizable item of expenditure. In order to assess the effectiveness of asset utilisation, assets turnover ratios are taken.

For the purposes of this analysis the companies are grouped into profit making and loss making units. There are five profit making and thirteen loss making undertakings. The discussion begins with profit making unit. Among the profit making units, T.T.P. emerges as the most important concern on the basis of investment.

Travancore Titanium Products Limited

The T.T.P. Ltd., established in December 1946, in collaboration with British for the manufacture of Titanium dioxide, utilising illmenite extracted from beach sands of Chavara, went into production in September 1951. Till 15th August 1960 the company was managed by a firm of managing agents. Thereafter the State Government appointed a managing director to manage the affairs of the company. The company produces Titanium dioxide.

Although the company has an installed capacity of 24000 MT, it only achieved 40% of the installed capacity till 1979-80. And the capacity utilisation has shown an increasing trend towards the end of the period under study.

Ratios of Cost

Raw material formed the most important cost element. The raw material consumed had increased steadily from Rs.129.58 lakhs (1974-75) to Rs.277.79 lakhs (1978-79).

The increase in the raw material consumption was along with increase in production. The ratio of raw material consumed to the total cost had shown an increasing trend. This was mainly due to a steady rise in raw material prices (the ratio of raw material consumed to total cost increased from 22% to 31%). The ratio of remuneration to employees to total cost remains around 23% except in 1975-76 although it increased about two and a half times. In absolute figures remuneration to employees increased from Rs.96.45 lakhs (1973-74) to Rs.242.79 lakhs (1978-79). Major items included in factory overhead are power and fuel, stores, maintenance and insurance in the order of their importance. Power and fuel has increased more or less proportionately to the increase in production. The accumulated depreciation of plant and machinery remained at Rs.207 lakhs, which means it was below 25% of the original cost of Rs.900 lakhs in the fast four years. Factory overhead charges remained more or less constant for a period of 3 years but thereafter it has shown a declining tendency due to the increased wages and cost of raw materials. Administrative overheads had more than doubled(increased from Rs.5 lakhs to nearly Rs.11 lakhs) and remained around 1% of the total cost during these years.

Profitability

In all these years the company had shown profit (except in 1978-79) which had fluctuated violently (between Rs.2.56 lakhs and Rs.98.83 lakhs). At the beginning of the

period undersstudy (first two years 1973-74 and 1975-76) the sales were just below Rs.600 lakhs (Rs.547 lakhs & Rs.598 lakhs) and the profit was only Rs.2.56 lakhs. In the subsequent year the sales almost doubled making a profit of nearly Rs.100 lakhs. Thereafter the profit fell down to Rs.63 lakhs and reached a low level of Rs.2.56 lakhs in the following year. The sales again doubled and the profit reaching to Rs.98 lakhs. During the last two years (1977 and 1978) although the sales had increased, the profit fell down again to Rs.42 lakhs and Rs.30 lakhs respectively culminating in 1978-79 to a huge loss of Rs.34 lakhs. The return on capital employed was as high as 9% during the 1st year which fell down to 1% and again rose to 8%. Thereafter was a steady fall signifying a decline in overall efficiency. A declining trend was also observed in the ratio of net profit to sales. The profit has not increased proportionately during 1976-77 and 1977-78. The ratio of cost of goods sold to sales was 88% of the selling price in 1973-74. During the subsequent year, it was nearly equal to selling price. In the last two years, the ratio came up to 96% and 97% showing very little margin.

Ratios of Assets

In 1973-74 and 1974-75 the sales were below 50% of the amount of capital employed. But in the subsequent years there was a marked increase in sales reaching over 0.86 times of the capital employed signifying a better

capital utilisation. Because of the gradual depreciation, the fixed assets value has been reduced and this has resulted a gradual increase in the ratio of sales to fixed assets signifying a slight increase in the utilisation of fixed assets. The current assets remained below Rs.600 lakhs in 1974-75 but jumped to over Rs.900 lakhs in the last 3 years. This is partly due to increased production activities and partly due to increased cash balance. The stock of raw material has not increased in proportion to production, The ratio of raw material turnover remained around three times in all the years. In 1973-74 and 1974-75 the ratio of sales to receivables was 38 times and 23 times respectively. After that the sales increased several times but this ratio came down to less than 13 times signifying a poor debt collection. A significant feature of the company is that the finished goods inventory has been showing a decreasing trend indicating a sellers market. What ever is produced are immediately sold. Among the items in current assets cash balance is the significant item. Large cash balances during the last four years show that the company was holding idle cash.

Working Capital Ratio

There is a gradual increase in the net working capital during 1974-75 which recorded a steep rise thereafter. The sales had increased a little more than 1¼ times.

The working capital as a whole has increased fourfold, showing reduced effectiveness in utilisation of working capital.

Liquidity

The current assets of the company remained over 3 times of the current liability in three of the six years under study. This is much above the normal current ratio of 2 : 1. The liquidity position was satisfactory as shown by the acid test ratio which remained at 1 : 1 except in 1978-79.

Solvency

The liquid capital of the company has been Rs.93 lakhs in 1973-74. In 1976 it has risen to Rs.159 lakhs and remained constant to the end of the period. The debt obligations and loans showed a decreasing trend from 667 lakhs to 539 lakhs. The interest charges of the company had been reduced correspondingly (Rs.41 lakhs to Rs.35 lakhs). The huge cash balance could have been used to reduce part of the outstanding loans. The accumulated profits in the form of reserves amounted to twice the equity capital. The solvency position of the company is sound, and the company's total assets were very much in excess of total outstanding liabilities.

Conclusion

The company's production could be raised much higher than the present 40% of the installed capacity as the

company deal in monopoly products. A disturbing trend is that the cost of production showed a constantly increasing trend disproportionately to sales increase. This is primarily due to the increasing trend in raw material prices. The fixed assets had shown a better utilisation. During the past four years the sizable amount of idle cash holding indicates a poor utilisation of working capital. The company had healthy solvency and liquidity positions. There is every scope for increasing the profit margin with sound sales and promotional activities. Measure should be taken to reduce cost. A pragmatic and effective finance management is necessary. (See Table 55 & Graph 15

Traco Cable Company

The financial performance of Traco Cables Ltd., has been analysed for a period of five years(from 1974-75 to 1978-79). The company is producing 3 types of cables (namely Telephone Cable, Power Cables and AAC/ACSR) of which the telephone cables form nearly half of the production. This item is mainly responsible for the increase in the profit of the company. The sales had steeply increased from 86 lakhs in 1974-75 to Rs.210 lakhs in 1975-76 reversing the loss of Rs.1 lakh into a profit of Rs.14 lakhs. In the year 1976-77 the profit increased more than double (nearly Rs.34 lakhs) when the sales almost doubled (Rs.832 lakhs) In 1977-78 the company had to declare a lock-out due to labour

unrest which adversely affected the sales and profit (sales was Rs.369 lakhs profit Rs.18.28 lakhs) In 1978-79 the sales increased again to Rs.465 lakhs, but the profit fell down to Rs.17 lakhs. The company had to depend more and more on borowed funds which nearly reached the level of equity capital. The profit was reduced because of the mounting financial charges.

In the telephone cables division the capacity utilisation was more than 100%. In all other divisions it was nearly 80%.

Cost Ratios

In the cost of production raw material cost forms a major item, accounting for more than 70% of the total cost (1975-76) which had increased to 81% (1977-78) due to price increase. The ratio of remuneration to labour to total cost showed a declining tendency from 8% to 5% although an increase was noticed in subsequent years irrespective of reduction in production. Factory overhead fluctuated during the period but the administration overhead showed a steady increase. The combined effect of factory overhead and administration overhead compared to total cost declined significantly.

Profitability

Return on capital employed has increased from 5% (in 1975-76) and 11% (in 1976-77) but came down to 4% in 1978-79 indicating a fall in over-all efficiency. The same

trend is visible in the ratio of net profit to sales. The cost of goods sold had fluctuated between 90% and 95% of the sales. This was mainly due to the changes in turnover and rigid nature of fixed cost.

Assets Turnover

The ratio of sales to capital employed showed a favourable trend during this period (the ratio increased from 36% to 120%). The ratio of sales to fixed assets have shown an increasing trend signifying better utilisation of fixed assets. Although the current assets had steadily increased, the utilisation of current assets also showed a favourable trend due to increase in sales. Among the current assets, receivables forms a major item. In 1974-75 it accounted for over half of the sales and in the subsequent years it was reduced to less than half. But in 1976-77 there was a steady increase in cash sales and a steep decline in credit sales along with an increase in total sales which is a healthy sign. On the other hand, raw material stock doubled during the period and the finished goods stock increased only by 1½ times.

Working Capital Turnover

Through out this period the ratio of cost of goods sold to net working capital has shown an increasing trend signifying more effective utilisation of working capital.

Liquidity

During the period the company had a favourable liquidity position as indicated by both current ratio and quick ratio.

Solvency

A welcome change in the capital structure of the company was noticed at the end of this period. The borrowed funds were reduced from 145 lakhs to 113 lakhs resulting in proportionate decrease in financing charges (nearly Rs.5 lakhs). But the financial charges again increased as debts increased in 1978-79. The company had maintained a bare solvency position.

Conclusion

During the 5 years under study, the company not only could eradicate accumulated losses of nearly Rs.48 lakhs and repay a part of the borrowed funds but also it could invest in plant and machinery to the tune of Rs.10 lakhs which was badly needed for expansion (as some of the plants were working above the rated capacity). There was industrial peace through out the period. There was no marketing problem since the company's main products (namely Telephone Cables) was having an ever increasing demand. If the existing industrial peace can be maintained, the prospects of the company will be rather bright. (See Table 56 & Graph 10

Kerala Minerals and Metals Limited

The profit of the company had increased steeply from less than Rs.3 lakhs at the commencement of the year to Rs.12 lakhs in 1975-76 and over Rs.30 lakhs in 1976-77. Thereafter it came down to less than Rs.10 lakhs (in 1977-78) to rise again to Rs.18 lakhs (in 1979-80). The sales also showed a more or less same tendency to fluctuate although not proportionately.

Ratios of Cost

The capacity utilisation of plants producing two major products was more than 80%. In other it was considerably low. The cost of raw material is comparatively insignificant to the total cost (less than 2%) as the raw material is available in local beach sand. The remuneration to employees showed an increasing trend (from 71% to 83%). The factory overhead also increased steadily from 14% to 25% of the total cost (from Rs.7.81 lakhs to Rs.10.48 lakhs). It indicates the uncontrollable nature of the factory overhead. The royalty given for beach sand is included in the factory overhead. The steep rise in factory overhead was mainly due to the increase in the cost of power and fuel and stores and spares. The administrative overheads was very little (hardly came to 1% of the total cost).

Profitability

The cost of production could not reflect its effect on sales due to wide fluctuation in the stock accumulation. The ratio of net profit to capital employed had increased from 4% (1974-75) to 13%. It fell down to a little over 1% to rise again to 8% in 1979-80. The steep decline in the return on investment has nothing to do with its efficiency of the capital use as it was mainly due to pumping of additional capital for expansion purposes, (which is included in the capital employed). The ratio of net profit to sales showed a steady increase from 6% (1974-75) to 43% (in 1976-77). Again it declined to 23% (1978-79). The fall in the percentage was due to fall in the sales.

Asset Turnover

The current assets increased from Rs.40.76 lakhs in 1973-74 to Rs.177.81 lakhs in 1979-80. The sizeable increase in current assets was mainly due to the cash holdings meant for the expansion programme which was Rs.100 lakhs and Rs.385 lakhs respectively in 1978-79 and 1979-80. Due to the increased cash holding, the current assets turnover steadily declined from 1.18 times to 0.15 times but increased to 0.45 times. Finished goods stock showed a fluctuating trend in relation to fluctuation in sales. The minimum stock was more than four months requirements which is considered to be high. Since the product enjoyed monopoly, it could hardly

affect the business. The stock accumulation was mainly due to a slack in the pigment industry. The receivables of the company was Rs.9.81 lakhs in 1974-75 and showed a declining trend. But in 1979-80 it rose to Rs.17 lakhs. Receivables forms Rs.16.53 lakhs signifying a slack in debt collection. Fixed assets also followed the same trend increasing steadily from nearly Rs.28 lakhs to Rs.279 lakhs due to the introduction of new machines brought for exapnsion and modernisation. Due to the increased investment, the fixed assets turnover steadily declined from 1.73 times to 0.22 times and rose again to 2.49 times during the period under study.

Working Capital Turnover

The net working capital steadily increased from Rs.13.12 lakhs in 1974-75 to Rs.367.55 lakhs in 1977-78 which resulted in reduction in the working capital turnover (from 3.47 times to 0.14 times). This was mainly due to increased cash holdings.

Liquidity

During the period under study the company enjoyed a fair liquidity position as indicated by current ratio and quick ratio.

Solvency

The most significant change in company's capital structure was noticed during 1977-78 as it borrowed a loan amounting Rs.400 lakhs for expansion which was double the

equity capital (of Rs.165.55 lakhs). The company enjoyed total solvency during the period, as indicated by the ratio of tangible net worth to equity.

Conclusion

The capacity utilisation in two units producing two major products was more than 80% while for the remaining products capacity utilisation was considerably low. The sales shows a fluctuating trend where as the cost of production increased steadily resulting in accumulation of stocks. The labour charges increased considerably as it forms the most important item of expenditure and this increase inflated the cost of production. The fixed assets utilisation declined and the working capital utilisation also showed the same trend. The company enjoyed fair liquidity position and solvency position during the period under consideration. Due to heavy borrowings (for expansion purposes) the company's capital structure was distorted. (See table 57 & Graph 12

Kerala State Drugs and Pharmaceuticals Ltd.

Kerala State Drugs and Pharmaceuticals Ltd., (inaugurated on 12-9-1974) is one of the latest undertakings of the State Government. The company was commissioned to meet the medical supply requirements of Kerala Health Service Department which is purchasing over 90% of the company's sales. The company was making profit consistantly even from

the very first year of production. It has made a profit of nearly Rs.4 lakhs during the first six and a half months of operation (when sales reached over Rs.67 lakhs). In the subsequent full year the sales were more than double but profit was reduced to Rs.3 lakhs. The next year the sales had increased by nearly Rs.20 lakhs and the profit by nearly Rs.1½ lakhs. In the two subsequent years, sales increased to Rs.274 lakhs and Rs.311 lakhs but there was not much increase in profits. The company is allowed to charge a pretax profit of 2.5% on its sales and this price was fixed by Government of Kerala and Kerala Health Service Department. This concession enjoyed by the company from the parent department is a major reason for its profit.

Ratios of Cost

In the cost of production, the cost of raw material was the most predoinant item. Raw material consumption disproportionately increased from Rs.49 lakhs to Rs.131 lakhs. The increase in consumption was proportional to production. The ratio of raw material consumed to total cost steadily declined from 65% to 42% due to the disproportional increase in other cost elements like labour, financing charges, factory overheads etc. Remuneration to employees had increased considerably partly due to increased production and partly due to new wage agreements. The factory overheads form the second major cost item (including packing material,

depreciation, power and fuel, repairs to plant and machinery and stores). Along with the increased production, the cost ofpacking materials increased sharply (nearly three times i.e., from Rs.7.02 lakhs to Rs.13.80 lakhs). The depreciation remained below Rs.5 lakhs all these years. As compared to initial years power and fuel consumption showed sharp increase (nearly two times) in the final year. Stores consumed, repairs and maintenance also showed a similar increase. On the whole, the high factory overhead indicated a fall in the efficiency. Even though administration expenses increased from Rs.3.44 lakhs to Rs.8.75 lakhs the ratio of administration overheads to total cost remained around 4%.

Ratios of Assets

Investments in fixed assets increased slightly during this period (from 51 lakhs to Rs.57 lakhs). The turnover of fixed assets showed an increasing trend (from 1.33 times to 4.71 times) signifying increase inthe utilisation of fixed assets. During the period under consideration the current assets increased over four fold (from Rs.39.49 lakhs to Rs.187.07 lakhs) This increase was mainly due to increased production, credit sales and bad debt collection. Among the current assets, raw material stock formed the most important item which had slightly increased during the period as a result of unreliable supply increased cost.

The receivables had increased nearly twenty seven times (from Rs.2.72 lakhs to Rs.71.93 lakhs) due to slow debt collection. Finished goods stock also increased more than three times (from Rs.8.20 lakhs to Rs.27.42 lakhs). Having a steady market for its products this increase has not resulted in accumulation of stock. In 1977-78 and 1978-79 there was a slight decline in the finished goods stock (from Rs.17 lakhs and Rs.13 lakhs). The cash balance of the company remained less than Rs.75,000/- during the first three years but rose to Rs.31 lakhs in 1978-79.

Net Working Capital Turnover

The net working capital of the company steadily increased from Rs.26.95 lakhs to Rs.130.24 lakhs. The ratio of cost of goods sold to net working capital decreased (from 2.46 times to 2.34 times) indicating a slight setback in the utilisation of working capital.

Liquidity

The current assets of the company has not increased in proportion to current liabilities. The current ratio showed a favourable trend because of stock piling and the quick ratio declined except in 1979. This indicates poor liquidity position.

Solvency

Borrowed capital increased along with equity

capital steadily. While the equity capital increased nearly ten times (from Rs.14.87 lakhs to Rs.159.41 lakhs) the borrowed capital only doubled (from Rs.63.23 lakhs to Rs.126.64 lakhs). The financial charges increased from Rs.3.07 lakhs to Rs.14.66 lakhs reaching 8% of the total cost. The reserves and surpluses had been increased from Rs.3 lakhs to Rs.11 lakhs. This considerably reduced the operating net profit. The company was more than solvent during the period as it had enough assets, to meet its outstanding liabilities including the equity capital.

Conclusion

Although the profit is deliberately kept low due to the policy of charging of only 2½% profit on sales. The company after declaring a dividend of 6% built up sizeable reserves and surpluses amounting to over 36% of the paid up capital. The labour charges showed a rising trend. The fixed assets were used to give better results. Increased credit sales and slow recovery of debts increased sundry debtors considerably. Although the solvency position of the company was fair, the liquidity position was poor.
(See table 58 & Graph 2

Premo Pipe Factory

Premo Pipe Factory, was commissioned by Norwegians under Indo-Norwegian project to supply pipes for Quilon Water Supply Scheme. After the completion of the scheme in 1964, it was taken over by the State Government.

The company operates on a patent method called Premo method and supplies to P.H.E.D. their requirements on cost plus basis. A salient feature of the company is that its production vary according to contracts from P.H.E.D. The company has only one executive (Finance Executive) as regular employee of the company and the rest are on deputation from P.H.E.D. During the period 1971-72 to 1977-78 under consideration, the company made profit in six years and losses in three years. The losses had ranged between Rs.1.79 lakhs and Rs.9.27 lakhs and the profit had varied from Rs.1.97 lakhs to Rs.5.65 lakhs. The sales of the company had fluctuated violently between Rs.20 lakhs and Rs.70.80 lakhs and shown a steady increase in the last three years. The total cost had varied between Rs.43.52 lakhs and Rs.59.24 lakhs. The sales depended on the orders from P.H.E.D. and production is restricted to the availability of raw material, price, shifts, lay-offs, strikes, etc. So even if large contracts are secured from P.H.E.D the production stand as a limiting factor.

Cost Ratios

The undertaking characterised a typical organisation with violent fluctuations in production and total cost. The cost of raw material is a major item. The raw material cost increased from Rs.15 lakhs (1971) Rs.23 lakhs (1974). The increase in the raw material consumption was due to increase in shifts and raw material prices. In 1976-77 and 1977-78

the consumption was Rs.22 lakhs and Rs.18 lakhs. Labour charges also fluctuated violently due to changes in shifts, lay-offs, and wage agreements, during the period of nine years from 1971 onwards. The factory overhead gradually increased from Rs.2.23 lakhs to Rs.3.02 lakhs which came to 8% of the total cost on an average. Administrative overheads was not prominent as it came to 1% to 2% of the total cost, but, in1976-77 and 1977-78 it amounted to 5% and 6% of the total cost.

Assets Turnover

The fixed assets of the company steadily increased from Rs.8.50 lakhs to Rs.22.20 lakhs (1974). The increase in the assets was due to modernisation of machineries. The utilisation of fixed assets showed a fluctuating trend. The current assets of the company increased from 1971 to 1973 (from Rs.32.44 lakhs to Rs.34.44 lakhs). This was due to increased production and finished goods stock. The current assets more than doubled in 1976 (from a low figure of nearly Rs.33 lakhs in 1973-74 to rise again to Rs.76 lakhs and Rs.87 lakhs in 1976-77 and 1977-78 respectively.) mainly due to closing stock and receivables. In 1975 and 1976 finished goods accumulated in large quantities due to low demand. The receivables had increased from Rs.8.71 lakhs and Rs.30.27 lakhs due to late payments from P.H.E.D., the company's chief customer. Except in the first two years 1971-72 the company

had considerable amount of cash balances varying between Rs. 2.35 and Rs. 26.21 lakhs.

Working Capital Turnover

The ratio of cost of goods sold to net working capital showed a declining trend towards the end, marking a poor utilisation of working capital. (Table 59)

Liquidity

The current ratio and quick ratio showed that the company's liquidity position is fairly well. (Table 59)

Solvency

The debts of the company increased from Rs. 9.62 lakhs in 1971 to Rs. 38.29 lakhs in 1978 and the financing charges increased from Rs. 83,000/- to Rs. 2.95 lakhs during the same period. The company's solvency position was good as the total assets were more than total outstanding liabilities. (See table 59 & Graph 1

Travancore Cochin Chemicals Limited

T.C.C is one of the most capital intensive undertaking in the State Sector with an investment of Rs. 1575 lakhs. Financial performance of the company is analysed from 1972-73 to 1979-80 which revealed that the performance of the company has gradually deteriorated during the first half of the period under study, and rapidly deteriorated thereafter accumulated losses amounting to Rs. 268 lakhs (1976-77). During this

period there is a steady increase in sales (from Rs.378 lakhs to Rs.607 lakhs). At the same time the total cost had almost doubled (from Rs.463 lakhs to Rs.889.15 lakhs). During the first two years the losses were Rs.10 lakhs and Rs.40 lakhs. It increased to Rs.134 lakhs in 1975-76 reaching Rs.267 lakhs in 1976-77. At the end of this period there was a slight fall in losses (Rs.158 lakhs). In 1977-78 losses came to 14% of the capital employed. In this period the sales proceeds were below the cost of production. For every 100 rupees of sales the cost of goods sold reached Rs.144 in 1977-78. The accumulated losses has already eaten away the equity capital of the company with the result that the government had to grant huge amounts as loans for its operations. In 1978-79 the losses reached Rs.134 lakhs. In 1979-80 the company showed a profit due to increased selling price, governments conversion of interest (Rs.25 lakhs) into capital and government subsidy.

Capacity Utilisation

The company produced caustic soda, hydrosulphate soda, sodium sulphate, sulphur dioxide, and their by-products. During the period from 1973-74 to 1977-78 the production was less than 50% of the capacity except in the year 1973-74. The production of hydrosulphate soda plant was less than 25% of the installed capacity, and that of sodium sulphate plant was less than 50%. Poor capacity utilisation

was mainly due to old-age of machinery, breakdowns, power fialures, marketing constraints and non-availability of raw materials. Under utilisation of capacity was one of the major reasons for losses.

Ratios of Cost

The cost of raw material is a major item of cost. It fluctuated between 17% and 33% which showed a steady declining trend in the last three years. Actually this fall in the ratio was due to increase in other cost elements like labour, financing charges, factory overhead etc. In the first three years the total price of raw materials was less as a result of low production. Employees remuneration steadily increased from Rs.102.96 lakhs (1973-74) to Rs.162.45 lakhs (1979-80). During the firstthree years the increase in the labour remuneration was mainly due to the provisions of the long term agreement of 1973-74. Due to slight increase in labour efficiency and increase in other items of expenditure, the ratio of remuneration to employees to total cost came down from 22% to 16%. The factory overhead formed the major item of expenditure in T.C.C. It steadily increased from 38% (1973-74) to 49% in 1976-77. It came down to 42% in 1979-80. As this item of expenditure is very high, it is one of the major causes for losses.

Being a large scale consumer of electricity the cost of power consumed forms an equally important item of

expenditure. The amounts spent on power and fuel had increased three times from Rs.41 lakhs in 1973-74 to Rs.124 lakhs in 1977-78. Very little attempt has been made to control these items of expenditure. When production declined in 1977-78 from 1976-77 level the cost of power and fuel had actually increased (from Rs.100 lakhs to Rs.124 lakhs). Comptroller and Auditor General in his report had pointed out that the company is not making use of consumption standards. Depreciation charges had increased more than three times (Rs.63.93 lakhs to Rs.197.21 lakhs) due to the increased investment in fixed assets, in the fourth stage expansion. Since the depreciation charges were very high and capacity utilisation was poor the fixed cost per unit remained also very high. Due to old age of machines and frequent break downs• the repairs and maintenance charges steadily increased from Rs.19 lakhs (1973-74) to Rs.65 lakhs (1976-77). It came down to Rs.43 lakhs (1977-78). The stores consumed form another major item of factory overhead which had steadily increased from Rs.32.25 lakhs (1973-74) to Rs.45 lakhs. The consumption of stores and repairs was high (due to increased production) in the last two years. Insurance expenses had increased from Rs.4.17 lakhs to Rs.10.71 lakhs. The increase was necessary to cover increased investment in fixed assets. The ratio of administration overheads remained around 1% of the total cost even though increased from Rs.7.7 lakhs to Rs.9.51 lakhs.

Assets Turnover

Fixed assets of the company had increased nearly three folds during this period (from Rs.475.16 lakhs to Rs.1336.20 lakhs). The ratio of the sales to fixed assets came down from 0.80 times to 0.44 times signifying poor utilisation of fixed assets but increased to 0.73 times and 1.14 times in 1979 and 1980. Similarly current assets had increased three times (from Rs.243.02 lakhs to Rs.672 lakhs). The ratio of sales to current assets had decreased showing a decline in the utilisation of current assets (1.56 times to 1.53 times). The receivables recorded a four fold increase (from Rs.61.98 lakhs in 1972-73 to Rs.242 lakhs in 1979-80) against a sales increase of three times. The increase in the receivables was due to increase in credit sales and poor debt collection. Raw material stock had varied between Rs.29.3 lakhs and Rs.40.20 lakhs). The low level of raw material stock was mainly due to non-availability of raw materials, high prices and working capital problems. Finished goods inventory varied between Rs.24.93 lakhs and Rs.55.16 lakhs during the period from 1973-74 to 1979-80. The finished goods stock hardly accounted for the days sales which is considered to be very low. The company's cash balance showed a declining trend, during the period except in the last two years.

Working Capital Utilisation

The net working capital of the company had varied between Rs.79.69 lakhs and Rs.403.23 lakhs during the period from 1972-73 and 1979-80. Ratio of cost of goods sold to net working capital had decreased from 6.05 times to 2.54 times due to increase in cost of goods sold and fall in working capital utilisation.

Liquidity

The current liabilities of the company had more than trippled (from Rs.98 lakhs to Rs.340 lakhs). The current assets of the company had increased from Rs.243 lakhs to Rs.672 lakhs. The current ratio had steadily declined from 2.64 to 1.47 indicating a precarious liquidity position except in 1979-80. The quick ratio showed a steady declining trend (from 1.49 to 0.45) signifying a very poor liquidity position except in 1979-80. (Table)

Solvency

While the equity of the company increased 1½ times (from Rs.423 lakhs to Rs.640 lakhs), the debts of the company increased nearly 8 times (from Rs.186 lakhs to Rs.1753 lakhs). This shows that the company is practically depending on borrowed capital for its existence, it has to meet a huge amount. This increase directly reflected on financing charges. (Financing charges had steadily increased from

Rs.21.73 lakhs in 1972-73 to Rs.172 lakhs in 1979-80). The increase was more than seven times. The ratio of financing charges to total cost increased from 6% to 19% of the total cost. This burden added to the huge losses made by the company year after year. In 1977-78 onwards the company became theoretically insolvent (as the outstanding liability became more than total assets, by nearly Rs.15 lakhs).

Conclusion

T.C.C. is a typical example of a public sector company continuing its existence inspite of complete erosion of capital. During the period the production capacity had been doubled but the actual production could not reach even the 50% of this capacity due to lack of demand. Since total cost remained above sales the losses incurred by the company also increased with the sales increase. The main reason for this is the abnormal increase in factory overhead as a result of high depreciation due to expansion and mounting rates for power and fuel. Due to unutilized and underutilized capacity and assets utilisation also declined. The liquidity of the company was adversely affected by the abnormal increase in current liabilities especially sundry creditors. Although current assets increased, cash balances steadily declined making the liquidity position of the company weak. Due to heavy borrowings, financial charges increased enormously adding to the huge losses incurred by

company. Towards the end of the period the company became theoretically insolvent. The only possible way to save this company is to reducing the cost of production by reducing all wastages, creating a demand for the products and utilising the full capacity of the plant.

(See Table 60 & Graph 8

Kerala Fisheries Corporation

The Kerala Fisheries Corporation Limited was incorporated in 1966 to take over and run efficiently various boat building yards, workshops, fishing boats, ice plants, freezing plants, and cold storages owned and operated by the department of Fisheries of the State government. Between June 1966 and May 1973 the State government transferred to the company five boat building yards, seven ice plants, five ice cum freezing plants, a cold storage plant, four refrigerated vehicles and three insulated vans. The company commissioned a nylon net factory (March 1969) at Ernakulam, a canning plant (January 1970) at Cochin and a fish meal plant (August 1972) at Azhikode. With a view of making the company viable by concentrating on deep sea fishing all other activities of the company were closed in February 1975. The boat building yards at Vizhinjam, Azhikode, and Cannanore are re-transferred to the boat building yards at Sakthikulangara and Beypore and seven ice plants and cold storages to the department of Fisheries.

The company is at present engaged in deep sea fishing, processing export of shrimps, internal marketing of fish and nylonnets.

Cost of Production

A special feature of the company is the wide fluctuations in the raw material prices and more or less steady nature of selling price in international markets. The ratio of raw materials ranged from 11% to 60% of the total cost. This is a major reason for huge losses. The ratio of wages and salaries and other allowances to total cost had varied between 10% and 57% of the total cost. In the case of factory overhead a significant amount was spent (Rs. 23 lakhs) for the purchase of stores and spares in 1972-73 resulting in a total overhead of Rs.43 lakhs. This item was drastically reduced in the subsequent year and the total factory overhead was reduced to reach nearly a little over half of the figures in 1976-77. It rose again to Rs.40 lakhs in 1978-79. The ratio of factory overhead to the total cost of the company came down from 22% (1972-73) to 11% (1976-77) to rise again to 15% in 1978-79. The administration overhead had more than doubled during this period (from 2.14 lakhs to Rs.5.45 lakhs).

Assets Turnover

Fixed assets during this period had increased significantly due to the purchase of trawlers (but it was reduced

to previous level when they were transferred back). It rose to Rs.141 lakhs in 1978-79. The turnover of the fixed assets showed a fluctuating trend. The current assets showed an increasing trend (from Rs.83 lakhs to Rs.140.62 lakhs). The turnover of the current assets shows that its utilisation had increased slightly. Receivable forms an important item. The receivables were continuously reduced from Rs.21 lakhs (1970-71) to Rs.6 lakhs (1974-75) and rose to Rs.37 lakhs (1978-79). This trend indicates that there is a steady decline in debt collection in recent years. The company never had sufficient finished goods stock. Similarly the company had very poor cash balance which fluctuated between Rs.0.79 lakhs and Rs.18.30 lakhs.

Working Capital Turnover

Out of the 9 years from 1970-71 to 1978-79 in six years the current liabilities of the company were more than current assets. The amount of current liabilities in excess of current assets varied between Rs.7.70 lakhs and Rs.71.47 lakhs. This position shows that the company had used current liability to finance fixed assets. This is against the principles of sound finance management.

Liquidity

The company's liquidity position was very poor during these years as indicated by current ratio and quick ratio.

Solvency

During the period from 1971-72 to 1978-79 the borrowed capital increased about 4 times of the equity capital and financing charges had reached an all time high figure of Rs.41.68 lakhs in 1977-78 but was later reduced to Rs.28 lakhs as a part of loans were converted to share capital. Financing charges increased from 4% to 30% of the total cost and came upto 1/3 of the equity capital. This is another major reason for themounting losses. At the commencement of this period the total liability of the company (excluding equity capital) was more than total assets of the company by Rs.11.39 lakhs. This defficiency had increased steadily year after year. In 1976-77 the outside liability was in excess by Rs.377 lakhs over total assets and in 1978-79 it was Rs.262 lakhs. From the very beginning of the period of the study the company was theoretically insolvent. This sad state of affairs cannot be allowed to continue any more. Unless some drastic measures are taken urgently to rectify the defects it is better to liquidate the company at an earlier date.

(See Table 61 & Graph 9

Kerala Soaps and Oils

Kerala Soaps and Oils Limited, was incorporated on 1st November 1963. The company took over (February 1964) four government departmental concerns (ie. (1) Government Hydrogenation Factory (2) Kerala Soap Institute (3)Government

Oil Factory and Government Shark Oil Factory). Major products of the company are soaps, shark liver oil products and glycerine. The analysis of financial performance is done for a period of 8 years (from 1972-73 to 1979-80). During the first two years the production was 59% and 54% respectively. During the 9 years the maximum capacity utilisation was achieved in 1974-75 - a more than 100% of the installed capacity. The installed capacity of the company was raised to 7000 tonnes from 4300 tonnes per year and in 1979-80 it was again raised to 9000 tonnes. Although the production increased 6 times from 1972-73 to 1979-80, the production could not reach the installed capacity in the later years and this was a reason for losses. In the shark liver oil division with an installed capacity of 300 tonnes per year achieved only 47% of the installed capacity in 1972-73. This is the maximum ever reached. The capacity utilisation was minimum in 1977-78 i.e. 16% (47 tonnes). The glycerine plant, with an installed capacity of 260 tonnes achieved only 18% of the installed capacity in 1979-80. The fish oil plant (purchased in 1968-69) was not put into operation so far. During the period under study the company has not produced vanaspathi and refined oil.

Cost of Production

The total cost had doubled during the first 3 years disproportional to the quantity produced. In 1975-76 the

total cost fell to Rs.59 lakhs from nearly Rs.92 lakhs in 1974-75 and the production dropped to 505 tonnes in 1975-76 from 729 tonnes in 1974-75. There was a steep price fall in the price of raw materials (from Rs.46.50 lakhs to Rs.14.57 lakhs). In 1978-79 and 1979-80 the total cost rose steeply to Rs.187 lakhs and Rs.33 lakhs. Taking into consideration the cost of production, raw material forms an important item. The cost of raw materials ranged between 81% to 34% of the total cost. In 1972-73 the cost of raw materials was about 34% which steadily increased to more than half of the total cost (65%) in the year 1976-77. This was mainly due to a steady increase in raw material prices. In 1975-76 there was a reduction in raw material value due to the fall in market price of raw material. Labour cost increased steadily and more than trippled in the year 1979-80 (from Rs.14.40 lakhs to Rs.45 lakhs). The increase was mainly due to periodical wage agreement. In the year 1975-76 there was a declining trend in labour cost as a part of the labour was diverted to expansion activities. In the factory overhead there are two main items namely stores and power and fuel. The overhead expenses were kept low by providing insignificant depreciation of fixed assets during the first four years. In 1976-77 the depreciation provided was a little more than ½% and the cost of fixed assets were over Rs.100 lakhs. At the end of the period no depreciation was

provided for fixed assets amounting to Rs.112 lakhs. This shows that the losses made by the company were really much more than what was shown in the accounts. The cost of power and fuel had increased proportionately and consumption of stores has increased proportionate to the total cost during the last two years. The administrative overhead more or less remained steady in the first four years and thereafter there was a steep rise from less than Rs.2 lakhs to over Rs.7 lakhs during the last two years. The sales of the company had doubled in the first three years (from Rs.46 lakhs to Rs.92 lakhs). But in 1975-76 the sales went down (to Rs.60 lakhs) due to accute competition in the market. But in 1976-77 the sales again rose to over Rs.144 lakhs and in 1979-80 the company showed an all time record sales of Rs.523 lakhs. This was made possible by the extra efforts of the company in organising a separate marketing division. At the commencement of the period the company had already lost what ever it had in the form of equity capital and incurred further losses. Accumulated losses came to Rs.64 lakhs (1972-73) against the equity capital of Rs.53 lakhs. The company had incurred losses every year thereafter at a diminishing rate reaching Rs.16.26 lakhs in the year 1977-78. In the mean time the company has taken various measures including diversification of production and appointing trained managerial personnel to improve the performance of the company and to reduce the losses to the minimum level.

It succeeded in its effort and in 1978-79 it made a nominal profit of Rs.36000 and in 1979-80 Rs.10.50 lakhs.

Assets Turnover

The current assets of the company had increased from Rs.2 lakhs to Rs.249 lakhs (1979-80). Only in 1975-76, a fall in the trend was noticed. The ratio of sales to current assets has shown an increasing trend (from 0.61 times to 2.10 times) signifying a better utilisation of current assets. As compared to the sales the yearly receivables had shown a declining trend in the beginning. When the sales had increased five fold (from Rs.32 lakhs to Rs.167 lakhs) the receivables had increased only three times Rs.10.111 to Rs.30 lakhs). But during 1978-79 and 1979-80 the ratio of sales to receivables had shown an increasing trend signifying a better realisation of receivables. The receivables amounted to Rs.149 lakhs and Rs.176 lakhs respectively (except in last two years). Raw material stock did not show much difference in the first three years. In the last three years raw material stock has increased disproportionate to the increase in production. During the last three years the ratio of sales to finished goods stock steadily increased signifying a better turnover of finished goods. The cash position of the company was reduced to a precarious position (declining from over Rs.6 lakhs in 1972-72 to nearly Rs.19,000 in the year 1977-78). The cash balance was not enough to

meet even the routine requirements of wage payments and purchase of raw materials. But in 1979-80 it had a cash balance of Rs.18 lakhs. During the period, the net working capital had increased from Rs.26.49 lakhs to Rs.199 lakhs. The ratio of cost of goods sold to net working capital showed a fluctuating trend ranging between 1.98 times and 5 times and showed an increasing trend during the second half of the period. This shows a better utilisation of net working capital.

Liquidity

The current liabilities of the company steadily increased from Rs.13 lakhs (1972-73) to Rs.101 lakhs (1979-80). Even then the current ratio shows a healthy trend remaining around two but acid test ratio showed an increasing trend towards the end due to huge amount of receivables.

Solvency

In the year 1972-73 the company had borrowed funds amounting to nearly 1½ times of its equity capital (of Rs.53 lakhs) and the financial charges for that period exceeded Rs.4 lakhs. But in the same year the equity capital was raised to Rs.100 lakhs, by converting a part of the loans to equity. The capital was raised again in subsequent years to Rs.149 lakhs in 1975-76. The company was trading on equity during the whole period although it was incurring losses year after year. The financing charges increased

from Rs. 2.31 lakhs to Rs. 21.41 lakhs during the period which came to 4% of the total cost on an average. This increase in financing charges was one of the reasons for losses.

Conclusion

The production was below the capacity during the period (1972-73 to 1979-80) especially in the latter part. The company was able to increase the sales nearly 8 times. Total cost increased due to a rise in all items of the expenditure especially the cost of raw materials and labour. Mounting financing charges were another reason for losses. Both fixed assets and current assets showed a slightly better utilisation towards the end of the period. The liquidity position was good. Although the company was functioning with more losses than equity capital the reconstruction and conversion of loans to equity capital by government had given an increased tenure of life to the company. The financial performance during the later half of the period had shown a favourable trend raising the hope that the concern had turned out to be a profitable unit.

(See Table 62 & Graph 5

THE KERALA CERAMICS LIMITED

The Kerala Ceramics Limited was incorporated on 1st November 1963 to take over the then existing departmental undertakings of Government Ceramics and Kerala Government Ceramics. The production commenced from February 1964 with

3 units namely the Mining unit, the Refractory unit, and the Porcelain unit. The Refractory was closed in January 1971. At present the company had three units namely Procelain, China Clay and Spray dried Kaolin. The financial performance of the comapny is analysed for a period of nine years from 1972-73 to 1979-80.

The Porcelain unit of the company had an installed capacity of 450 MT per year. During the first 4 years of the study the production reached a maximum of 602 MT (134%). In 1975-76 the capacity was raised to 595 MT and the production fell to 89% and 95% of the capacity in 1976-77 and 1977-78 respectively. The China Clay plant with an installed capacity of 5000 MT per year achieved more than 100% production during the first four years. The maximum capacity utilisation was noticed in 1973-74 i.e. 149%. During 1976-77 and 1977-78 the capacity utilisation was 99% and 97%. (The actual production was only 4962 MT and 4859 MT in 1976-77 and 1977-78 respectively as compared to the maximum production of 7469 MT in 1973-74). The spray dried Kaolin plant was commissioned in 1975 with an installed capacity of 18000 MT per year. During the first three years (in 1975-76, 1976-77 and 1977-78) the production recorded only 9%, 21% and 29% (the actual production was only 1559 MT, 3820 MT and 5260 MT respectively). The poor capacity utilisation of Kaolin division is one of the reasons for losses after expansion.

Ratios of Cost

During the nine years, (except in 1973-74) the company was selling its products below the total cost. The extent to which the company was under selling the products ranged from 32% (1974-75) and 72% (1975-76). In 1978-79 and 1979-80 total cost was more than sales by 42% and 30% respectively. Among the items of expenditure remuneration to the employees came upto 67% of the total cost in 1972-73 and steadily declined to 40% in 1978-79 and again to 38% in 1979-80 although during this period the remuneration paid to the employees increased steadily nearly 3 times (from Rs.22.45 lakhs to Rs.63.86 lakhs). In the newly started Kaolin division no additional labour force was recruited. The increase in the wage payment in these years is mainly due to increase in wage levels. In order to streamline the wage payment and the productivity a work study was conducted by Kerala State Productivity Council (1972-73). They have fixed a piece rate system. But this could not achieve the expected results due to lack of incentive system and other motivating factors. The raw material cost had increased nearly five times (ie. from Rs.5.34 lakhs to Rs.23.04 lakhs). The fall in the cost of raw material was due to fall in production. The raw material cost is not very prominent due to the fact that the company exploited its own mines. The ratio of raw material cost to total cost

steadily increased from 9% to 16% signifying a fall in the efficiency. Factory overhead increased slowly from Rs.4 lakhs to Rs.10 lakhs during the first 4 years. But during the last two years the factory overhead increased considerably due to expansions. In 1978-79 and 1979-80 the factory overhead came upto 23% and 29% of the total cost, whereas administration overhead has remained around 3% on an average.

The sales of the company showed a steady increase. During the nine years it had almost tribled (from Rs.31 lakhs to Rs.87 lakhs). During the first three years the Porcelain division of the company contributed maximum to the total sales. But after the commissioning of spray dried Kaolin this place was taken by that unit and it earned considerable amount of foreign exchange. According to the sales executives of the undertaking even though this company's selling price is rather high it could not make a profit due to its high cost of production.

Loss

The company was incurring losses in 1972-73 amounting over Rs.11 lakhs. But it showed a nominal profit of Rs.23000 in 1973-74. Thereafter the losses has increased irrespective of increase in sales(from Rs.14 lakhs in 1975 to Rs.53 lakhs in 1978). The losses in 1978 came to nearly 50% of the equity capital of Rs.107 lakhs. During the last two years (1978-79 and 1979-80) even though the sales

increased (to Rs.100 lakhs and Rs.108 lakhs) the losses also increased (of Rs.46 lakhs and Rs.47 lakhs respectively). All these years (except 1974) the selling prices were less than the cost of production (ranging from 32% to 73% of the total cost).

Assets Turnover

In this period the fixed assets of the undertakings had increased more than four times (from Rs.30 lakhs to Rs.124 lakhs) with the establishment of Kaolin plant. The ratio of sales to fixed assets declined from 1.17 times in 1972-73 to 0.61 times in 1977-78 to rise again to 0.87 times in 1979-80, indicating that, fixed assets utilisation was poor in later years as compared to the initial years. The current assets of the company had increased from Rs.47 lakhs to Rs.91 lakhs mainly due to the increase in finished goods stock and loans and advances. The ratio of sales to current assets declined from 1.08 times in 1972-73 to 0.67 times in 1973-74 and steadily increased to 1.18 times in 1979-80, indicating better utilisation of current assets. The receivables of the company had decreased from Rs.9.58 lakhs in 1972-73 to Rs.8 lakhs in 1973-74 and again rose upto Rs.13.19 lakhs in 1976-77 to fall down to Rs.11.06 lakhs in 1979-80. The ratio of sales to receivables showed a steady increase from 3.93 times to 9.75 times signifying a better collection of receivables. Among the current assets the

most important item was the inventory of finished goods stock. It increased over five times during this period. (from Rs.8 lakhs to Rs.41 lakhs). The ratio of sales to finished goods varied between 1.89 times (1974-75) and 4.06 times (1976-77). It showed the lack of co-ordination between production and sales. The cash balances of the company was very poor (less than Rs.50,000) and except in1973-74. The cash position of the company was not satisfactory.

Working Capital Utilisation

The net working capital of the company increased from Rs.9 lakhs (1972-73) to Rs.37 lakhs (in 1973-74) and declined to Rs.28 lakhs in 1977-78. In 1979-80 it was again Rs.37 lakhs. The ratio of cost of goods sold to net working capital showed an increasing trend 1.52 time (1973-74) to 3.82 times (1979-80) indicating a slight improvement in working capital utilisation.

Liquidity

During this period the current liabilities increased more than three times (from Rs.15.27 lakhs to Rs. 54.49 lakhs). The increase in liabilities was mainly due to increase in creditors and outstanding expenses. The current ratio was less than 2 during the last five years indicating the poor liquidity position of the company. The quick assets of the company decreased from Rs.17 lakhs in 1972-73 to Rs.12 lakhs in 1979-80. The ratio was much less than 1

in the last eight years again indicating poor liquidity position.

Solvency

The debt of the company had increased more than 4 times (from Rs.85.34 lakhs to Rs.388 lakhs). During this period the equity capital increased less than two times. (from Rs.65 lakhs in 1971-72 to Rs.108.05 lakhs in 1979-80) The 'debt equity' ratio reached a level of 1 : 3.59 in 1979-80 and this increase of borrowed capital inflated the financing charges to more than 6 times (from Rs.4.42 lakhs to Rs.27.10 lakhs). Interest charges for loans reached nearly 20% of the equity capital and 14% of the total cost, further adding to the losses. During the last two years (1976-77 and 1977-78) as in the first year (1972-73) the solvency position of the company was very weak and the total value of assets of the company were not enough even to meet the external liabilities.

Conclusion

Even though the production was more than the rated capacity in china clay and porcelain divisions the capacity utilisation of Kaolin division was very poor. The sales procedes were not enough to meet two thirds of the cost of production. In four out of the nine years it covered only 50% of the total cost.

During the period labour efficiency declined. The fixed assets utilisation also declined. Increase in sales were more of cash than credit. The liquidity position of the company (as indicated by current ratio and quick ratio) was poor. In 1976-77 onwards the company became theoretically insolvent. As a result of heavy borrowings financing charges increased and losses also increased. Unless the company finds some ways and means to increase the sales and production of Kaolin division the future of the company is bleak. (See table 63 & Graph 3

KERALA ELECTRICALS AND ALLIED ENGINEERING COMPANY LTD

(K.E.L)

The K.E.L incorporated on 6th June 1964, took over the governmental undertaking of Electrical and Allied Industries Travancore and commenced business on 16th August 1964. The company has four divisions, the motors and casting division at Kundara, and the Structural, Transformer and Switch Gear Divisions at Mamala. The financial performance of the company is analysed for a period of six years from 1972-73 to 1977-78.

The company has an installed capacity of 1,20,000 HVA for making distribution transformers. The production of this products had fluctuated violently, ranging from 29% and 64% of the installed capacity. The minimum capacity utilisation was in 29% in 1975. The maximum capacity

utilisation of 64% was noticed in 1977-78. The capacity utilisation increased from 23% in 1972-73 to 53% in 1974-75 and it steadily declined reaching to 1.2% in 1977-78, due to the inability of the company to compete in the market. The maximum fluctuation in capacity utilisation was observed in the case of motor components for which the company has an installed capacity of 2,52,000 numbers. Only 27% of its utilised in 1972-73 and 10% in 1974-75. The capacity utilisation rose to 113% in 1975-76 to fall again to 18.4% in 1977-78. In electrical wiring accessories the company has got an installed capacity of 1,33,000 numbers. The capacity utilisation was maximum in 1972-73 (67%) and it steadily declined to 11.3% and 16.5% in 1976-77 and 1977-78 respectively. The company has an installed capacity of 240 MT . with regard to CI pipes and special pipes. The capacity utilisation declined from 67% in 1973-74, to 5[illegible]% in 1974-75 due to lack of orders.

In the year 1974-75 the company introduced two new products, Contactors and Starters and Brushless Alternators with installed capacities of 12,000 numbers and 600 numbers respectively. The first two years the capacity utilisation in contactors and starters remained less than 50%. The original proposal was to import fusing elements initially and in the mean time to develop necessary facility to manufacture them indigenously. The company could not do so as

the collaborators failed to supply the fusing elements at a reasonable price and the failure of company to develop the fusing material indigenously led to closure of the division in 1976-77. The capacity utilisation with regard to brushless alternators were only 10.5% in 1975-76 which rose in the second year of its introduction to 49.8%. On the whole it can be said that the poor capacity utilisation is a reason for continued losses.

Ratios of Cost

During the six years under consideration except in 1973-74 and 1974-75 the company had been selling its products above the cost of production. During the years from 1975-76, to 1977-78 the total cost was above total sales (by 35%, 16% and 23% respectively). Even during the year that company made profit, the ratio of the cost of goods sold was 99%. Raw material, a major item of cost fluctuated between 62% (1971-72) and 35% (1975-76) of the total cost. The value of raw materials showed a four fold increase in six years (from Rs.50 lakhs to Rs.182 lakhs). This was mainly due to higher prices and non availability of raw materials in time. The remuneration to employees more than trippled (from Rs.24 lakhs to Rs.75 lakhs). In 1972-73 the ratio of remuneration to the employees to total cost came to 26% which rose to 44% in 1973-74 and thereafter declined to 22% due to increase in other items of expenditure. The industrial relations were disturbed by go slow tactics and

strikes. There was an attempt to streamline the efficiency through work study. Nothing could be achieved, due to the lack of co-operation from the workers. Factory overhead had increased from Rs.8 lakhs in 1972-73 to Rs.18 lakhs in 1974-75 and again rose to Rs.24 lakhs in 1979-80. The sudden increase in 1974-75 was due to increased consumption of spares and parts. The factory overhead remained around 9% of the total cost on an average. The administration overhead been reduced to 4 months requirements in 1977-78 indicating the better attention to inventory management. The finished goods stock came only to 1 months sales requirement in 1979-80 and it is considered to be very low. Since the company is producing according to orders of Kerala State Electricity Board, low inventory has not created any, problem. During this period the company has cash balances which fluctuated violently from 16,000 rupees (in 1974-75) to Rs.21 lakhs (in 1976-77) and Rs.2.55 lakhs in 1979-80 indicating poor cash planning and management.

Working Capital Management

The net working capital of the company varied between Rs.52 lakhs (1972-73) and Rs.136 lakhs (1973-74). During 1978-79 and 1979-80, the company had net working capital of Rs.124 lakhs and Rs.164 lakhs respectively. The net working capital turnover increased from 0.50 times (1972-73) to 2.7 times (1977-78) and declined to 1.95 times

in 1979-80. Even this increase in turnover has not helped the company to reduce the losses.

Liquidity

The current liabilities of the company had increased from Rs.13.24 lakhs in 1972-73 to Rs.121 lakhs in 1979-80. The current assets of the company was nearly 4 times the current liabilities in 1973-74. The current liabilities increased steadily thereafter. In 1979-80 the current assets were only ¾ of current liabilities signifying the fall in the liquidity position. The quick assets of the company had increased from Rs.28 lakhs to Rs.88 lakhs (1979-80) and the quick ratio fluctuated between 0.6 times and 1.2 times and in 1979-80 it was only 0.72 times indicating company's poor liquidity position.

Solvency

The debts of the company had increased four fold (from Rs.76 lakhs to Rs.362 lakhs). The equity capital of the company increased more than double during this period (Rs.42 lakhs to Rs.106 lakhs). The debt equity ratio steadily rose upto 3.43 times in 1979-80. The increase in debts were followed by increase in financing charges which increased more than 5 times (from Rs.6 lakhs to Rs.32 lakhs) and came to 9% of the total cost. This is one of the reasons for losses. The total assets were more than total outstanding

liabilities in the first five years but in the last four years the outstanding liabilities were more than the total assets, reducing the company to a position of insolvency.

Conclusion

The company could not make use of the full capaicy of the plants and also failed completely to sell its products above cost of production. Fixed assets utilisation was poor and current assets of the company had increased more than 2½ times (from Rs.38 lakhs to Rs.102 lakhs). The steep increase in the fixed assets were noticed during the last four years due to the expansion. The ratio of sales to fixed assets had remained around 1.90 times except in 1975-76 (2.6 times) and 1976-77 (1.56 times). But in 1978-79 and 1979-80 it was 2.52 times and 3.29 times. This indicates that there has been wide fluctuations in fixed assets utilisation. The investment in current assets had increased more than 3 times (Rs.85 lakhs to Rs.285 lakhs). In 1971-72 the company had current assets worth only Rs.85 lakhs but in 1973-74 it rose to Rs.120 lakhs due to increase in debtors (from Rs.21 lakhs to Rs.43 lakhs) work in progress (from Rs.40 lakhs to Rs.27 lakhs) and raw material stock (from Rs.32 lakhs to Rs.36 lakhs). The ratio of sales to current assets showed that the turn over was less than 1 except in 1978-79 and 1979-80. Poor utilisation of current assets is another reason for loss. Among the current assets the major item,

receivables, had steadily increased from Rs.21 lakhs to Rs.96 lakhs (more than 4 times). In otherwords the receivable rose to 20% and 33% of the total sales. Dur to increasing credit sales and poor debt collection the turnover was only 2.55 times (except in 1979-80). Inventory management was not given sufficient attention in earlier years. In 1973-74 the stock of raw material accumulated to over 10 months requirements. This had more than doubled (from Rs.6.43 lakhs to Rs.13.48 lakhs) and remained around 5% of the total cost.

Sales

During the six years the sales of the company increased nearly 4 times (from Rs.79 lakhs to Rs.318.90 lakhs). There was a slight decline in sales due to stoppage of contractors. The sharp increase in 1977-78 was due to the increase sales of brushless alternators. (Table 64)

Loss

Four out of six years, the company had incurred heavy losses. In the last three years the losses were considerably high. In 1973-74 and 1974-75 the company made nominal profits (as Rs.49,000 and Rs.1.39 lakhs). The loss incurred by the company in 1977-78 (Rs.45.19 lakhs) was nearly fifty percent of the equity capital of the company (as Rs.95.82 lakhs). In 1978-79 and 1979-80 the losses were Rs.43 lakhs and Rs.15 lakhs respectively. Some of the reasons for increased losses are the under utilisation of capacity,

increase in the overhead during the gestation period of the alternators project and keen competition.

Ratios of Assets

The fixed assets utilisation was not satisfactory as its turnover was less than one. Liquidity position of the company was poor and the company became theoretically insolvent in 1977. In 1979-80 the accumulated losses reached Rs. 201 lakhs against equity capital of Rs. 105 lakhs, indicating the sad state of affairs. The company is an example of the public sector undertakings given artificial respiration in the form of loans to exist. Unless drastic measures are taken in cost reduction and better utilisation of the plants the company is not going tobreak even in the near future. (See Table 64 & Graph 11

TRAVANCORE PLYWOOD INDUSTRIES

Travancore Plywood Industries Limited, incorporated on 1st November 1963 took over the Travancore Plywood Industries, the departmental undertaking, to be run on economic basis. It commenced its operations on 24th February 1964. The company produces and sells Tea Chest Pannels, Commercial Plywood, Decorative Plywood, Flush Doors, Black Boards, Chequered Plywood etc. The company has two units, one to manufacture tea chest pannels and second to manufacture other items. The financial performance of the undertaking is analysed for a period of 9 years from 1971-72 to 1979-80.

Capacity Utilisation

At the date of commencement, of this study the company had an installed capacity of Rs. 22.8 lakhs for its II unit on 4 mm basis. The production steadily increased in the first three years (from 28% to 52% and then to 54% in 1975-76 to 1977-78 of the installed capacity). In the next two years the capacity utilisation was 47% and 36.5% respectively. When the installed capacity was raised to Rs. 27.38 lakhs on 4 mm basis in 1977-78 the production was (only Rs. 9.85 lakhs) less than that of 1976-77 (Rs. 13.68 lakhs). In 1978-79 and 1979-80 the capacity utilisation was less than 50% of the installed capacity. The poor capacity utilisation can be said to be a reason for continued losses.

Cost Ratios

Out of the 9 years the company made profits in 4 years (1973-74, 1974-75, 1975-76 and 1979-80). In this period the ratio of cost of goods sold to sales were 96%, 93%, 98% and 60% respectively. In the last two years (1978-79 and 1979-80) the company was selling its products below the total cost. The cost of raw materials, a major item of expenditure showed a three fold increase (Rs. 27 lakhs to Rs. 70 lakhs). The raw material consumed to total cost of production ranged between 42% (1977-78) and 53% (1974-75) of the total cost mainly due to increase in their

price. The labour cost had increased three fold as a result of periodical wage agreements. The labour cost ranged between 17% to 27% of the total cost during these years. Factory overheads had almost doubled (from Rs.14 lakhs in 1973-74 to Rs.28 lakhs in 1979-80). There are three items which predominate in the factory overhead expenses namely depreciation, power and fuel and stores. The depreciation has been decreasing due to reduction in the value of assets from Rs.7 lakhs at the commencement of the period of Rs.5 lakhs at the end of the period. On the other hand cost of power and fuel had increased three fold (from Rs.4.7 lakhs to Rs.16 lakhs) during the same period. The stores consumption increased from Rs.3.5 lakhs in 1972-73 to Rs.5 lakhs and declined to Rs.3.5 lakhs in 1977-78. Thus the cost of power and fuel is a reason for steep rise in factory overhead. Even then the ratio of factory overhead to total cost showed a favourable tendency (from 23% to 16%). The administrative overheads remained around 2% of the total cost in all these years.

Sales

The sales of the company increased by more than 2½ times. (Rs.62.42 lakhs to Rs.169 lakhs). Quantity wise the maximum sales of 13.68 lakhs on 4 mm basis were observed in 1976-77. In1977-78 the sales quantity was 9.85 lakhs on 4 mm basis. Among the products that contributed

maximum in 1977-78 were commercial plywood (Rs.95 lakhs) and tea chest pannels (Rs.15 lakhs) and decorative plywood (Rs.10 lakhs).

Losses

At the commencement of the study (1972-73) the company had an accumulated losses to the tune of Rs.22 lakhs. The first year of the study the company incurred a loss of Rs.10 lakhs and in the subsequent years when the sales had doubled the company showed a profit of Rs.3 lakhs and Rs.2 lakhs (1973-74, 1974-75 and 1975-76). In the subsequent year, there was a slump in the market and vigorous effects were made to sell the accumulated stock allowing very high discounts resulting in a record loss of Rs.11 lakhs. Although the marker showed a favourable trend in 1977-78 the losses could not be reduced due to increase in wage payment (due to new long-term wage agreement) to the tune of Rs.9 lakhs. In 1979-80 the company showed a marginal profit of Rs.57,000. There was accumulation of finished goods.

Assets Turnover

The fixed assets utilisation had increased as indicated by the ratio of sales to fixed assets. This was mainly due to writing off a sizeable amount of depreciation. The current assets increased more than 3 times during this period (Rs.36 lakhs to Rs.140 lakhs). There was a drastic

reduction in cash balances (from over Rs.11 lakhs in 1973-74 to little over Rs.1 lakh) in the subsequent five years (except in 1979-80). The raw material stock remained more or less same and the receivable increased six fold (Rs.5 lakhs to Rs.31 lakhs). But the finished goods inventory fluctuated violently year by year. During the years of 1975-76 the stock of finished goods were Rs.44 lakhs and Rs.32 lakhs. This was caused by severe competition and the sluggishness in the market. In 1978-79 and 1979-80 the finished goods stock were Rs.40 lakhs and Rs.34 lakhs due to the same reason.

Working Capital Turnover

The net working capital steadily increased from Rs.23 lakhs (1972-73) to Rs.89 lakhs (1978-79) with slight reduction in the following year (Rs.66 lakhs in 1979-80). The net working capital utilisation reached over 3 times in 1973-74 and came down to a little over 1.3 times in subsequent years and again rose to 3.07 times in 1979-80. This was mainly due to the wide fluctuations in financial goods stock.

Liquidity

In 1972-73 the current assets were nearly 3 times the current liabilities, which gradually came down in the subsequent years reaching a little over 2 times in the year 1974-75. It rose to nearly 3 times in 1975-76 to fall again

to a little over 1½ times in 1976-77. In 1977-78 the current assets and the current liabilities were equal. In 1978-79 and 1979-80 it was more than two times. This shows the fluctuating trend in the liquidity position. Six out of the nine years the quick assets were less than current liabilities indicating that the liquidity position was weak.

Solvency

During the period of past 6 years the borrowed capital had increased from 1½ times of equity capital to nearly 2½ times (borrowed capital of Rs.114 lakhs against the equity capital of Rs.49 lakhs). The interest charges increased from a little over Rs.5 lakhs to nearly Rs.10 lakhs (1977-78). Financial charges ranged between 5% to 9% of the total cost. It has reduced the profit and increased the losses. This is a typical example of reaping the unfavourable effects of trading on equity.

Conclusion

The production was considerably below the installed capacity during the period. Sluggishness in the market reduced the demand for the product considerably. Ever rising raw material prices, increased labour charges, and mounting financing charges inflated the total cost of production considerably above the sales. Fixed assets showed a better utilisation. Current assets utilisation was not so good. The company had poor liquidity position through out this

period. The equity capital of the company gradually got eroded with the results that in 1978-79 the whole of equity capital disappeared. In 1979-80 the company became theoretically insolvent. Drastic measures are to be taken to save the company. Restructuring of capital and diversification of production may be attempted . A major part of the loans be converted into equity to reduce the increasing fixed debt obligation. Diversification is a must to reduce the adverse effects of labour cost. (See table 65, Graph 13

TRIVANDRUM RUBBER WORKS LIMITED

Trivandrum Rubber Works Ltd., was incorporated on 1st November 1963, taking over the departmental concerns of Travancore Rubber Works, Kerala Cycles and Kerala Government Rim Factory. The company commenced its operations on 24th February 1964, with three units namely Rubber unit, Rim unit and Cycle unit. The major products of the company were cycle tyres, cycle tubes, rubber hoses, rubber sheets, cycle rims etc. The financial performance of the company is analysed for a period of 9 years from 1971-72 to 1979-80.

Even though the company produces a variety of products, the installed capacity is known only for two products ie., cycle rims and cycle tyres. It has got an installed capacity of 50 lakhs cycle tyres, and 3 lakhs cycle rims.

The capacity utilisation in tyres was less than 40% in the six years. The maximum production was observed in 1974-75. In 1976-77 and 1977-78 the capacity utilisation was 24% and 23% respectively. Not much progress was noticed in 1978-79 and 1979-80 also. The fall in the production was due to market constraints. The capacity utilisation with regard to rim increased from 30% at the commencement of the period to 81% in 1973-74 and declined to 71% in 1974-75. Thereafter it sharply declined to 27% and 7% in subsequent two years as a result of fall in demand and curtailment of production. The cycle tubes were produced in 1972-73 and 1973-74. During the rest of the years the production was suspended due to inability to compete in the market. The drastic reduction in the production of all other products was due to poor demand, sluggishness in the market and the inability to compete due to high cost of production.

Cost

In all the nine years the company was selling its products from 10% to 55% below the cost of production. Raw material cost, a major item of expenditure ranged between 25% to 50% of the total cost. The fluctuations in the cost of raw material were not directly proportional to the total cost in any of these years due to product diversification and periodical stoppages in particular lines of production.

labour cost increased nearly 2½ times (from Rs.20 lakhs to Rs.51 lakhs). The labour cost ratio varied widely from year to year ranging from 18% to 29% due to periodical strikes, lay offs, and wage agreements. Factory overhead forms another item of expenditure consisting of depreciation, power and fuel and stores. Cost of power and fuel rose from Rs.2.58 lakhs in 1973 and nearly doubled in the subsequent year and reached over an all time high cost of over Rs.11 lakhs. This steep rise was mainly due to operation of a new plant (Burbury mixi) on behalf of Madras Rubber Works. When the contract was discontinued the power and fuel consumption was reduced. The consumption of stores showed a steady declining trend during the first five years (Rs.22 lakhs to less than Rs.4 lakhs) again picked up due to, diversification. Production reached Rs.11 lakhs in 1977-78. In 1978-79 and 1979-80 the factory overhead expenses showed a sharp increase (Rs.36 lakhs) due to price hike. The administration overheads ranged between less than Rs.1 lakh to over Rs.4 lakhs but this expense is comparatively low compared to the ratios of other items to total cost.

Sales

The sales of the company increased steadily from Rs.77.62 lakhs in 1971-72 to Rs.131 lakhs in 1974-75 and declined to Rs.116 lakhs to rise again to an over all record of Rs.167 lakhs in 1976-77. In 1977-78 the sales of the company was Rs.107 lakhs only, but it reached an all time

high level of Rs.230 lakhs. Even then the company could not breakeven due to severe competition and products variation according to the market.

Loss

At the beginning of the period, the company had incurred an accumulated loss of over Rs.96 lakhs while the equity capital was just below Rs.59 lakhs. In 1972-73 the loss was Rs.39 lakhs from a sales of Rs.108 lakhs. Subsequent two years due to various reasons the losses had been reduced (less than Rs.17 lakhs in 1973-74 and Rs.34 lakhs in 1974-75). There was only marginal increase in sales in these years. In the next year although the sales had increased it could not make a profit due to increased cost of goods sold. In 1977-78 the sales had gone down again nearly to two third of the previous year. The company made a record loss of Rs.59 lakhs (which is more than the equity capital of the company). Even in 1979-80 when the sales was Rs.230 lakhs the company incurred a loss of Rs.31 lakhs. Severe competition, underpricing of the products, poor capacity utilisation, strikes, and lock out are major reasons for this situation.

Assets Turnover

Although fixed assets utilisation increased partly due to depreciation of fixed assets, the utilisation of current assets has not been substantially increased, as

shown by the ratios of sales to current assets. This is partly responsible for huge loss made year after year. Receivable forms a major item of current assets which ranged between 22% to 28% of the total sales and the ratio showed poor debt collection. Finished goods inventory and raw material stock ranged from Rs.50 lakhs to Rs.37 lakhs in value signifying poor inventory management.

Working Capital Utilisation

The ratio of cost of goods sold to net working capital declined sporadically during the period (to 1.88 times) indicating wide variation in credit purchases, and other outstanding expenses.

Liquidity

Current ratio ranged between a little less than 2½ times and over 3 times. But the acid test ratio has always been less than .70 in five years out of 9 years reaching a level of .3 in the year 1977-78 indicating a poor liquidity position.

Solvency

The borrowed capital of the company increased steeply year after year and reached Rs.248 lakhs in 1977-78 (more than 4 times of the equity capital of Rs.59 lakhs). This has resulted in huge financial charges, which had

increased nearly 6 times (from Rs.3.18 lakhs to Rs.18.85 lakhs) and came upto 8% of the total cost. As the outstanding liability were more than total assets of the company even in the 1st year the company was insolvent theoretically. The outstanding liabilities were more than the total assets by Rs.173 lakhs in 1977-78. In 1979-80 it was reduced due to increase in current assets.

Conclusion

The company had shown a poor capacity utilisation and it had totally failed to compete in the market as it was forced to underprice its products, considerably below the cost of production. Fixed assets had shown a better utilisation whereas current assets turnover was low. The working capital turnover showed a declining trend. The company had poor liquidity position and was theoretically insolvent from the very beginning of this period. The huge financing charges was another reason for heavy losses. In 1979-80 the total accumulated losses were more than 5½ times of the equity capital. The company was existing only on borrowed funds. The company management has failed in almost all fronts namely production, personnel marketing and general management. Instead of keeping this company alive at the cost of tax payers it is advisable to wide up the company at an early date. (See table 66 G Graph 7

PALLATHARA BRICKS AND TILES

Pallathara Bricks and Tiles was taken over by government as a loosing concern in 1957. The company produces only white bricks which are much superior to locally made country bricks. These bricks are manufactured from a mixture of lime and white sand processed with high pressure at a very high temperature. The company has an installed capacity of 120 lakhs of white bricks per year. In 1971-72 the capacity utilisation was 35% which steadily decreased to 5% in 1974-75 (from 42 lakhs to 6 lakhs bricks). The production had to be curtailed due to financial crisis and subsequent declaration of lay off for a period of six months. With additional capital from government the production again picked up and reached an all time record of 94 lakhs ie. 78% of installed capacity in 1975-76. Even then the company could not break even. In 1976-77 the production again declined to 41% of the installed capacity to rise above 50% in 1979-80.

Total cost of production always remained higher than sales proceeds ranging between 11% to 267%. An important elements of cost of production were power and fuel followed by labour and raw materials. Although in the first 4 years, the cost of power and fuel had shown a declining trend, (due to steep fall in production) during the subsequent

years it went upto 40% of the total cost as a result of a hike in Furnace Oil prices. Even though the raw material ie. white sand and lime are locally available the same trend is visible in the case of raw material prices. The cost of raw material ranged from 7% to 22%. In the same way the labour charges declined from nearly Rs.1½ lakhs to less than Rs.1 lakhs in the first four years. There was a steep rise reaching nearly Rs.4 lakhs in 1979-80 disproportional to production.

Sales

The sales of the company initially showed a declining trend from Rs.3.17 lakhs in 1972-73 to Rs.1.22 lakhs in 1974-75 due to the heavy competition from country made bricks, which forced the company declare a lay off. From 1974-75 onwards the sales steeply increased to an all time record of Rs.21 lakhs. Even then the company could not break even due to high cost of production. In 1978-79 and 1979-80 the sales were Rs.11.35 lakhs and Rs.17.44 lakhs.

Loss

The competition from country bricks and the steep increase in the cost of furnace oil and coal used for heating the chamber are themajor reasons for loss. Due to huge accumulated losses, the capital was eroded. During 1972 the company had a paid up capital of nearly Rs.12 lakhs (Rs.9 lakhs of equity and Rs.3 lakhs of preference shares). The accumulated losses in the same year was over Rs.9 lakhs and in the

subsequent year accumulated losses exceeded the share capital (both equity and preference taken together). In 1979-80 the accumulated losses were more than the share capital by Rs.9 lakhs.

Assets Turnover

Although the company raised additional capital of Rs.3 lakhs it had not acquired any additional fixed assets and whatever money was received was utilised for working capital purposes. Fixed assets utilisation showed an increasing trend towards the end of the period while the current assets of the company showed a declining trend in utilisation in the first 4 years but showed slight increase inthe last two years.

Liquidity

Even though the current ratio showed a favourable trend with regard to liquidity in the initial period the company had failed to maintain the normal level of acid test ratio and current ratio in the last few years.

Solvency

The debts of the company increased steadily from Rs.9 lakhs in 1971-72 to Rs.18 lakhs in 1979-80 and the financing charges ranged from 3% to 18% of the total cost. During the last 4 years the outstanding liabilities of the company was more than total assets and this difference increased from

Rs.1 lakh (1973-74) to Rs.7 lakhs (1979-80). Thus the company was theoretically insolvent and it was solely existing on borrowed capital.

Conclusion

Even after using 79% of the installed capacity the company could not break even. The company had failed to compete with the locally made country bricks and was forced to sell below the cost of production. The cost of power and fuel had increased steeply and raised the cost of production above selling price. All the borrowed capital was used for working capital requirements. The company has become theoretically insolvent as accumulated losses were more than equity capital (by 3 lakhs). In order to save the company from further losses the company had been trying to diversify the production. In fact it had obtained a certificate of intent for manufacturing calcium carbide. Since this project requires large capital investment (Rs.4.55 crores) it has not yet materialised. Effective measures are not taken to diversify the production. There is not even a remote possibility of this company reaching its breakeven point. (See Table 64 & Graph 4

CHALAKUDY REFRACTORIES LIMITED

Chalakudy Poteries (renamed Chalakudy Refractories Limited in 1977-78) with a capital of Rs.3 lakhs, commenced manufacturing operations in 1971-72. The financial

performance of the company was analysed for a period of 9 years (from 1971-72 to 1979-80). The company produces refractories. It has an installed capacity of 5,000 MT. per year. The production had fluctuated year by year between 1000 MT. and over 2000 MT. but it never reached more than 40% of the installed capacity due to market constraints.

Cost ratios

All these years the company had been selling its products below the total cost. It has sold its products from 9% to 13% below the cost. Labour cost is the major item under manufacturing expenses ranging from 29% to 70% of the total cost. The company had to face two major strikes. As a result of these there was a complete stoppage of production (for 5 months in 1972-73). During the subsequent year, the production increased by 1½ times and labour charges increased more than 3 times. In the year 1974-75 when production increased over 40%, labour charges again doubled. Thereafter, there was a slight fall in production but labour charges remained high. In the year 1977-78 the production registered a record low level of 1142 tonnes against an all time high labour cost of over 8 lakhs (due to new wage agreement). In 1978-79 and 1979-80 the labour charges came upto 44% and 40% of the total cost. Factory over-head ranged between 13 and 40% of the total cost. Along with the changes in production the cost of power and fuel charges increased

disproportionately. During the year 1972-73 the company provided about 8% of the total cost of fixed assets as depreciation and in the subsequent year it has been reduced to 7%. But during the latter half of the period, although the cost of fixed assets had doubled, depreciation was a little over 5% of the value of fixed assets. Thus the depreciation charged was not adequate. The administrative overhead increased from less than 1 lakh in 1972-73 to Rs.2.27 lakhs in 1977-78 due to expansion activities and this came upto 18% of the total cost. The fixed assets of the company had increased nearly 5 times during this period due to the expansion programme (from Rs.8.02 lakhs in 1972-73 to Rs.43.24 lakhs in 1979-80). The ratio of sales to fixed assets had shown a decreasing trend towards the end, indicating poor utilisation of fixed assets. The current assets also had increased more than 6 times during the period (from Rs.3.14 in 1971-72 to Rs.26.41 lakhs in 1979-80). The ratio of sales to current assets had shown a decreasing trend indicating poor utilisation of current assets. Receivables constituted a major item which had increased (from Rs.84,000 to a over Rs.8 lakhs in 1979-80). The ratio of sales to receivables showed a decline trend indicating poor debt collection. The finished goods, another major item had accumulated from Rs.1.03 lakhs in 1972-73 to 7.80 lakhs in 1979-80. The ratio of sales to finished goods showed a declining trend showing the necessity of sales promotion

activities. The cash balance of the company steadily declined from Rs.95,000 in 1972-73 to Rs.2,000 in 1977-78. This has increased to Rs.18 lakhs in 1979-80 when loans for expansion were availed off.

The net working capital of the company had increased Rs.1.34 lakhs (1972-73) and Rs.38 lakhs (1979-80). But the ratio of cost of goods sold to net working capital had shown a sharp declining trend in latter half of the period signifying poor utilisation of working capital.

Assets Utilisation

The fixed assets of the company had increased from Rs.46 lakhs to Rs.96 lakhs due to the introduction of new products (carbon film resister products, plastic film capacitors, and 11 KV switch gear). But the fixed assets turnover showed a decreasing trend signifying the poor utilisation of gixed assets. The current assets of the company steadily declined (from Rs.99 lakhs in 1974-75 to Rs.86 lakhs in 1976-77) and then increased to Rs.111 lakhs). The turnover of the current assets showed an increasing trend marking a better utilisation. The fall in the current assets was due to the fall in the raw material stock (from Rs.50 lakhs to Rs.39.84 lakhs). Raw material showed a better turnover. The receivables of the company increased steadily (from Rs.19 lakhs to Rs.25 lakhs) along with the sales and the

turnover of the receivable showed an increasing trend (5.5 to 7.01) signifying a better debt collection. Finished goods inventory declined (from Rs.9.38 lakhs to Rs.6.62 lakhs) and the inventory is hardly enough to meet one months sales requirements, which is considered low.

The net working capital of the company showed an increasing trend (from Rs.65 lakhs to Rs.81 lakhs) and showed a better utilisation (from 1.81 times to 2 times).

Current liabilities of the company increased from Rs.33 lakhs to Rs.34 lakhs and declined to Rs.30 lakhs. The current ratio ranged from 2.53 to 3.79 signifying a fair liquidity position. The quick ratio of the company had picked up from 0.63 times to 0.90 times signifying that the company is improving its liquidity position.

Both current ratio and quick ratio showed a fair liquidity position.

Solvency

The debts of the company had steadily increased from Rs.8.78 lakhs in 1972-73 and to Rs.22.22 lakhs in 1976-77. The unfavourable debt equity ratio was partly reversed when a part of the borrowed funds from the government was converted into ownership capital. During the period 1979-80 the equity of the company was Rs.47 lakhs and loans amounted to Rs.76 lakhs.

Conclusion

During the period the production was below the installed capacity. The company was selling its products below the cost of production. Both fixed assets and current assets utilisation declined. The accumulated losses of the company amounted to over 19 lakhs. To make the company financially more sound and to reduce the debt obligations, a part of the government loan was converted to equity capital. This has not influenced in any way the loss incurring nature of the concern. It was practically impossible to save the company from further losses. However, the company expected to got huge funds as loans from KFC and KSIDC and government for further expansion and to make the company economically viable (Directors Report 1977-78). But even in 1979-80 the expansion programme was not over. (see table GSG Graph 17

UNITED ELECTRICAL INDUSTRIES LIMITED

The United Electrical Industries Limited incorporated in October 1950 as a government company, is now engaged in the manufacture of single and poly phase house meters, motor starters, switch gear, magneto generators, and other electrical items. The financial performance of the company is assessed for a period of 5 years (from 1975-76 to 1978-79). For magneto generators, 11 KV switch gear and electronic items, the company has not fixed the installed capacity yet.

The installed capacity for KWH meters was 20 lakhs and the capacity utilisation was 60.7% in 1975-76 which declined to 58% in 1977-78. The production of motor control gears was 36.7% and 37.7% in 1975-76 and 1976-77 respectively. The minimum capacity utilisation was observed in the case of LT switch gear ie., 22% and 19.2% during these two years. The company had not shown a steady trend in capacity utilisation. It has not fixed any installed capacity for some of its items. But in 1977-78 and 1978-79 the company showed a marked increase in capacity utilisation (as shown in Table)

Cost Ratios

During the initial years, the company was selling its products below the cost of production. The pricing of the products below the cost ranged from 11% to 16%. But the sales came only upto 96% and 94% of the total cost in 1977-78 and 1978-79. Raw material was a major item of expenditure which ranged from 39% to 57% of the total cost. The raw material consumption steadily increased from Rs.71 lakhs to Rs.110 lakhs mainly due to price increase of raw materials. Remuneration to labour steadily increased from Rs.43 lakhs to Rs.59 lakhs in 1978-79. The increase in 1976-77 was due to the new wage agreement. The labour cost varied between 30% to 28% of the total cost. The fall in the ratio was due to increase in other elements cost. The factory overhead

ranged from 5% to 6% of the total cost. The major items of factory overhead were power and fuel, tools consumed, repairs, depreciation and packing materials. Depreciation increased from Rs.1.83 lakhs to Rs.2.64 lakhs as the fixed assets increased from Rs.46 lakhs to Rs.70 lakhs. The expenses for tools also increased from Rs.0.80 lakhs to Rs.1.57 lakhs due to the price increase of tools and components. Power and fuel charges had increased from Rs.0.73 lakhs to Rs.1.38 lakhs. The cost of packing material fluctuated in accordance with production. The administrative over-head came to less than 1% of the total cost and it increased from Rs.2.84 lakhs to Rs.3.27 lakhs in 1978-79. Financing charges steadily increased from Rs.10 lakhs to Rs.17 lakhs and came to 8% of the total cost.

The sales of the company increased two-fold during the three years (from Rs.105 lakhs to Rs.225 lakhs) and declined to Rs.174 lakhs in1978-79. In 1975 the company incurred a loss of Rs.13 lakhs which increased to Rs.21 lakhs in 1975-76 and declined to Rs.17.25 lakhs in 1976-77. In 1977-78 and 1978-79 it made a profit of Rs.2 lakhs and Rs.18 lakhs respectively. The major reasons for the losses in the initial years were selling of the products below the total cost, poor market conditions over increasing expenditure especially financing charges.

The debts of the company had increased steadily

(from Rs.63 lakhs to Rs.97 lakhs) and the equity was raised (from Rs.44 lakhs to Rs.97 lakhs). The ratio of debt equity was less than 1.45 during the period. The increase in the borrowed capital had increased the financing charges.

Conclusion

The company had been selling its products below the cost of production in the initial years. Fixed assets utilisation had decreased. There was a steady increase in labour charges and raw material cost. The company had a fair solvency position. The losses of the company had come upto 40 lakhs in 1976-77 against an equity capital of Rs.59 lakhs. Since the Government of India now already giventhe letter of intent for the expansion of plastic film capacitors and carbon film resistors the company has a bright future and it was able to breakeven in 1977-78.

(See table 69 & Graph 6

TRAVANCORE SUGARS AND CHEMICALS LIMITED

Travancore Sugars and Chemicals Limited, was taken over by government in 1974-75 from Pyarry and Company. Sugar price was controlled and the company has to surrender 65% of its production to government at controlled prices. The company produces three products, namely Sugar, Arrack and Indian made fine liquor.

The company has an installed capacity of 900 tonnes for crushing sugar cane (270000 per annum). The

maximum capacity utilisation was achieved in 1975-76 (40%). It declined to 23% in 1976-77 and came down to 21% in 1977-78. In 1978-79 there was a slight improvement in capacity utilisation. The poor capacity utilisation was due to non-availability of sugarcane. The crushing days in sugarcane steadily declined from 85 days to 59 days (1976-77). In the case of arrach the company has an installed capacity of 27,000 litres. The production of arrack steadily increased from 9% in 1974-75 to 75% in 1977-78. The increase in the production was facilitated by purchasing additional molases from other sugar mills to the tune of 3671 tonnes in 1977-78. in 1978-79 the same trend was visible. With regard to Indian made fine liquor the installed capacity of the company is 2,60,129 litres the capacity utilisation was maximum in 1974-75. From there it steadily declined to 52% due to the increase in production of arrack to which maximum molases was diverted. The poor capacity utilisation in sugarcane crushing is a reason for losses.

Cost

During the four years under consideration the company has been selling its products below the cost of production. As a result the company incurred a loss of nearly Rs.8 lakhs in 1977-78 and Rs.0.43 lakhs in 1978-79. The major reason for this is under-pricing of sugar by the government. In 1974-75 the sugar price per tonne according

to control prices was only Rs.2146 against the cost of Rs.2441 per tonne. The difference between the cost of production and selling price continued through out the period and 1977-78 the selling price of sugar per tonne was Rs.2715 against a cost of production of Rs.3076 per tonne. The raw material cost steadily increased from Rs.52 lakhs to Rs.113.68 lakhs which ranged from 29% to 42% of the total cost. The rise in the price was due to the increase in sugarcane prices. Due to the unrealistic price fixed for the raw material by the government the availability of raw materials was effected. Even though Central Government had fixed Rs.85 per tonne of sugar cane, the company was paying much more than that to avoid the production curtailment. Thus, in 1976-77 and 1977-78 the company had been paying Rs.130 and Rs.139 per tonne of sugarcane. The remuneration of the employees had increased from Rs.32.15 lakhs to Rs.42 lakhs. The remuneration to the employees ranged between 19% to 22% of the total cost. In 1977-78 the work-men on a strike to press the demand for revision of wages, D.A and fringe benefits.

The sales of the company increased from Rs.159 lakhs in 1974-75 to Rs.179 lakhs in 1975-76. After a slight fall (to Rs.177 lakhs in 1977-78) it rose again to Rs.233.26 lakhs in 1978-79. The increase was due to the increase in price and reduced availability of sugarcane.

The company is also producing and selling liquor. Excise duty was an important item of expenditure. It declined from Rs.40 lakhs in 1973-74 to Rs.27 lakhs in 1977-78 as the production of Indian made fine liquor declined sharply. The cost of this item ranged from 13% to 20% of the total cost.

Factory overhead ranged from 13% to 17% of total cost. Important items coming under this head are depreciation, power and fuel, packing materials, and repairs. Depreciation increased from Rs.2 lakhs to Rs.2.80 lakhs as the fixed assets increased. Power and fuel increased from Rs.2.98 lakhs to Rs.4.45 lakhs as the operation in process plant for arrack increased. Packing materials declined from Rs.30 lakhs to Rs.8.14 lakhs as the production of Indian made fine liquor declined. Repairs increased from Rs.5.53 lakhs to Rs.12.96 lakhs as the maintenance of crushing plant and machinery increased as the time passed. Administration overhead came up only to 2% of the total cost.

Fixed assets of the company had increased a little (from Rs.11.06 lakhs to Rs.12 lakhs) and the turnover of fixed assets showed a declining tendency. The current assets declined from Rs.111 lakhs in 1974-75 to Rs.73 lakhs in the subsequent year and then increased to Rs.120 lakhs in 1978-79. The turnover of the current assets showed a declining trend towards the end of the period marking poor utilisation of

current assets. Finished goods stock declined from Rs.41 lakhs in 1974-75 to Rs.19 lakhs in 1975-76 and increase to Rs.53 lakhs in 1978-79. The finished goods stock was high due to the seasonal nature of the industry. The receivables of the company increased from Rs.9 lakhs in 1974-75 to Rs. 12.12 lakhs in 1975-76. But declined to Rs.9 lakhs in 1978-79. The ratio of sales to receivables showed an increasing trend towards the end of the period signifying a better debt collection. Although there was a decline in production cash balances remained above Rs.4 lakhs except in 1976-77. This was maintained to acquire sugarcane during the crushing season.

The current liabilities of the company declined from Rs.60 lakhs to Rs.33.86 lakhs (1976-77) to rise again to Rs.43 lakhs in 1978-79. The current ratio for the company increased from 2.21 in 1974-75 to 2.77 in 1978-79, signifying a fair liquidity position. But the quick ratio showed that the liquidity position of the company is not all that safe as it fluctuated between 0.16 and 0.74.

The borrowings of the company increased from Rs.9.94 lakhs to Rs.54 lakhs whereas the equity capital remained steady around Rs.53 lakhs. Contrary to other public sector concerns the borrowings of the company are comparatively less and company was solvent through out the period except in 1978-79. Financing charges was less than 1% of the total cost and in 1978-79 it amounted to Rs.5.49

lakhs.

Conclusion

The poor capacity utilisation due to non-availability of sugarcane is one of the reasons for losses. The fixed assets as well as the current assets utilisation declined in 1978-79. The accumulated losses came upto Rs.13.30 lakhs. Unless drastic measures are taken to increase the production of sugarcane by giving additional incentives to farmers the company can never make use of its capacity in full and operate profitably. (See table 70 & Graph 18

FOREST INDUSTRIES TRAVANCORE (ALWAYE) LTD.

Forest Industries Travancore (Alwaye) Limited was incorporated in 1946 to supply fire wood to FACT. Later it started selling Timber to outsiders and began to manufacture items like furniture, shutters, frames, wardrobes etc. At present the company is exporting its furniture and allied items to Gulf countries. The financial performance of the company is analysed for a period of 9 years from 1971-72 to 1979-80. The installed capacity of the concern is computed to 7,26,000 manhours. The maximum capacity utilisation was observed in 1973-74 (46%), and the company was able to break even and make a profit of nearly Rs.5 lakhs. The capacity utilisation fluctuated violently between 33% (1977-78) and 46% (1973-74) due to the fluctuation in timber availability.

Out of the nine years the company made profit in six years. The company incurred losses during the other 3 years mainly due to the non-availability of timber at concessional rate and the delay in getting the sanction from government to exploit the reserve forest.

When raw material was not available from this source the company had been purchasing logs from open market. And hence, the raw material prices ranged between 12% to 67% of the total cost. Due to the high raw material prices (Rs.38 lakhs) the company was not able to make considerable profits in 1979-80. As regards remuneration to labourers, the company used to enter into long term arrangements with trade unions periodically. Labour management relationship were cordial and no industrial disputes disrupted the performance of the company. Remuneration to employees steadily increased from Rs.9.15 lakhs (1972-73) to Rs.17 lakhs (1979-80). The ratio of remuneration to total cost fluctuated violently (between 40% and 55%) due to the fluctuation in total cost. The company employed regular labourers without much change. Although a portion of the workshop was dismantled, the workers employed there are still retained.

Factory overhead consisted of 4 major items of expenditure namely, stores, power and fuel, depreciation and repairs. Stores consumed increased steadily from Rs.1

lakh in 1972-73 to Rs.4.30 lakhs in 1975-76. In 1976-77 it sharply increased to Rs.6 lakhs and Rs.12 lakhs due to increase in the production of wardrobes, shutters, frames etc., for export. (in 1977-78 the company's export sales amounted to Rs.17 lakhs) Power charges had increased and the repairs to machinery had also increased but not considerably. The administrative overhead remained around Rs.3 lakhs and came to 8% of the total cost.

The ratio of sales to fixed assets showed a better utilisation. The depreciation was reduced to Rs.5 lakhs in 1979-80 from Rs.8 lakhs in 1971-72. The current assets of the company increased from Rs.37 lakhs to Rs.61 lakhs and turnover of the current assets showed a fluctuating trend. Among the current assets the receivables of the company increased from Rs.15 lakhs to Rs.23 lakhs in 1976-77 and declined Rs.20 lakhs in 1977-78 to rise again to Rs.25 lakhs in 1979-80. The fall in the debts of the company was due to the decline in sales. The turnover of the receivables showed a declining trend signifying unsatisfactory debts collection. The cash balance of the company fluctuated violently between Rs.10.17 lakhs and Rs.3.25 lakhs due to irregular receipts (from sales to government departments). The finished goods stock of the company was considerably low. As it ranged between Rs.1 lakh and Rs.2 lakhs which hardly came upto 15 days sales requirements.

The current ratio and the quick ratio showed the poor liquidity position of the company. One of the reasons for the company to remain solvent through out the period is that it never had any loans from any institution.

Conclusion

Inspite of low capacity utilisation the company could make profit. If the capacity is fully used and the raw materials are made available at the right time, there is the possibility of greater profit. It is a commendable fact that the labour relations in the company remained cordial in all the years. The company has a good capital structure. Large number of foreign orders are received by the company which indicates that there is a big scope for expansion and diversifications if proper facilities are made available to the company. (See table 71 & Graph 14

TRIVANDRUM SPINNING MILLS LTD

The financial performance of the company was analysed for a period of 6 years from 1974-75 to 1978-79. It had an accumulated loss of Rs.140.49 lakhs (nearly three times the equity capital) at the commencement of period under study. After two years the losses have reached Rs.157 lakhs and the company had declared lay off for nearly two years (13-11-1975 to 8-9-1977). The reasons for the lay off for such a long time are the following :

1) The selling price of yarn went down (by 33% during 1974-75)
2) Salaries and wages increased considerably (from Rs.24.03 lakhs in 1973 to Rs.29.62 lakhs in 1977-78)
3) There was a reduction in production (by about 11% in 1974-75)
4) (a) lower efficiency (b) lower utilisation of the machinery (c) increase in usable waste.
5) Power failure (loss about Rs.7.25 lakhs in 1974-75)
6) Lack of industrial peace and
7) Lack of working capital.

The company was reopened on 8th August 1977 according to the government order. This was facilitated by the financial assistance of I.D.B.I and I.F.C.I who have jointly sanctioned a sum of Rs.88 lakhs after entering into an agreement with trade unions for a period of three years on 8th May 1977. In 1978-79 the company made a profit of Rs.3 lakhs after modernisation of the mill.

Production

The company has an installed capacity of 25,200 ring spindles. At the commencement of the period under study (1973-74) the production was 6.68 lakhs kg of cotton yarn. It steadily declined to 2,99,556 in 1975-76 when the company declared lay off. Even after reopening, the production for the 8 months came up only to Rs.4.85 lakhs. But in

1978-79 the production came upto kg. The installed capacity was achieved after reopening the company as it is operating three shifts a day and even on sundays by giving leave to the employees on a rotation basis. This company in its history for the first time made profits in 1978-79.

All these years the company had been selling its products below the cost of production except in 1978-79. The extent to which the company had been under-pricing its products ranged from 20% to 48%. Raw material cost formed the most important item of expenditure, which steadily increased disproportionate to production. When production declined from 7,67,256 to 6,70,891 the raw material cost increased from Rs.71 lakhs to Rs.77 lakhs. Even after reopening the same trend was observed. For production of 4.86 lakhs kg in 1976-77 the material cost came upto Rs.85 lakhs. This was mainly due to reduction in the efficiency and increasing waste. The raw material cost ranged from 47% to 68% of the total cost and in 1978-79 it came upto 65%. Similarly the labour cost increased considerably disproportionate to production. It increased from Rs.32.48 lakhs in 1973-74 to Rs.40.63 lakhs in 1974-75. Eventhough the production shows a steady decline, for 8 months production in 1977-78 the remuneration to employees came to Rs.30 lakhs. In 1978-79 it was Rs.31 lakhs. The remuneration to employees ranged from 24% to 34% of the total cost. This increase was due to long term agreements. In 1978-79 the ratio

showed a declining trend due to increase in other cose elements. The company had a poor industrial climate. Factory overhead ranged from 5% to 9% of the total cost. The major items of factory overhead are depreciation, power and fuel, stores and repairs. The depreciation declined from Rs.4.30 lakhs to Rs.1.05 lakhs as the fixed assets value diminished year after year. Power and fuel consumption declined from Rs.3.38 lakhs to Rs.1.26 lakhs proportionate to production. Administration overhead hardly came upto 1% of the total cost.

The sales of the company steadily declined from Rs.125 lakhs in 1973-74 to Rs.90 lakhs in 1974-75. But in 1977-78 when the company reopened the sales for 8 months came upto Rs.100 lakhs. In 1978-79 the sales came to Rs.178 lakhs. The fall in the sales in the first two years was due to poor demand.

Loss

After reopening, the company had succeeded to generate a profit. The company was selling its products below the cost of production for years together and this process landed up in accumulated losses of nearly three times of equity capital. Even the amounts that were borrowed were lost as a result of mounting losses.

Assets Turnover

The fixed assets of the company had steadily

declined from Rs.31 lakhs in 1973-74 to Rs.26 lakhs in 1976-77 due to the depreciation. It suddenly rose upto Rs.116 lakhs in 1978-79. As a result the turnover of the fixed assets declined. The current assets declined from Rs.52 lakhs in 1973-74 to Rs.46 lakhs in 1974-75. But after reopening, the current assets increased to Rs.82 lakhs due to increase in raw material stock, finished goods stock and cash balance. This resulted in the decline of turnover of current assets indicating poor utilisation. The raw material stock declined from Rs.25 lakhs to Rs.20 lakhs androse to Rs.26 lakhs in 1978-79. Finished goods stock was about Rs.1 lakh in 1973-74. It rose to Rs.20 lakhs in 1974-75 and Rs.26 lakhs in 1978-79. The fluctuations in raw material stock shows the inadequate attention given to inventory management. The receivables of the company declined from Rs.15 lakhs to Rs.3 lakhs due to fall in sale but increased disproportionately to Rs.18 lakhs in 1977-78 (against the sales of Rs.100 lakhs). There was a slight decline in receivables in 1978-79 (Rs.17 lakhs) indicating increased cash sales. The turnover of receivables showed a declining trend due to the poor debt collection. It increased slightly in 1978-79. The company never had enough cash balance in all these years (except 1977-78 in which the cash balance was Rs.7.50 lakhs intended for expansion programme). The current ratio and the quick ratio were significantly, less than the normal level signifying a very poor liquidity position.

Solvency

At the commencement of the period the company had a borrowed capital of Rs.117 lakhs against an equity of Rs.57 lakhs. This loan steadily increased upto Rs.248 lakhs against an equity capital of Rs.65.4 lakhs in 1978-79. Even after raising the equity in 1977-78 the debt equity ratio was at an abnormal level of 3.76 times in 1978-79. Financing charges increased from Rs.5.98 lakhs in 1973-74 to Rs.6.38 lakhs in 1974-75. Thereafter, the company had not provided for enough financing charges and in 1978-79 it came upto Rs.8 lakhs. In 1973-74 the excess of outstanding liability over total assets amounted to Rs.63 lakhs. This situation steadily deteriorated and in 1977-78 the excess of external liabilities over total assets came upto Rs.125 lakhs. This was reduced to Rs.106.92 lakhs in 1978-79 due to increased investment.

Conclusion

The company was forced to sell its products below the cost of production due to its inability to compete in the market. The fixed assets and current assets showed poor utilisation. The company was prolonging its life on borrowed capital. It was insolvent right from the commencement of the period. Since then the government, IDBI and IFCI had granted loans worth Rs.112 lakhs to revitalise the company. The company was able to break-even and hence future does not look bleak. (See table 72 Graph 16

Conclusion

The above discussion clearly leads to some definite conclusions as given below.

During the period a number of firms turned out to be theoretically insolvent.

There is no relation between remuneration paid to employees and production.

The material consumption had increased disproportionate to production.. Liquidity position in majority of the companies is poor. Asset utilisation, both fixed as well current, had shown a declining trend. Majority of the units are selling their products below cost of production etc. All these trends show that the financial planning and control existing now are not effective in increasing the financial strengths or in reducing the financial weaknesses of any of these undertakings.

CHAPTER - VIII

FINANCIAL PERFORMANCE EVALUATION

Introduction

8.1 In the previous three Chapters (V, VI, and VII) an attempt is made to analyse the financial planning process and the control exercised. It was made clear that the existing financial planning process and control are unscientific and suffer from many defects. In this Chapter an attempt is made to evaluate the cumulative effect of the improper financial planning and ineffective financial control.

8.2 The discussion in the previous chapter reveals that the majority of the state public sector concerns (13 out of 18) covered by this study are units making losses. Even in units making profits, there are significant differences in the factors responsible for profits. Each unit has its own special features which are primarily responsible for their profits. The special characteristics of these companies should also be taken into consideration in order to assess and evaluate the financial performance of these companies. For example, although Titanium Dioxide of T.T.P. is facing international competition, a major portion of their production is sold in India (75%) where they enjoy a monopoly market. Hence, the prices fixed by them are sufficiently high to earn a profit. As regards K.M.M.L. the selling price of the products are fixed by the department of Atomic Energy on a cost plus basis and the profit margin is fixed arbitrarily. Although Traco Cable was working on a loss before 1975 after the commencement of the manufacture of Telephone Cables, the company consistently made profits year after year. It is getting orders to make use of the full installed capacity on a cost plus contract basis. Premo Pipe Factory Ltd., supplies to the P.H.E.D. their requirements on a cost plus basis which enables them to earn

a profit. The profits of K.S.D.P. can be attributed to two major factors namely drug industry is allowed by the government to charge a pre-tax profit of 15% and K.S.D.P. has a ready market (90% of the sales) in the Kerala Health Service. Thus it can be said that it is the command over selling price which is primarily responsible for their profits.

8.3 There are many reasons for the losses incurred by the 13 units. The chief among them are :

1) Incompetency.
2) Huge Financial Burden.
3) Inability to control cost.
4) Surplus labour.
5) Dead investments etc.

8.4 Among the companies making losses six of them have eroded their capital (T.C.C., T.R.W., Trivandrum Spinning Mill, K.F.C., Pallathara Bricks and Tiles, K.E.L., K.C.L.) due to continuous losses. Trivandrum Rubber Works incurred a record loss of Rs.59 lakhs in 1977-78 alone which is more than its equity capital. T.R.W. had an accumulated loss of Rs.235.15 lakhs in 1977-78 which was four times the equity capital of Rs.58 lakhs. T.C.C. had an accumulated loss of Rs.957.81 lakhs against an equity of Rs.635 lakhs in 1979-80. The losses of T.C.C. in 1976-77 and 1977-78 amounted to Rs.526 lakhs. Nearly three fourth of

the equity was eroded by the losses of just two years. Similarly Trivandrum Spinning Mill had an accumulated loss of Rs.185.26 lakhs in 1978-79 against an equity capital of Rs.65.85 lakhs. Thus accumulated losses were more than three times the equity capital. In the case of Kerala Fisheries Corporation the accumulated losses in 1978-79 amounted to Rs.621.36 lakhs against an equity capital of Rs.158.95 lakhs. It means that the accumulated losses were more than four times the equity capital.

8.5 Majority of these (10 companies) are practically insolvent and dead but are made to continue in existence by artificial respiration through Government loans. These companies have not only lost their capital but had burdened the company with huge external obligations, which they will find it difficult to carry out. For example the outstanding liabilities of T.R.W. were greater than the total assets by Rs.8.95 lakhs in 1971-72. But it steadily increased year after year and in 1979-80 the excess of outstanding liabilities over total assets amounted to Rs.96.97 lakhs. Similarly K.F.C. had outstanding liabilities greater than the total assets by Rs.11.39 lakhs in 1970-71 and it steadily increased to Rs.262.32 lakhs in 1978-79. In the case of Trivandrum Spinning Mills the outstanding liabilities were only Rs.62.54 lakhs in 1973-74 and it steadily increased to Rs.124.42 lakhs in 1977-78. (See tables from 60 to 72)

8.6 The most pressing problem that a number of these manufacturing units face is that the losses steadily increase with the increase in sales. For example Kerala Ceramics had increased its sales from Rs.30.90 lakhs in 1972-73 to Rs.107.78 lakhs in 1979-80. During the same period the total cost of production had increased from Rs.33.44 lakhs to Rs.169.79 lakhs and the losses shot up from Rs.11.54 lakhs to Rs.53.00 lakhs. K.E.L. was able to increase its sales from Rs.78.92 lakhs in 1971-72 to Rs.318.90 lakhs in 1979-80. During the same period the total cost increased from Rs.80.73 lakhs to Rs.318.90 lakhs and the losses increased from Rs76,000 to Rs.43.33 lakhs in 1978-79. Thus the efforts of these loss making concerns have been in vain to wipe off losses. In the same way the efforts of all profit making concerns to increase their profits have also failed. (See Tables 60 to 72).

8.6.1 In fact in some of the concerns there is a decline in profits. T.T.P. for example had pushed up its sales from Rs.548 lakhs in 1973-74 to Rs.983 lakhs in 1977-78. But the profits of the company had come down from Rs.63 lakhs to Rs.30.62 lakhs in the same period. It had incurred a loss of Rs.33.74 lakhs in the subsequent year. Kerala Minerals and Metals had increased its sales from Rs.45.79 lakhs in 1975-76 to Rs.62 lakhs in 1977-78, but the profits of the company fell from Rs.12 lakhs to Rs. 9 lakhs during the same period. The disproportionate increase in the cost of production is the main reason for the increase in losses

and a decline in profits inspite of increased sales. (See tables 55 & 60)

8.7 Inflationary conditions prevailing at present had been pointed out (by some executives of these companies) as the sole reason for this sad state of affairs. This is not a valid reason; for the inflationary conditions affect not only the input, but also the output. For example during the period from 1973-74 to 1977-78 T.C.C. had increased the sales price of caustic soda from Rs.1194 per M.T. in 1974-75 to Rs.1675 in 1977-78. During the same period it had increased the selling price of Hydrosulphate from Rs.11,630 to Rs.16,813 and that of sodium sulphate from Rs.2,348 per M.T. to Rs.3,655 per M.T. Similarly T.T.P.had increased the selling price of Titanium dioxide from Rs.8,712 to 9,799 per tonne during the period from 1973-74 to 1977-78. In the same way K.F.C. had increased the price of sea-food from Rs.14,236 to Rs.44,658 per tonne during 1972-73 to 1976-77. It is true that the cost of the inputs also had gone up but not in this proportion. The cost of common salt one of the main raw material used in T.C.C. had shot up steadily from Rs.113 per metric tonne to Rs.131 only per metric tonne during the period from 1973-74 to 1977-78. The cost of zinc dust had increased from Rs.10,858 per metric tonne to Rs.17593 per metric tonne. The price of sulphur had increased from Rs.383 to Rs.659 during the same period. In Travancore Sugars and Chemicals there is marked increase in the price of molasses which is used for the manufacture of

spirit had paid Rs.286 per tonne of molasses in 1977-78 against Rs.62 in 1973-74. Similarly Traco Cable Company had paid Rs.10,024 per tonne of lead in 1977-78 against Rs.7418 in 1974-75. In the same way all the elements of cost had increased during this period. Thus it can be said that inflationary conditions had affected both the expenditure and the revenue. Many of these concerns had to compete with the private sector. The private sector concerns were adopting various methods to reduce their cost of production, whereas control measures were not strictly followed in these public sector concerns with the result that on many occasions the total cost of production had exceeded the selling price resulting in heavy losses. Some of the factors responsible for losses are explained below. (See tables 73&74)

8.8 Poor Capacity Utilisation

The majority of the firms under study utilise only less than 50% of the installed capacity. During the period from 1970-71 to 1978-79 the capacity utilisation of T.T.P. was less than 40%. With an installed capacity of 24,000 tonnes per annum the maximum that they could produce was only 9,888 tonnes(in 1976-77). Maximum capacity utilisation in the various plants of T.C.C. from 1974-75 to 1979-80 were 49% in caustic soda plant, 27% in Hydrosulphate soda, 43% in Sodium sulphite and 49% in Chloric (byproducts) plants. In Travancore Sugars and Chemicals which has sugarcane crushing capacity of 3,28,500 tonnes the maximum cane crushed was

63,661 tonnes during the period from 1973-74 to 1978-79. This is less than 25% of the installed capacity. The Chalakudy Refractories which had an installed capacity of 5,000 M.T. of refractories per annum the maximum capacity utilisation was 2,308 M.T. which was less than 50% of the installed capacity. Forest Industries had an installed capacity of 7,26,000 manhours and the maximum capacity utilisation amounted to 3,32,640 manhours which was less than 50% of the installed capacity. Thus poor capacity utilisation was one of the major reasons for the poor performance. (Tables 38 to 54)

Out of the 18 companies, Traco Cable had produced more than the installed capacity. Telephone cable division of Traco Cable has an installed capacity of 1000 LKM per annum. During 1976-77 and 1977-78 the production amounted to 1225 LKM and 1307 LKM respectively. Even with a less than 50% capacity utilisation T.T.P. and Forest Industries were able to make profits. But, at the same time, with 80% capacity utilisation in 1976-77 Pallathara Bricks and Tiles failed to generate any profit (Tables 38 & 54). The reasons for poor capacity utilisation are the following :

8.8.1 Installed Capacity not commensurate with Market Demand

This situation arose because the installed capacity was not determined after conducting a proper market study.

Due to this the capacity remains unutilised and consequently unit cost gets inflated. Kerala Fisheries Corporation has five freezing plants in Alleppey, Calicut, Cannanore, Cochin and Neendakara. The total installed capacity of the plants came to 10,950 tonnes per annum. The actual production were 97.50 tonnes, 397.98 tonnes and 471.20 tonnes respectively in 1974-75, 1975-76 and 1976-77 and was more or less same in 1977-78 and 1978-79. In fact the capacity utilisation during this period was less than half percent of the total installed capacity. According to the production co-ordination executive "our installed capacity is like elephant-gates: The maximum we had used is 10% of the installed capacity." (Table 48). No serious efforts have been made to make use of the unutilised capacity even since the installation. Koalin division of Kerala Ceramics is another example. The plant had an installed capacity of 18,000 M.T. per year. The maximum production till 1977-78 was 4,260 tonnes (1977-78) (Table 39). According to the marketing executive "This product is made use of only by 16 firms in India. We are of the assumption that all of them will come to us for the product. Otherwise they had to import. They persisted on importing as they were not ready to give up the import licence. We were expecting 50% of the production for export. We could not export them as our prices were much higher than international prices."

8.8.2 Lack of balancing machines and maintenance

T.T.P. has got an installed capacity of 24,000 tonnes per annum. The maximum the company could produce so far is 40% of the installed capacity. Marketing of the product was not a problem as the company was enjoying monopoly. According to one of the plant managers "we could not achieve the installed capacity due to production bottlenecks and lack of balancing machines."

T.C.C. could not achieve even 50% of the installed capacity, in any of its plants. The plant produces chlorine which is highly corrosive. According to the plant managers one of the main reasons for the poor capacity utilisation is lack of proper maintenance.

8.8.3 Availability of Raw materials

Travancore Sugars and Chemicals had an installed capacity of 3,28,500 tonnes of sugarcane. The maximum the company could crush was 63,661 tonnes (1973-74) which came only about 19% of the installed capacity (table 45). The basic reason for this was the non-availability of sugarcane, decrease in the area under sugarcane cultivation and diversion of sugarcane land to produce other products. Forest Industries had an installed capacity of 7,26,000 man hours. The maximum capacity utilisation in the company was 3,32,640 man hours in 1973-74 which amounted to less than 50% (table 50) of the installed capacity. This was mainly due to the

non-availability of timber, the basic raw material. In fact the company was forced to dismantle its workshop because of the non-availability of timber but the workers are kept in the pay rolls. In the earlier periods the government used to give forest areas on royalty basis for exploitation. From 1977-78 onwards government discontinued this practice.

8.8.4 Non computation of or Improper computation of Installed Capacity

Premo Pipe Factory Ltd., was commissioned by the Norwegiens to supply pipes for the Quilon Water Supply Scheme under Indo-Norwegion project. After completing the project, this factory was handed over to the Kerala Government. Even now the installed capacity of the plant is unknown. In fact, computation of the installed capacity of this plant is not difficult and certain alterations made in the production process would increase the capacity utilisation. Unit II of T.P.I. has an installed capacity of 22.8 lakhs Sq.M. of plywood on 4 MM. basis. The maximum the company could produce was 12.39 lakhs Sq.M. in 1974-75 which is a little over 50% of the installed capacity. According to the production manager of the company "Installed capacity of 22.8 lakhs Sq.M. is according to the project report of Skoda India (P) Ltd., who undertook the construction. But our former Managing Director conducted a study on this matter and has found that the maximum capacity that could be achieved is 15 lakhs. He has found that the project report is unrealistic."

8.8.5 Dead Investment

A number of companies were facing the problem of dead investment due to improper planning and defective execution. Ambitious expansion plans have been envisaged and partially executed without commissioning the plant for production in time. Huge amounts of money were invested in plant and machinery which have been kept idle for years together, without proper maintenance and use. It is a feature of the public sector concerns to invest the precious capital in some projects that do not generate anything. Such investments have a double effect on these companies. Firstly they inflate the fixed cost by inflating depreciation and secondly it lock up the capital which does not earn any profit or interest and do not provide any opportunity for investment in more profitable alternatives. The following examples will clarify the point further. "Between June 1970 and April 1973 the State Government transferred to the company (K.F.C.) indigenous trawlers. The design of these trawlers constructed by a comsortium of boat builders in the country at a cost of Rs.59.14 lakhs was finalised by Mazagaon Dock Limited, Bombay, a government of India concern and the construction was supervised by the Mercantile Marine Department of the Government of India. Trial runs were found to be satisfactory. However, after taking over the trawlers, the company found that there were frequent breakdowns which rendered fishing operations with the trawlers uneconomical.

"The company therefore, claimed (May 1973) from the Government reimbursement of losses (Rs.8.58 lakhs) sustained between 1970-71 and 1972-73 on the operations of the indigenous trawlers. Government sanctioned (May 1973) a loan of Rs.6 lakhs (repayable in 13 instalments) to meet the depletion of working capital caused by the operations of the indigenous trawlers. None of the indigenous trawlers were sent out for fishing since March 1974 and the crew were idling. Idle wages paid to the crew and the staff of the fleet section during 1974-75 amounted to Rs.4.25 lakhs."[1]

As the trawlers were found to be of defective design, government ordered in August 1974 that all the trawlers be leased out or sold and the crew retrenched. The crew of the trawlers were retrenched in December 1974 on payment of retrenchment compensation of Rs.1.31 lakhs. "Attempts of the company in September 1974 to dispose of the trawlers (cost of Rs.54.14 lakhs) having proved unsuccessful, two trawlers were transferred in February 1976 at their cost value to the State Port Department. The remaining four trawlers (cost Rs.35 lakhs) were lying idle (in March 1978)."[1]

In pursuance of a scheme for rehabilitating of repatriates from Burma, Sri Lanka and the other countries, formulated (August 1976) by the Government of India, the company (Premo Pipe) proposed (November 1968) at the instance of the State Government (September 1968), expansion of

existing plant at Chavara and setting up of new units to manufacture R.C.C. poles and pipes at a total cost of Rs.27.55 lakhs. The original proposal sent to the government of India by the State Government in May 1969, was served in April 1971 and was approved in May 1973. The revised proposal envisaged expansion of the existing plant and setting up of a new unit for the manufacture of R.C.C. pipes (but not poles) at a cost of Rs.27.55 lakhs. It was anticipated that on completion of the facilities in May 1972, employment to 250 repatriates would be provided."[2]

Based on the assurance from the Government of India that loans would be provided, the company went ahead with the proposed scheme and spent Rs.17.50 lakhs (Rs.14.88 lakhs on machinery and Rs.2.62 lakhs on land) between October 1969 and April 1973, out of its working capital. Even now the machines and land are lying idle.

8.9 Expansion Myopia : Wrong Decisions in Expansion and Modernisation

In one of the companies (T.C.C.) as a part of their expansion programme, machinery and equipment were imported. The plant was kept idle for some time and even after five years it could not be used for more than 50% capacity. Because of the time delay the project itself could not be completed even with an amount twice the original estimate.

(a) The capacity of the caustic soda plant was raised from 20 tonnes to 30 tonnes per day in February 1961 and to 40 tonnes per day in March 1963 through its first and second stage expansion schemes costing Rs.60.21 lakhs and Rs.33.63 lakhs respectively.

(b) Third Stage Expansion[3]

In December 1963 the company embarked on the third stage expansion scheme which envisaged setting up of the following additional plants :

		Installed capacity on three shift basis (in tonnes per day)
1)	Caustic soda (lye) plant	60
2)	Caustic soda fusion plant	60
3)	Hydrosulphite plant	7
4)	Salt recovery plant	10
5)	Chlorine liquefaction plant	20
6)	Hydrochloric acid ovens	60

The company did not prepare any detailed project - feasibility report on this expansion scheme. The scheme, which was estimated to cost Rs.350 lakhs, was expected to be completed by 1965. It was mentioned in Paragraph 126(iii) of the C & A.G's Report for the year 1969-70 about the delay in the implementation of the scheme. The scheme was completed only by 1970-71. The delay was attributed by the management (July 1974) to :

1) Non-supply of additional power by the K.S.E.B.
2) Labour strike from December 1966 to March 1967 and
3) Delay in receipt of import licence and non-receipt of indigenous equipment in time.

The original estimate of Rs.351 lakhs was revised to Rs.440 lakhs in March 1966, to Rs.535 lakhs in July 1966 and to Rs.578 lakhs in January 1968. The actual cost of the scheme was Rs.602 lakhs. Increase in the world price of mercury, imposition of higher rates of customs duty on capital equipment, devaluation of the rupee in 1966, increase in the cost of indigenous machinery and civil construction works on account of increase in the cost of material and labour, increase in interest charges due to delay in commissioning the plants and increase in charges for credit insurance (for insuring the deferred credits offered by suppliers of equipments) were the reasons attributed by the management (July 1974) for the increase in the cost of the scheme.

The following are some of the points noticed regarding the installation of the various plants :

1) Caustic soda fusion plant : In addition to the installation of a caustic soda (lye) plant for increasing the capacity from 40 tonnes to 100 tonnes per day the third stage expansion scheme envisaged the setting up of a fusion plant with a capacity of 60 tonnes per day for converting a portion

of caustic soda lye into caustic soda solid/flakes. This was considered necessary by the company in view of increased production of caustic soda lye, limited capacity of storage tanks and possibility of shortfall in the offtake of caustic soda lye. The plant was commissioned in November 1970 at a cost of Rs.47.78 lakhs. A comparison of the actual output with the installed capacity revealed that utilisation of the fusion plant during 1971-72, 1972-73 and 1973-74 was only to the extent of 23.2%, 20.4% and 21.7% respectively.

The difference between the selling prices of soda/flakes and lye did not cover the cost of conversion of lye into soda/flakes (including packing cost) during the three years ending 1973-74 as indicated below.

	Difference in selling prices of solid/flakes and lye	Cost of conversion of lye into solid/flakes (including packing)
	(Rupees per tonne)	
1971-72	187	415
1972-73	233	525
1973-74	218	622

The management stated in December 1974 that the high cost of conversion of lye into soda flakes was mainly due to higher overheads resulting from poor utilisation of the plant.

2) Salt Recovery Plant

a) From the sodium hydrosulphite plant installed in 1960, 30 cu.M. pure salt solution was being drained out every day. To recover the salt from the solution, a salt recovery plant was installed in December 1970. The total expenditure on installation of this plant, including the foreign exchange component of Rs.8.2 lakhs on the main plant imported under Swiss credit arrangement, amounted to Rs.17.45 lakhs, as against the estimated cost (December 1976) of Rs.11.60 lakhs. The imported plant was received in October 1969, but before the indigenous equipments required were received, operation of the old hydrosulphite plant was stopped from November 1969 as its working had become uneconomical. A new hydrosulphite plant (cost Rs.28.99 lakhs) was installed in October 1968 and started production from October 1968. The manufacturing process in the new hydrosulphite plant was different and did not require draining of salt solution which could be used in the salt recovery plant. In the circumstances the expenditure of Rs.17.45 lakhs incurred in salt recovery plant did not serve the intended purpose, and was unnecessary.

b) The salt recovery plant was commissioned in December 1970 for trial runs with a view to utilising it for the production of pure salt as an independent product by using industrial common salt. The plant was closed down in

January 1971, on account of operational troubles arising from unsuitability of the salt solution used. The plant was re-started in May 1971 but again closed down in September 1971 on account of labour dispute. The plant was put to use again in December 1972 after settling the labour problems, but had again to be closed down on 1st January 1973, on account of failure of the heat exchanger tubes which required replacement. Replacement of the heat exchanger tubes, estimated to cost Rs.0.40 lakhs, is yet to be done (1975 February).

c) Fourth Stage Expansion:

Even before the third stage expansion was completed, the company initiated action in 1969 for the fourth stage expansion comprising :

1) Installation of a 100 tonnes per day caustic soda/chlorine plant for increasing the annual production of caustic soda from 33,000 tonnes to 66,000 tonnes, and of chlorine from 29,040 tonnes to 58,080 tonnes.

2) Expansion of capacity of sodium sulphide plant from 4 tonnes per day to 7 tonnes per day, and

3) Installation of a sulphur dioxide plant of 15 tonnes capacity per day.

The company obtained the necessary letters of indent from the government of India for the three plants in April 1970, July 1970 and March 1971 respectively. Detailed project

report for the expansion was however prepared only in October 1971.

In the project report of October 1971, the fourth stage expansion project was estimated to cost Rs.950.86 lakhs (including Rs.233.20 lakhs in foreign exchange). The estimate was revised to Rs.994.82 lakhs (including Rs.236.72 lakhs in foreign exchange) in April 1972 against which the actual expenditure incurred up till December 1974 amounted to Rs.744.61 lakhs.

As for the project report, the sodium sulphite plant was scheduled to be commissioned in October 1973, new caustic soda plant in July 1974 and Sulphur dioxide plant in November 1974. The scheduled dates for commissioning were, however, revised in April 1972 and again in December 1973. According to the latest revision (December 1973) the sodium sulphide plant was scheduled to be commissioned in December 1974, new caustic soda plant in April 1975 and sulphur dioxide plant in August 1975. According to the Management, the postponement of the dates of commissioning of the plants was mainly due to :

i) delay in finalising loan agreement with foreign bankers on account of delay in appraisal of the project by them.

ii) delay in getting import licence for the sodium sulphide plant and (iii) delay in receipt of basic engineering data in respect of sulphur dioxide plant from the foreign supplier.

The sodium sulphide plant has not yet been commissioned (January 1975).

8.9.1 Unused plant and machinery

During the period from 1973-74 to 1977-78 T.C.C. had not used at all its sulphur dioxide plant which has a capacity of 7500 M.T. per year for a period of four years (1973-74 - 1977-78). Similarly in K.S.O. the glycerine plant which has an installed capacity of 260 tonnes per annum was used only during 1977-78. Even in 1977-78 the actual production was only 47 tonnes which is less than 1/5th of the installed capacity.

8.9.2 In Travancore Plywoods Ltd., a Veneer Slicing Machine (capacity 1800 Sq.M. or 1.08 cubic meters per shift of 8 hours) costing Rs.1.61 lakhs for the manufacture of decorative panels was commissioned in June 1968. Another machine of the same capacity costing Rs.2.93 lakhs was imported in February 1968 and commissioned in August 1970. As orders for decorative panels were not executed at all for a period of five years(1971-72 to 1976-77). The second machine was only sparingly used during the period from August 1970 to March 1976 and was not utilised during 1976-77."[4]

In the case of K.S.O. Ltd., with a view to increasing production of soaps the company imported in April(1971) an automatic plant (value Rs.12.27 lakhs) with an annual

capacity for the manufacture of 3600 tonnes of soap. This included a cartoning machine (cost Rs.0.48 lakhs) for automatic plant for vertical packing of soap. Though the automatic plant was commissioned by the end of 1975 the cartoning plant was not put to use so far (March 1978) and packing had to be done manually."[5]

8.10 Depreciation

Dead investments in projects which are not commissioned to production and under utilisation of existing plant has resulted in inflating the depreciation of plants and inefficient utilisation of capital. The cumulative depreciation of the 13 loss-making companies came upto Rs.1,334 lakhs in 1976-77. The cumulative depreciation of the five profit-making companies came upto Rs.250 lakhs in 1976-77. Depreciation being a fixed cost is more or less the same regardless of profit or loss or the quantity of production in these units. Since depreciation charged is for the whole plant and the capacity utilisation is poor the amount of depreciation absorbed per unit produced is quite high. The following are the points observed with regard to depreciation:

8.10.1 Depreciation forms a considerable part of the total cost.

In T.C.C. the depreciation of the years 1975-76, 1976-77 and 1977-78 were Rs.127.53 lakhs, Rs.197.23 lakhs

and Rs.151.39 lakhs respectively (22%, 22%, and 18% of the total cost in the respective years). In T.T.P. depreciation came to over Rs.145 lakhs, Rs.138 lakhs, Rs.196 lakhs and Rs.90 lakhs in the 4 years from 1974-75, to 1977-78 respectively. This is about 25%, 16%, 11% and 10% respectively of the total cost in the respective years. (See table 77)

2) Owing to replacement of machinery and expansions depreciation had shown an increasing trend in some companies. In United Electricals the depreciation was Rs.1.83 lakhs, Rs.1.93 lakhs and Rs.2.64 lakhs in 1975-76, 1976-77 and 1977-78 respectively. In K.F.C. the depreciation was Rs.9.91, Rs.9.06 and Rs.10.85 lakhs respectively in 1974-75, 1975-76 and 1976-77 respectively.

3) As a part of the effort to show a higher profit or reduced losses, many of the companies resorted manipulation in depreciation charges. In some of the companies there is no depreciation policy consistent with the nature of the fixed assents. In some others depreciation charges are very much unrealistic. But as a whole the amount of depreciation charged is always inadequate.

4) None of the companies were creating a depreciation fund for absolescence and consequent replacement or modernisation of the machinery.

8.11 Locational Costs

Locational factors have not be taken into consideration in fixing the site for certain factories. For example Pallathara Bricks and Tiles is far away from the twon (Ottapara). Means of transportation to the site were quite inadequate. Transportation expenses from factory to town inflate the cost of the product. T.T.P. has got its own transportation facilities. The money that has to be spent on the buses inflate the fixed cost. K.S.D.P. is located in Alleppey where pure water is scarce. The expenses that have to be incurred to get pure water (being a drug industry) also formed a part of the cost due to the locational disadvantage.

8.12 Social Overhead

Companies like T.C.C. have their own colonies and clubs. The expenses incurred in this regard from another part of the cost. The canteens and other welfare activities of the company also inflates the cost; for to break even it has to cover all its costs.

8.13 Heavy Expenditure in Stores

Expenditure on stores constitutes a substantial portion of the total cost. It forms one of the four important cost components in factory overhead. In T.T.P. the stores and spares consumed came to Rs.24 lakhs and Rs.21 lakhs

in 1976-77 and 1977-78. In K.S.D.P. packing materials came to Rs.20 lakhs and Rs.13 lakhs in 1976-77 and 1977-78. During the same period the consumption of mercury and graphite came to Rs.25 lakhs and Rs.26 lakhs respectively.

8.14 High Consumption of Power and Fuel

In many companies there has been an increasing trend in the use of power and fuel as against the standards fixed for the operations. This along with increasing prices of power and fuel (furnace oil and crude oil) increased enormously the factory overhead expenses which has to be absorbed by the cost of the units produced (Example T.C.C., Pallathara Bricks & Tiles, Chalakudy Refractories etc.)

Regarding power and fuel three aspects have been noticed: (a) increasing trend in power and fuel cost (b) standards not being used and (c) lack of controllability.

8.14.1 Increasing trend:

The cost of power and fuel in T.C.C. was only Rs.41.38 lakhs in 1972-73 and it had steadily increased to Rs.124.16 lakhs in 1977-78(Table 16a)disportionately to increase in production. In the case of T.T.P. it was Rs.75.42 lakhs in 1973-74 and increased twice when the production increasedsonly 6%.(Table 16). Similarly in T.P.I. the cost of this was Rs.1.54 lakhs in 1970-71 and it steadily increased to Rs.16.06 lakhs in 1977-78 (Table 16). Thus the consumption

of power and fuel had increased two to three times when production did not increase much (Table 76).

8.14.2 Excess consumption (Standards not being used)

T.C.C. has set standards for the consumption, but it is not used. Thus the extra expenditure on account of excess consumption (in T.C.C.) of electricity worked out to about Rs.0.96 lakhs in 1971-72, Rs.6.04 lakhs in 1972-73 and Rs.6.40 lakhs in 1973-74 (vide table 23). Same is the case with other companies.

8.14.3 Lack of Controllability

These companies have little control over the rates of power. Rates for electricity is decided by K.S.E.B. The standards of consumption are not used. Frequent power failures is a menace. Even so, the companies have not made any alternative arrangements.

8.15 Financing Charges

8.15.1 Trading on equity

All companies in the public sector are invariably practising trading on equity which is a double-edged weapon. In the case of concerns making profit, if the rate of profit generated is more than the rate of interest that is to be paid for the borrowed capital, it will be a blessing.

But the rate of profit of the companies in public sector are less than the interest rates they have to pay for borrowed funds. In the case of companies with losses, the interest paid for the borrowed capital will increase the losses. Interest paid by these companies have become a burden as many of them were getting additional loans from the government year after year. All these show that the efficiency with which borrowed capital is used had decreased (Tables 55 to 72)

8.15.2 Increasing Trend: Again, the financing charges had shown as increasing trend. The financing charges of K.C.L. in 1972-73 was above Rs.6 lakhs and it increased to over Rs.27 lakhs in 1979-80. The interest charges of K.E.L. was only a little over Rs.4 lakhs in 1970-71 and it had steadily increased to over Rs.31 lakhs by 1979-80. Financing charges of K.F.C. was a little below 5 lakhs in 1969-70 and it increased steadily to nearly Rs.42 lakhs in 1977-78 (Tables 61 to 72). Constantly increasing financing charges, particularly when it ranges between 10 to 20% of the total cost is too much of a burden for the company concerned.

8.15.3 Debt to Equity: The high financing charges of the companies can be attributed to their distorted capital structure. These companies had resorted to debt financing beyond the normal standard of 1:1. The debt to equity ratio of these companies was even more than 3:1. The debt to

equity ratio of K.E.L. varied between 1.52 to 3.43 and in 1979-80 the ratio was 3.43 (Table 64). The debt to equity ratio of K.F.C. steadily increased from 0.99 in 1970-71 to 4.44 in 1977-78 (Table 61). Similarly this ratio in K.C.L. increased steadily from 1.31 in 1971-72 to 3.59 in 1979-80 (Table 63). In 1979-80 the long-term debts of the K.E.L. was a little over Rs.362 lakhs against the equity of nearly 106 lakhs. In K.C.L. the debts were Rs.387.62 lakhs against an equity of Rs.108.05 lakhs. The constantly increasing debts naturally burden the companies with high financing charges.

8.15.4 Penal Interest : The debt financing is resorted to on the assumption that the company will generate enough revenue to pay back the debt and the interest. If the company fails to do so they have to pay the penal interest. This was exactly what happened to T.P.I.

"Loans aggregating Rs.99.59 lakhs were obtained by the company from government between February 1964 and September 1971. The loans carrying interest at rates varying from 5 to 7 percent per annum, were repayable in 13 to 17 annual instalments, commencing from the third year after the receipt of the loan. The loans also carry penal interest at rates varying from 7 to 9.5 percent per annum on overdue instalments of principal and interest. The company has not been repaying the instalments of principal and interest

regularly from September 1970 onwards. The overdue instalments of principal (Rs.20.67 lakhs) interest (Rs.24.28 lakhs) and penal interest on delayed payments (Rs.7.98 lakhs) amounted to Rs.52.93 lakhs at the end of 1976-79."[6]

K.C.L. faced the same problem.

"Loans aggregating Rs.114.76 lakhs obtained from the State Government from February 1964 onwards were outstanding as on 31st March 1975. The loans bear interest at rates varying from 5 to 8½ percent per annum and were repayable in 15 to 20 instalments. The company has not yet (January 1976) paid the interest (Rs.35.88 lakhs) as well as the overdue instalments of principal (Rs.23.84 lakhs). The default in the repayment of principal and payment of interest had resulted in the accrual of penal interest (at 2% over the normal rate in respect of overdue instalments of principal and at rates varying from 2 to 10½% in respect of overdue interest) amounting to Rs.5.98 lakhs. The total amount of interest outstanding as on 31st March 1975 was Rs.41.86 lakhs."[7]

8.15.5 Inability to Pay Interest: These companies were not able to pay the interest owing to the shortfall in actual production and sales. Secondly inthe case of new projects the time taken for their completion are usually double the time anticipated in the projects. In the meanwhile the cost of other factors of production would go high. As a result the companies would found it impossible to make

enough cash to pay back the borrowed money. Lastly the companies had a feeling that finance problems can always be solved through government help for government is very liberal in sanctioning enough money always.

8.16 Material cost

Raw material price, usage, yield and mix are the main factors affecting the variances between standard fixed and actual material consumption. In many of these companies raw material inventory control is not in existence. Consumption of raw material is much above the normal requirements. Standard is not fixed for the use of raw material. No variance is taken into consideration. No remedial measures are taken. A scientific system of material management is conspicuous by its absence. Periodical non-availability of material is another problem.

In material oriented industries material consumption forms a vital part of the production cost. The material usage, trend in consumption, standards, control etc., are the salient points which affect material consumption. These are discussed below :

8.16.1 Efficiency :

Regarding raw material it is not the increasing trend in the consumption that is more important, but the efficiency with which raw material is used. This efficiency

can be found by making use of the ratio of raw material consumed to total cost over a period of time. Raw material forms 40% to 60% of the total cost in many companies understudy. The ratio thus calculated shows that the efficiency in the use of material had gone down generally and in some it had been fluctuating periodically (Tables 55 to 72 show the decreasing trend in efficiency).

In Travancore Sugars and Chemicals the ratio of raw material consumed to total cost had steadily increased from 29% (1974-75) to 48% (1978-79).(Vide Table No. 6). The raw material cost had fluctuated between 11% (1974-75) and 60% (1976-77) in the case of K.F.C. In the case of T.T.P. this had fluctuated between 22% (1975-76) and 31% (1977-78) of the total cost (Table 55)

8.16.2 Increasing trend in Consumption :

In K.E.L. the raw material consumption had steadily increased from over Rs.41 lakhs in 1972-73 to above Rs.182 lakhs in 1979-80. In K.S.O. the raw material consumption had increased from nearly Rs.16 lakhs in 1972-73 to Rs.333 lakhs in 1979-80. Similarly in T.R.W. the raw material consumption had increased from nearly Rs.24 lakhs in 1972-73 to Rs.140.93 lakhs in 1979-80. All these increases had been disproportional to production increase. (Tables 55 to 72)

8.16.3 Material Standards :

Material specifications and the quantity to be used is set for each product in most concerns. The problem is regarding the issue of material and the yield required. These companies do not exercise any control over the issue of materials and no variance analysis is done. As a result losses are incurred owing to excess consumption of raw material. For example the cost of excess consumption of common salt in T.C.C.(Table 23) for production of one tonne of caustic soda were Rs.18.63, Rs.16.27 and Rs.17.49, and that of menthol were Rs.107.79, Rs.194.43 and Rs.177.5 during the years 1971-72, 1972-73 and 1973-74 respectively. Cost of excess consumption of zinc dust and sulphuric dioxide were Rs.136.08, Rs.49.63, Rs.77.22 and Rs.43.26 respectively in 1971-72 and 1972-73. Similarly the cost of excess consumption of raw material in PUC section in Traco Cable company (Table 26) were Rs.0.33 lakhs and Rs.0.70 lakhs and lead section Rs.0.18 lakhs and Rs.0.12 lakhs in 1974-75 and 1975-76 respectively. Table 31) shows the cost of excess consumption in the case of Titanium Products. The cost of excess consumption of the raw materials during 1971-72 and 1972-73 amounted to Rs.1.30 lakhs and Rs.2.32 lakhs respectively.

8.16.4 Inventory Control :

Inventory control is virtually not exercised in these companies. Usually there will be an annual stock

taking alone at the end of the year. The control tools such as ratio analysis, finding out economic order quantity, perpetual inventory control, fixing safety level etc., are not used. There is delay in getting raw materials, unnecessary locking up of money, obsolescence, wastage and damages to goods etc. For example in the case of K.C.L. the value of slow moving and nonmoving stores, spares and raw materials held in the inventory as on 31st March, 1975 amounted to Rs.1.39 lakhs. In Traco Cable Company, out of 520 items identified, 122 were in stock for more than three years. Similarly the value of slow moving/nonmoving items of finished goods held in stock as on 31st March 1977 was Rs.4.53 lakhs (vide table 35 & 36)

8.16.5 Scarcity of liquid cash :

Inadequate cash resources had been pointed out by the executives of these companies as a major problem to purchase raw materials in time. The intense cash problem especially that of loss making units is amplified by long debt collection period. Among the current assets, account receivables forms the most important item. With increase in sales credit sales also increased and that too with very long debt collection periods (vide table No. 75). In K.S.O. the receivables had increased from Rs.9.83 lakhs in 1972-73 to Rs.175.70 lakhs in 1979-80. In T.P.I. the receivables had increased from Rs.6.55 lakhs in 1972-73

to Rs.31.56 lakhs in 1979-80 and in K.E.L. it had increased from Rs.21.07 lakhs to Rs.84.47 lakhs during the same period.

8.16.6 No Credit from suppliers :

Executives of some of these companies said "we do not get credit from suppliers." This is because of the undue delay in making payments. Everyone is aware of the cash problems of these companies' and also their poor liquidity and solvency position (Tables 62 to 72). In the case of Travancore Sugars and Chemicals the quick assets varied between Rs.5.57 lakhs and Rs.44.04 lakhs during 1973-74 and 1978-79. During the same period the current liabilities of the company varied between Rs.33.25 lakhs and Rs.59.56 lakhs. The ratios of quick assets to current liabilities were less than one in all these years signifying that the quick assets of the company were less than the current liabilities. During the same period in T.C.C. and in T.R.W. the quick assets were always less than current liabilities (vide tables 60 and 66).

8.16.7 Solvency :

Taking into consideration asset-liability ratio some companies are theoretically insolvent, as their outstanding liabilities were greater than their total assets. The tangible net worth (total assets minus outstanding liabilities) was always negative. For example in T.R.W.

the outstanding liabilities were greater than total assets by Rs.8.95 lakhs in 1971-72. But it steadily increased to Rs.96.97 lakhs in 1979-80. In the case of K.F.C. the outstanding liabilities were greater than total assets only by Rs.11.39 lakhs in 1970-71 and rose to Rs.262.32 lakhs in 1978-79. In Trivandrum Spinning Mill, the outstanding liabilities increased from Rs.62.54 lakhs in 1973-74 to Rs.106.92 lakhs in 1977-78. Thus it is clear that these companies are theoretically insolvent now and the trend is that day by day this situation will be worsening(Tables 66,67,72).

There is no wonder that these companies are required to make payments in advance to their suppliers. The creditors know the poor liquidity and solvency position of these companies. It is justifiable that they are relectunt to extent credit facilities to these practically insolvent companies.

8.16.8 Other Problems :

There are numerous other problems facing these companies. First of all they have little control over the raw material price. Secondly, some items of raw materials which are to be imported pose a major problem, as they have to import them through S.T.C., with all the attendant delay and other inconveniences. The quota system of the government in issuing some raw materials like aluminium, nickel etc. is a real bottleneck and at times stands in the way of

growth. As the quota is granted according to the previous year's performance, any strike or lock out during the previous year will affect the quota of the current year. According to an executive of Traco Cable, "regarding aluminium we are at the mercy of the government".

8.17 Labour :

In labour oriented industries wages and salaries predominate in the total cost of production. In the companies under study this item ranges between 20% to 67%. Without any consideration for the value added or productivity of the labour force, periodical wage agreements have been entered into, causing wage hike even in the case of companies making heavy losses. Bonus is granted as right and ex-gratia disbursements of allowances are made liberally every year. Wages form a significant portion of cost of the product.The high labour cost is the result of inefficiency, increasing trend in remuneration, indiscipline, overtime payments etc.

8.17.1 Efficiency of Labour :

In most of the industries the cost of labour ranges between 30% to 60% of the total cost. The tendency in repeated wage agreements is to grant bonus much above the statutory requirements. In some companies disbursement of ex-gratia allowances are usually made. Overtime payments much above the normal wages are allowed continuously, and

this alone in some cases comes to nearly ¼ of the total wage bill. Idle time in certain companies had risen to as much as 20% of the total labour time. But the efficiency of labour has gone down as revealed by the ratio of remuneration to employees to total cost. For example the remuneration paid to the employees of Chalakudy Refractories (Table 68) increased from Rs.1.53 lakhs (1972-73) to Rs.8.53 lakhs (1977-78) and the percentage of remuneration to total cost increased from 34% (1972-73) to 70% (1977-78) signifying a downfall in labour efficiency. According to table the above ratio had increased from 0.20 times to 0.35 times marking a fall in labour efficiency.

8.17.2 Increasing wage Trend :

In K.C.L. (Table 28) remuneration to the employees was only Rs.20.61 lakhs in 1971-72 and it steadily went upto Rs.63.86 lakhs in 1979-80 while the production increased most marginally (table 28). In T.P.I. remuneration to the employees were only Rs.8.68 lakhs in 1971-72 and it steadily increased to Rs.51.14 lakhs in 1979-80 but there was not much change in production (table 28). In United Electricals the remuneration to the employees were only Rs.42.86 lakhs in 1974-75 and it increased steadily to Rs.59.21 lakhs in 1978-79 (Table 28). Thus remuneration to the employees increased many fold in all the companies.

8.17.3 Surplus labour and Overstaffing :

In several companies, staff pattern and the total number of labour force have no relation with the productive operations. A large number of persons were employed in different grades over and above the requirements of the effective operation in different sections of these companies. Out of the 18 companies surveyed the top executives in 17 companies were of the opinion that their companies were overstaffed. In Forest Industries not even 50% of the available labour hours are being utilised for production purposes. In the timber cutting section, a part of workshop has stopped all operations. But the workers employed numbering about 30 were allowed to continue without work with full salary from 1977 onwards. According to the report of Controller and Auditory General - K.E.L. were employing a sizeable surplus labour in two divisions (structural and transformer) over and above their requirements during the three years ending 1974.

As a result of this, not only the wage bill has increased enormously but the morale and discipline of the labour force had also been affected adversely and their efficiency has gone down. A work study conducted by the K.S.P.C. during 1970-71 revealed that the production achieved in the various units at present is much less compared to what can be produced with the existing number of men.

The wages paid for the surplus labour for the three years ending 1972-73 aggregated to Rs.20.89 lakhs. Overstaffing is a permanent handicap in all the manufacturing companies.

8.17.4 Overtime :

Overtime is a common feature in these companies. Double the usual wages are paid according to the Factories Act. This overtime is usually paid so as to increase the economic surplus. But in these companies, instead of creating economic surplus, overtime had inflated the wage bill without corresponding benefit. It is paid by companies which cannot afford to do so. Overtime is usually created by mutual adjustments, taking leave unnecessarily, purposely delaying the job etc., overtime allowance paid in T.C.C. during 1971-72, 1973-74 and 1974-75 for the factory staff amounted to Rs.6.35 lakhs, Rs.7.20 lakhs and Rs.9.18 respectively as shown by table 30. Expressed as a percentage, overtime allowance to total salaries were 18.86%, 22.91% and 22.29% respectively during the corresponding periods. In the administrative department the overtime paid were Rs.1.36 lakhs, Rs.1.64 lakhs and Rs.2.32 lakhs respectively in 1971-72, 1972-73 and 1973-74. Overtime paid by T.T.P. to its workers amounted to Rs.4.40 lakhs, Rs.5.59 lakhs and Rs.7.88 lakhs (Table 31) and that of staff amounted to Rs.0.95 lakhs, Rs.1.39 lakhs and Rs.1.58 lakhs respectively in 1971-72 and 1973. In the case of workmen, the percentage of overtime to wages were 18.30%, 18.40% and 21.8%

in 1971, 1972 and 1973 respectively. In fact this overtime has become a sort of fixed charge for the companies to bear.

8.17.5 Idle time :

Idle time arises due to power failure, want of work, deliberate idling, machine break down etc. In fact an overstaffed unit would be a gossip centre and so are these companies. Irresponsible behaviour of the executives also causes idle time. In K.E.L. during the period 1972-73, 1973-74 and 1974-75 the total labour hours were 264065, 258391 and 259041. Out of this, idle time hours were 33893, 48364 and 40158. Among the idle time hours 3670, 2001 and 5582 hours were due to deliberate idling. The deliberate idling hours are caused by people wandering here and there, taking more time at tea breaks, etc. Maximum idle hours were due to want of work. In 1972-73, 1973-74 and 1974-75 idle time due to want of work were 19463 hours, 19171 hours and 28917 hours (vide Table 31a). This was exactly the situation in all the units under study.

8.17.6 Indiscipline :

One of the executive in T.R.W. said "There had been three incidents here when the managers were bashed up by the workers. I am one among those managers. The worker who did it was dismissed from the company and now he is back again in the same place with same salary." This is

not an unusual incident now-a-days. The main reason for it is that the trade unions are directly connected with the ministry. Most of the ministers represent one of the trade unions. Any action taken against a worker can be nullified if there is a minister supporting this trade union. As a result the executives have become mere puppets in the hands of the workers.

8.17.7 Resistance to Change :

Any attempt on the part of the executives to change the mode of work or to introduce a new innovation or more economical method is resisted by their workers blindly, because of their ignorance. This resistance is due to the feeling that any new method is to extract more work from them. (Out of the 18 companies only three have a workers performance standard. They are K.C.L., Trivandrum Spinning Mill and United Electricals). Due to the lack of workers performance standard the executives of the companies find it hard to measure the performance and to introduce standard costing. There are cases of workers manhandling the management and of escaping punishment.

8.18 From the above discussion the reasons why the companies are not able to cope with the fast increasing total cost is made clear. An analysis of the sales and costs of these companies will enable a division of these companies into four different categories. They are :

1) Profit making companies.
2) The companies whose revenue do not cover the factory cost.
3) The companies whose revenue do not cover the factory cost and financing charges.
4) The companies whose revenue do not cover the total cost.

8.19 The division is made on the following logic.

1. The revenue for a year should be enough to meet the expenditure for that year.
2. The closing stock is not taken as sales since no revenue is generated out of it and its influence is reduced since a period of four years is taken.
3. Even if closing stock is taken considerable change will not be there in the classification since closing stock is applicable equally to all the groups.
4. Such a classification will help to locate the position of the company regarding the possibilities of profit creation.
5. Financing charges are included due to their dominant nature.

Out of the 18 companies only five are profit making (1. T.T.P. 2. K.M.M.L. 3. K.S.D.P. 4. Traco Cables 5. Premo Pipe Factory). There are six companies that have failed to cover the factory cost during the period from 1974-75 to 1979-80.(They are: 1) K.F.C. 2. T.R.W. 3. Trivandrum Spinning Mill 4) Kerala Ceramics

(5) Challakkudy Refractories (6) Pallathara Bricks and Tiles.

There are three companies whose revenue do not cover the factory cost and financing charges.
1) K.E.L. (2) T.C.C. (3) United Electricals.

The rest of the four companies have failed to cover only the total cost and were able to recover factory cost and financing charges. They are : 1) K.S.O. (2) T.P.I. (3) Travancore Sugars and Chemicals (4) Forest Industries.

Thus the sales of K.F.C. during the period from 1974-75 to 1977-78 were Rs.72.57 lakhs, Rs.5.91 lakhs, Rs. 107.78 lakhs and Rs.230.71 lakhs respectively. And the factory cost (Raw material + Labour + Factory over head) during the respective years were Rs 132.60 lakhs, Rs.118.69 lakhs, 127.00 lakhs and Rs.243 lakhs. It can be seen that even though the company was able to increase its sales more than three times it had failed to cover the total cost. (See table 61)

Similarly the sales of K.C.L. from 1973-74 to 1977-78 were Rs.38.45 lakhs, Rs.44.56 lakhs, Rs. 59.32 lakhs, Rs.83.61 lakhs and Rs.86.92 lakhs respectively. And the factory costs during the respective years were Rs.39 lakhs, Rs.50 lakhs, Rs.65 lakhs, Rs.82 lakhs and Rs.94 lakhs. Thus it is clear that even though the company was able to

double its sales during this period the company had failed to cover the factory cost. (See table 63)

During the same period from 1974-75 to 1977-78, Trivandrum Rubber Works had increased its sales from Rs.131 lakhs to Rs.156.69 lakhs. The sales during the period were Rs.131.34 lakhs, Rs.116.48 lakhs, Rs.156.69 lakhs and Rs.107.11 lakhs respectively and the factory cost in the same years were 127 lakhs, Rs.149 lakhs, Rs.147 lakhs and Rs.114 lakhs respectively. (See table 66)

Similar is the case with Trivandrum Spinning Mill, Pallathara Bricks & Tiles and Chalakudy Refractories.

T.C.C. and K.E.L. are good examples of companies that have not covered factory cost and financing charges. The sales of T.C.C. during the years from 1973-74 to 1977-78 were Rs.453 lakhs, 467 lakhs, Rs.417 lakhs, Rs.606 lakhs and Rs.586 lakhs respectively. Factory cost and financing charges amounted to Rs.454 lakhs, Rs.493 lakhs, Rs.596 lakhs, Rs.886 lakhs and Rs.829 lakhs respectively. Thus even though T.C.C. was able to push up its sales from Rs.463 lakhs to Rs.606 lakhs it had failed to cover the factory cost plus interest during these years. (See tables 60 & 69)

Similarly the sales of K.E.L. from 1972-73 to 1977-78 were Rs.71 lakhs, Rs.84 lakhs, Rs.109 lakhs, Rs.143 lakhs, Rs.126 lakhs, Rs.220 lakhs respectively. The factory

cost and financing charges during the period amounted to Rs.80 lakhs, Rs.100 lakhs, Rs.124 lakhs, Rs.144 lakhs, Rs.165 lakhs and Rs.223 lakhs respectively. Thus even-though K.E.L. was able to tripple its sales the company had failed to cover the factory cost plus the financing charges. Similar is the case with United Electricals. (See table 64)

K.S.O. is a good example of the companies that failed to cover the total cost with sales. K.S.O. was able to push up its sales from Rs.40 lakhs to Rs.166 lakhs during the period from 1973-74 to 1977-78. But the total cost of the company had increased from Rs.50 lakhs to Rs.176.7 lakhs during the same period. Thus the company was not able to break even, even with increased sales during this period. Same is the case with other companies of the group. (See table 62)

Conclusion

From the above discussion it is clear that eventhough both the profit making and loss incurring concerns were able to increase their sales they failed to generate either an increase in profit or a profit. This is because the speed with which total cost is increasing is faster than that of the increase in sales. This clearly manifests the lack of proper financial planning and effective financial control and the inadequacies of the existing system.

CHAPTER - IX

SUMMING UP, CONCLUSIONS AND RECOMMENDATIONS

9. The first part of this study explains lucidly the theoretical background of the financial planning and control process which serves as a base for the empirical research conducted by the researcher. In the second part the functional problems have been identified in the case of 18 public sector undertakings run by the Kerala State Government. Important problems facing the effective financial management especially with regard to the budget preparation, implementation and control were traced. The financial strengths and weaknesses were pinpointed and effective measures to rectify the weaknesses were suggested after making an evaluation of financial performance in each case. Major conclusions drawn from the study are given below with recommendations and a plan of action to be implemented forthwith.

9.1

1. None of the 18 companies studied had clearly laid

down objectives and policies to follow.

2. Comprehensive perspective planning and functional planning are not in existence.

3. Expansions and diversifications often end up in dead investments and financial crisis.

4. Authorities and responsibilities of the executives are not clearly defined.

5. Inter departmental conflicts instead of co-operation is rampant in these undertakings.

6. Decisions are made on the basis of experience. In many cases, they are unscientific and proved to be unsound.

7. The most important hindrance for the healthy growth of these organisations is the lack of commitment on the part of the personnel.

8. External factors like ministerial intervention, multi-unionism, trade union interference, political influence etc have many a time proved to be stumbling blocks to the smooth functioning of the undertakings.

9. As in the case of private enterprises and contrary to our expectations, strikes, demonstrations, lay-offs, gharaoes etc., are still a rule than an exception in these concerns.

10. A number of concerns having surplus labour consider it as social responsibility to keep them. This inflates the labour cost and reduces the labour productivity.

11. Periodical wage agreements resulted wage rise always.

Appointment of inexperienced bureaucrats to top positions for short periods, lack of motivation and incentive systems are other major causes for inefficient functional performance.

12. Incompetency of non-professional managers in these undertakings is a great draw back. Profits are made only in the concerns having a protected market. Those concerns producing goods competing with private sector are selling their products below the cost of production.

13. Lack of sales promotional activities and dependency on a few customers for their products had made some of the units to accept the terms and conditions of the customer. Unsteady market had resulted in overtime payment and sales fluctuation.

14. Majority of the concerns do not have any marketing organisation (except in K.S.O.). This has proved a major barrier in profit-making.

15. Very little effort is made in the direction of aggressive sales. Inadequate marketing facilities, and infrastructure made it impossible in many undertakings to push the sales.

16. Many of the undertakings are suffering from under-utilised and unutilised capacities resulting in huge losses.

17. In a few cases the reluctance to follow the trends of product life cycle have proved to disastrous. In many undertakings lack of production control resulted in continued losses.

18. Operational controls like proper inventory management, production co-ordination, materials control etc., are not followed in a systematic manner.

19. Lack of work standard and inadequate supervision had resulted in low labour efficiency and deliberate idling.

20. Poor financial performance is the weakest link in the chain of functional performance. Budgets are formulated without realistic forecasting and planning, control through budgets is either not attempted or practically observed.

21. Lack of cost consciousness have proved to be endangering the sound financial performance of the organisations.

22. Inadequate costing system and its adverse effect on budget preparation, implementation and control are reflected in all the activities of these undertakings.

23. Many of the concerns are depending on borrowed capital for their existence. Interest charges proved to be very heavy as compared to other expenses.

24. More than 50% of the units covered by the study are practically insolvent and they are made to exist by artificial respiration in the form of liberal loans from the governments.

25. Lack of professionalism and managerial skill are manifested in almost all the activities of these undertakings.

9.2 Major Recommendations are the following :

1. Objectives and policies of the undertaking should be made clear to all the personnel in the undertaking to know their positions in the organisation and their rights and responsibilities and the role they have to play.

2. To ensure systematic growth all the undertakings should develop comprehensive perspective planning.

3. Diversifications and expansions should be on the basis of proper market studies and realistic project reports and should be implemented and completed according to the schedule.

4. To facilitate better functioning of the undertaking and to ensure better performance and better results management and trade unions should work complementary to each other and develop team spirit instead of raising conflict.

5. Decisions like location of industry, employee strength etc., should not be political decisions but should be on the basis of economic viability and sound business principles.

6. Politics should be kept outside the industry and should free the trade unions to function for the betterment of labourers.

7. Management problems in the functional areas should

be reduced as far as possible by appointing experienced and qualified personnel.

8. The government should extend credit facilities only to those schemes and concerns which have a chance for survival and growth.

9. The government should take necessary steps to write off the accumulated losses and convert loans to equity whenever necessary.

10. Work standards should be introduced in all the units. This can be made a part of bargaining at the time of long-term wage agreements.

11. More emphasis should be given to utilise idle capacity and underutilised capacity.

12. Marketing of the products should be through full-fledged marketing divisions or specialised agencies.

13. Workers should be motivated to achieve the targets through proper incentive systems linked with productivity.

14. Standard costing system should be installed in all the manufacturing undertakings in consultation with the personnel. Manpower planning, training the personnel and management development programmes are to be introduced.

15. Majority of the units' manpower requirements for expansion and diversifications should be filled by the existing surplus labour if they are qualified.

16. The industrial disputes should be resolved through negotiations as far as possible without labour force staging

strikes, demonstrations, lay offs etc.

17. Operational controls like inventory control, production co-ordination materials control etc., should be strictly followed by making use of the standards.

18. Financial planning and control should be introduced where it is not in existence and control should be made more effective by variance analysis and implementing corrective action and their review and evaluation.

19. Personnel function, which is overlooked in these undertakings should be handled more scientifically and should be given equal importance as other management functions.

9.3 A Plan of Action :

The following plan of action is suggested for individual companies :

TRAVANCORE COCHIN CHEMICALS LIMITED

1. The company should strengthen its marketing organisation with additional staff facilities and sales promotional activities.

2. It should make arrangement for marketing by-products especially chlorine by providing sufficient transportation facilities and storage facilities.

3. Steps should be taken to maintain the required strength of Hydrochloric Acid and regularly supply it to

the entire satisfaction of the customers.

4. The company should take urgent measures to improve the capacity utilisation. It should provide for preventive maintenance and sufficient funds should be allotted for this.

5. Power and fuel consumption should be controlled dra stically making use of realistic standards.

6. The government should take immediate measures to convert at least a major part of its loan given to the company into equity capital and reduce the huge financial charges paid by the company (to the tune ofRs.1.5 crores yearly).

7. The company should see that minimum possible wastage is incurred in the manufacture of its main products and by-products.

8. All its future expansion programmes should be on the basis of proper market study and a comprehensive project report and tested on return on investment criteria.

K.F.C. (KERALA FISHERIES CORPORATION LIMITED)

1. The company should make all out efforts to get the maximum amount of raw materials during the season according to specifications.

2. The government should write off the accumulated losses and convert part of the government loans into equity.

3. The management of the company should be strengthened with specially qualified persons especially for purchasing, processing and marketing divisions.

4. Special measures should be adopted to diversify the products.

5. Export promotional activities should be resorted to increase the sales.

6. As full capacity of freezing plants are not being used at present they should be leased to outsiders.

7. The company should stop experimenting on loss-making products and concentrate only on profit-making activities.

T.R.W. (TRIVANDRUM RUBBER WORKS LIMITED)

1. The company should improve its existing marketing arrangement and introduce additional sales promotion activities. Competent and experienced personnel should be appointed in this section without delay.

2. It should discontinue production of loss-making products.

3. Surplus labour should be diverted as far as possible to the proposed expansion plants, like scooter tyre manufacturing.

4. The conflict between management and workmen should be resolved quickly and labour problems should be amicably settled.

5. The government should help the company to write off its losses and convert a major portion of the loan into equity.

Pallathara Bricks and Tiles

1. The company should explore possible markets for its high quality bricks and start sales promotional activities without further delay.

2. Necessary steps should be taken to provide transportation facilities to deliver the bricks to the consuming centres.

3. The company should diversify its production into products like calcium chloride.

4. Economy should be effected in the consumption of power and fuel.

Chalakudy Refractories

1. The company should establish a marketing division under a qualified and experienced marketing manager.

2. Every effort should be made to execute its orders promptly to avoid loss of customers.

3. Wage agreement should be made without adversely effecting the production, or productivity.

4. The expansion programme should be speeded up.

K.C.L (KERALA CERAMICS LIMITED)

1. Internal market should be developed for Koalin products by sales promotional activities.

2. The possibility of getting export market should be explored for Koalin products.

3. Every effort should be made for the full utilisation of capacity of Koalin division.

4. The capacity of porcelain divisions should be expanded to meet the increasing demand.

5. Incentive system of wage payment should be introduced to give more remuneration to efficient workers and to encourage them.

6. The government loans should be converted into equity capital so as to reduce the mounting financial charges.

Travancore Sugars and Chemicals

1. The company should introduce promotional activities to increase sugarcane production. Area of cane cultivation should be increased through getting land from government at reasonable cost or on lease.

2. Special measures should be taken to reduce the cost of production which is steadily increasing in the factory.

3. Every effort should be taken to secure molasses adequately for the manufacture of arrack and fine liquor.

4. The company should try to get adequate subsidy to meet the losses arising from the difference between the cost price and issue price.

K.S.O. (KERALA SOAPS AND OILS LIMITED)

1. The company should find a regular source for the supply of raw material at reasonable prices.

2. The work-study as agreed upon in the long-term wage agreements by the trade unions should be implemented without delay.

3. The government should convert the loans into equity. The losses should be written off.

4. An effort should be made to reduce the consumption of power and fuel.

Trivandrum Spinning Mill

1. The company should avoid raw material wastage. Better sources of raw material is to be found out.

2. The present system of remuneration should be streamlined by introducing incentives in all the divisions.

3. The programme of rationalisation should be speeded up.

4. The government should convert its loans to equity to reduce financial charges.

K.E.L. (KERALA ELECTRICALS AND ALLIED ENGINEERING CO., LTD.)

1. The company needs price and wage excalation clauses included in their tenders with State Electricity Board.

2. The company should stick to agreed time for

completion of the orders accepted.

3. The company should establish contacts with other Electricity Boards and private customers ensure more customers for its products.

4. The switch gear division which is closed down should be re-opened. Indigenous raw material sources should be found out.

5. Steps to reduce deliberate idle time and excessive overtime should be taken as quickly as possible.

United Electricals

1. New markets should be found out for the products of the company especially film capacitors and carbon film resistors. Special allotment for sales promotional activities is to be made.

2. In order to improve the demand for single phase and polly phase house service meters the company should cultivate better relationship with Electricity Boards especially with Kerala State Electricity Board.

3. The raw material consumption should be reduced and the standards fixed should be adhered. Necessary steps should be taken for better inventory management.

4. The existing work standard should be adhered and production incentive should be created.

T.P.I (TRAVANCORE PLYWOOD INDUSTRIES LIMITED)

1. The company should find new market for its tea

chest panels (as it has lost the traditional customers).

2. The company should explore new export markets for its products like decorative panels, flush doors, chequered plywood etc.

3. Steps should be taken to check overconsumption of glue on the manufacture of plywood.

4. Necessary transportation facilities should be provided to transport logs to the factory as and when required.

5. Adequate funds should be made available for a dynamic programme of sales promoting activities.

Forest Industries

1. Lucrative gulf market for its products should be further explored.

2. The company should expand its activities and fully utilise its surplus labour previously employed in the dismantled workshop and kept idle now. Measures should be taken to utilise the capacity fully.

3. Every effort should be made to collect outstanding debts from the customers especially from the government.

4. Measures should be taken for better capacity utilisation.

K.S.D.P. (KERALA STATE DRUGS & PHARMACEUTICALS LIMITED)

1. The company should increase its sales to outside

parties than the government through sales promoting activities.

2. The Vitamin A plant should be commissioned as early as possible as there is a ready market potential for it.

3. The practice of advancing money to Indian Drugs and Pharmaceuticals Limited for raw material, should be discontinued to tide over the working capital problems.

4. The company should commission a water purification plant to supply pure water as it is a problem, the company is facing.

5. Special attention should be given to improve the quality of the products and receive its tarnished image.

Premo Pipe Factory

1. Measures should be taken to expand immediately to expand the production of premo pipes to expand the present market.

2. Steps should be taken to improve the existing operational methods.

3. The company should have experienced and skilled managers instead of engaging persons on deputation.

4. The company should get special sanctions from the government to assure a regular and steady supply of cement.

Trato Cables

1. The company should explore the possibility of increasing its capacity and expand its telephone cable division.

2. With the help of the government adequate and steady supply of aluminium should be sought to tide over existing difficulties to get it.

3. A competent marketing executive should be appointed to develop better market for its products.

4. The existing industrial relations climate should be maintained.

K.M.M.L (KERALA MINERALS AND METALS LIMITED)

1. The company should modernise its method of mineral separation.

2. The expansion programme under implementation should be speeded up as it is behind schedule already.

3. Steps should be taken to increase sales through sales promoting activities in the International Market.

4. The company should professionalise its management and stop hiring persons on deputation.

T.T.P (TRAVANCORE TITANIUM PRODUCTS LIMITED)

1. Measures should be taken to increase production, increase the capacity utilisation and reduce the fixed cost.

2. The surplus fund at the disposal of the company should be used for expansion.

3. The company should discontinue the unjustifiable overtime and production bonus.

4. The company should prepare itself for meeting increased competition for its products especially for titanium dioxide.

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1. Budget of K.C.L. for 1976-77, P - 21.
2. Report of C & A.G. for 1972-73, P - 26.

KERALA PREMO PIPE

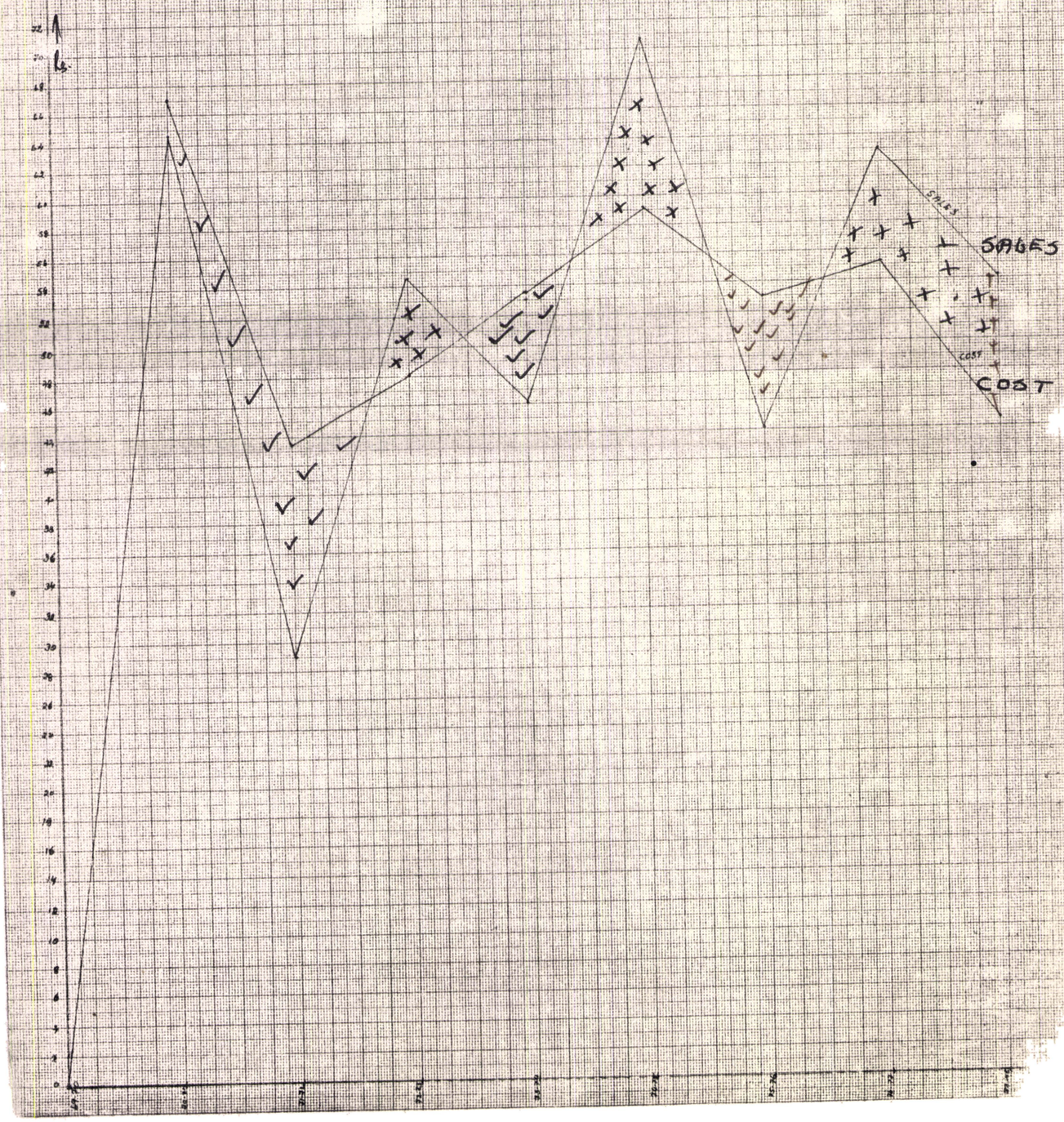
COST & SALES TREND

PROFIT +

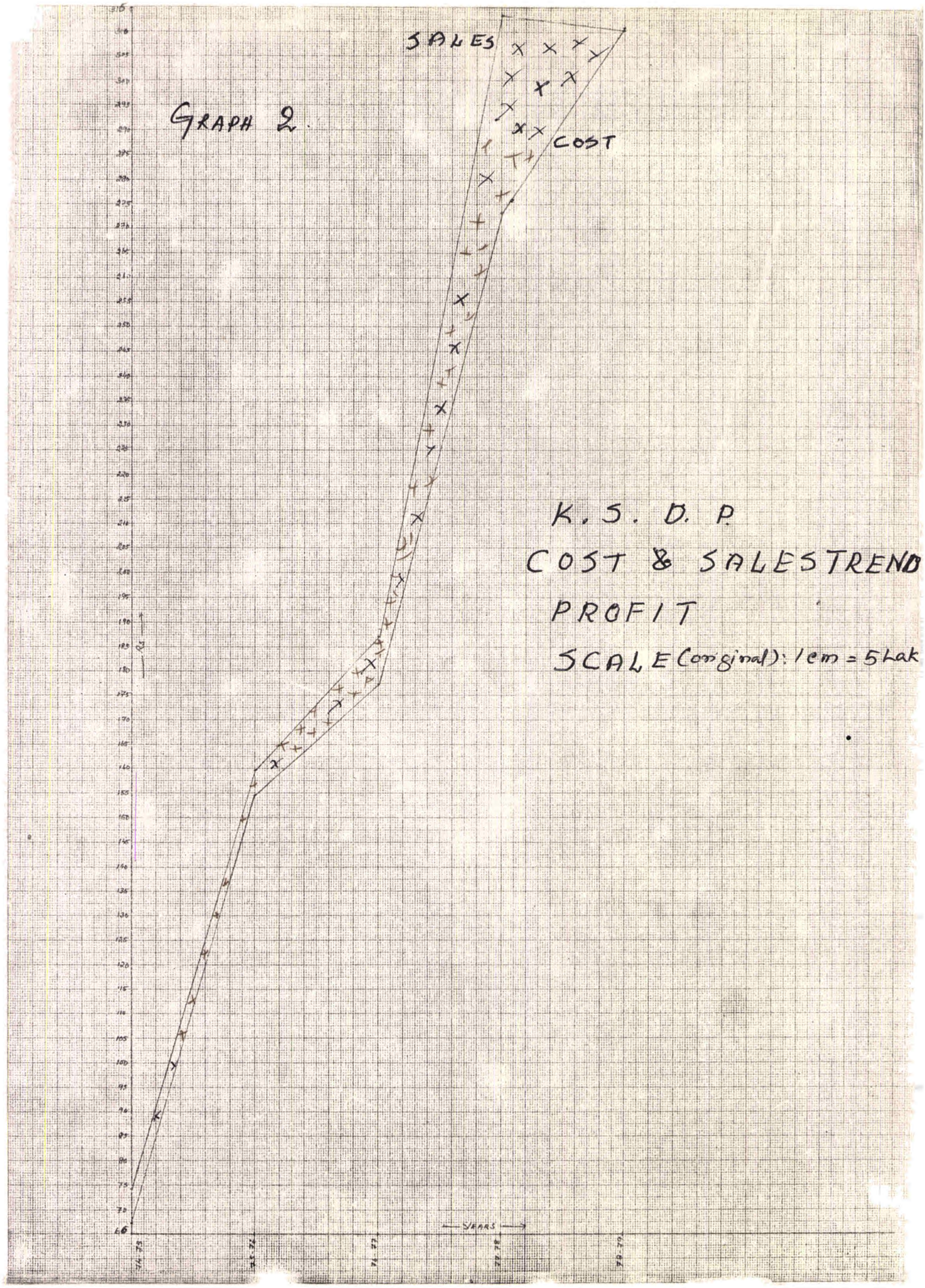
LOSS ✓

GRAPH - 1

SCALE (original) 1cm = 2 Lakhs



GRAPH 2.

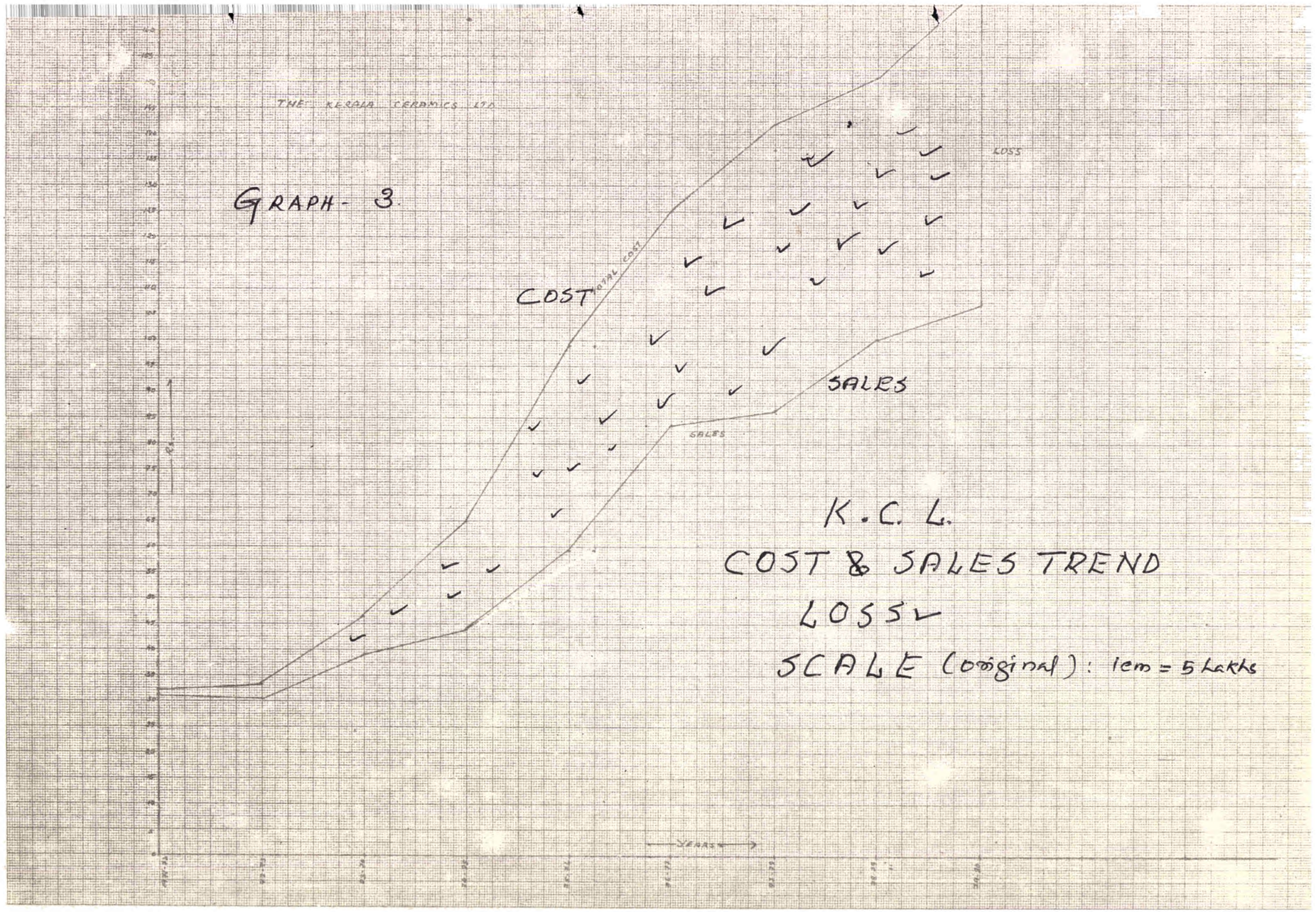


K. S. D. P.

COST & SALES TREND

PROFIT

SCALE (original): 1 cm = 5 Lak


THE KERALA CERAMICS LTD
GRAPH - 3
COST
TOTAL COST
LOSS
SALES
SALES
K.C.L.
COST & SALES TREND
LOSS
SCALE (original) : 1cm = 5 Lakhs
YEARS

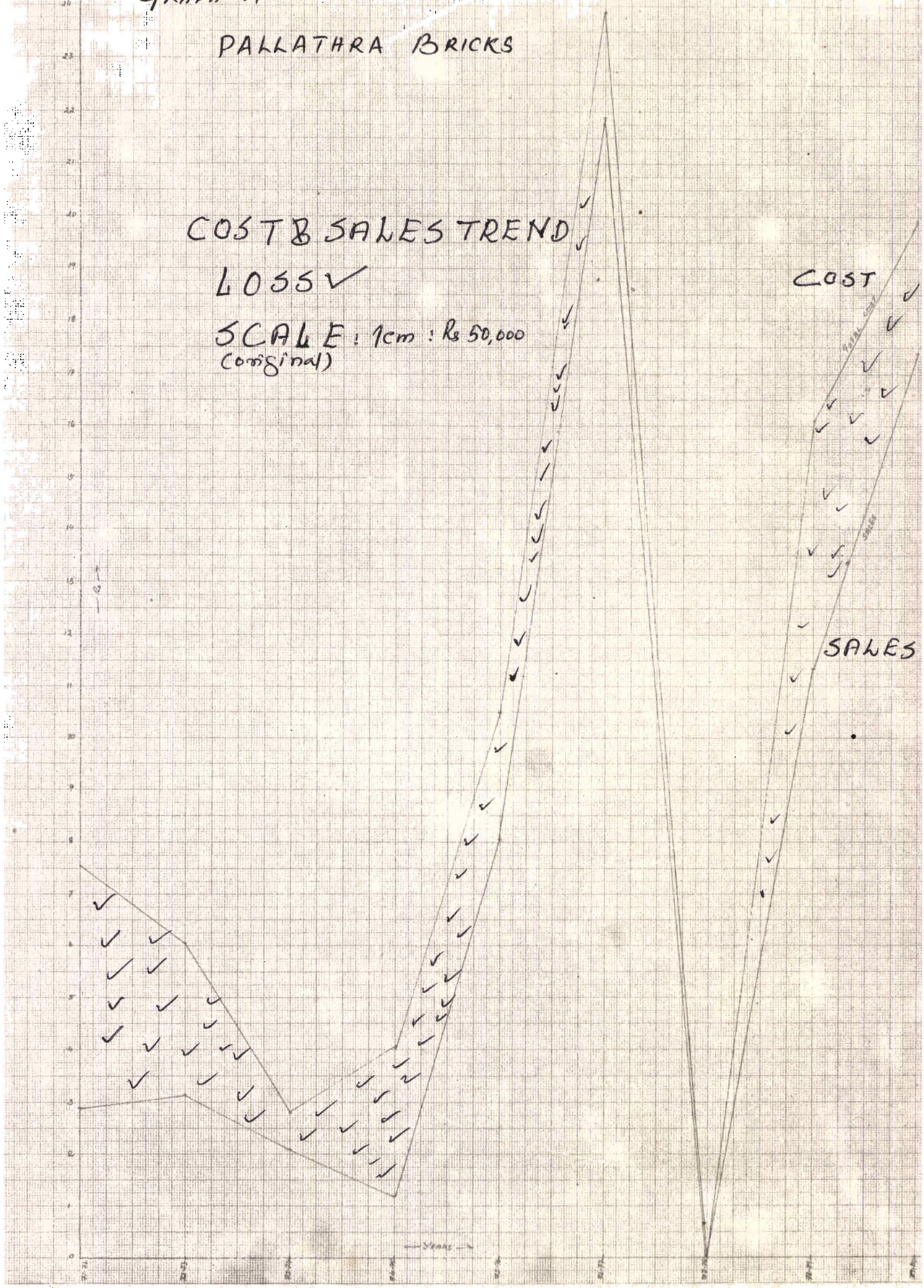
GRAPH - A -

PALLATHRA BRICKS

COST & SALES TREND

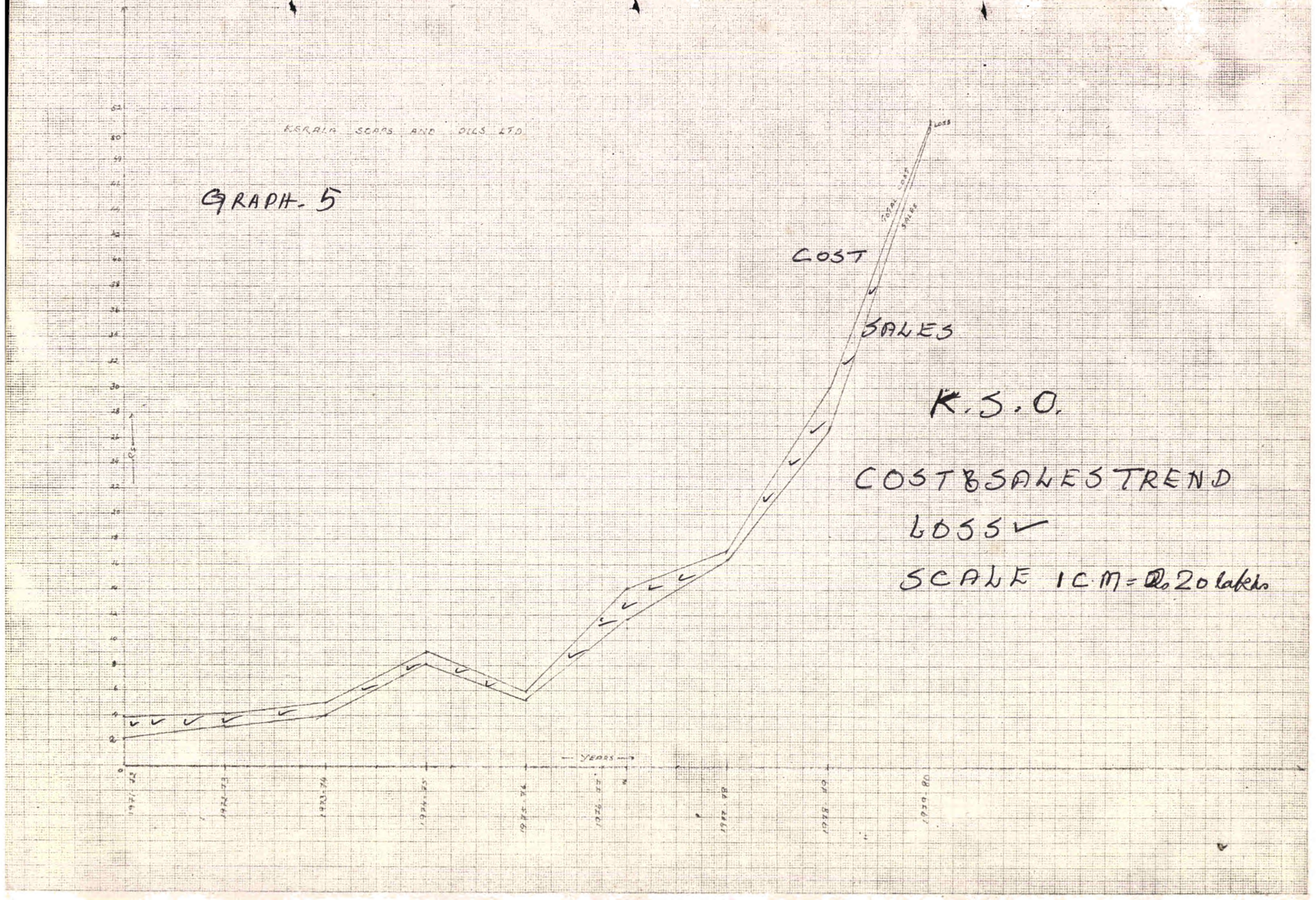
LOSS ✓

SCALE : 1cm : Rs 50,000
(original)



KERALA SOAPS AND OILS LTD

GRAPH. 5



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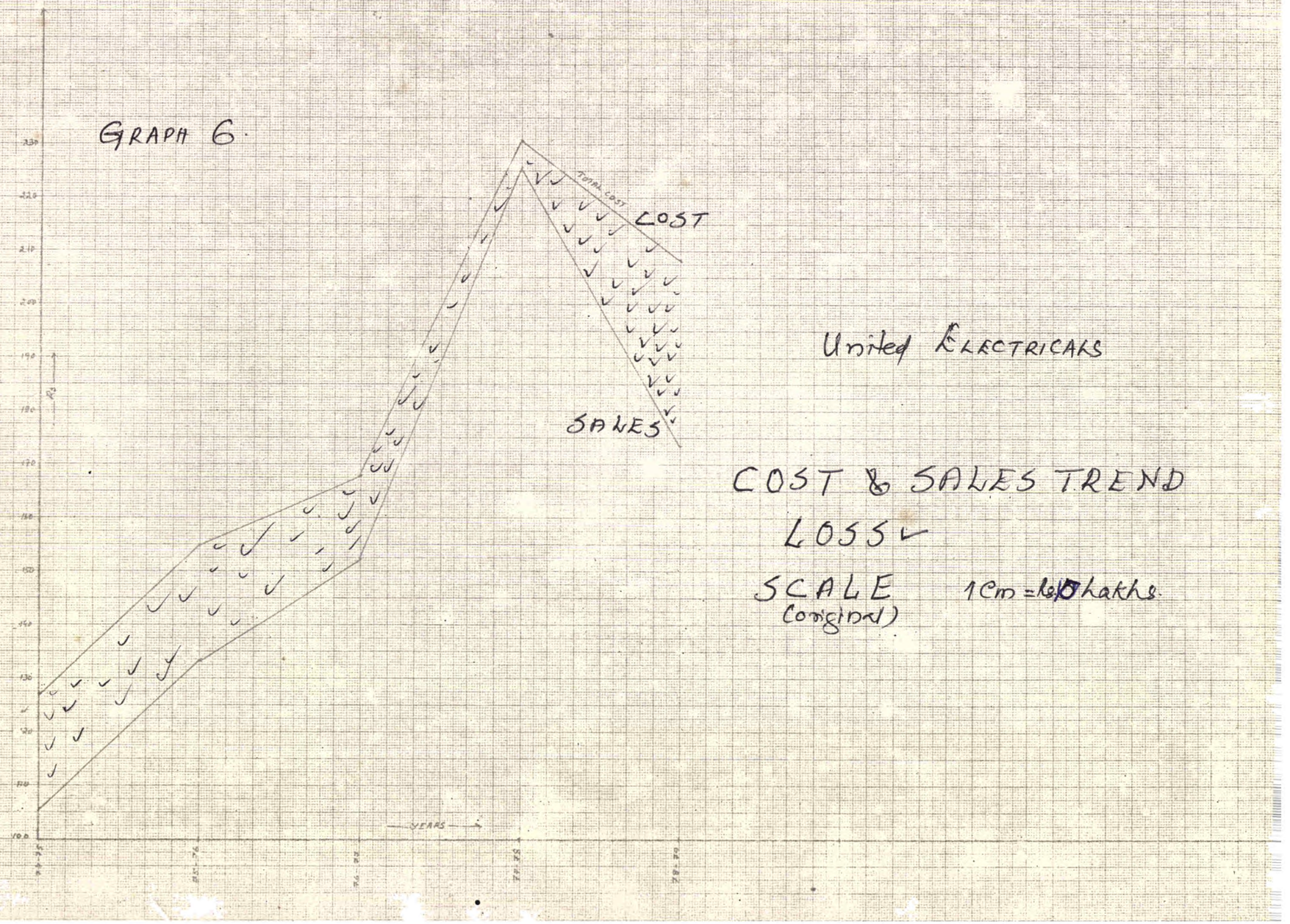


United ELECTRICALS

COST & SALES TREND

LOSS

SCALE (original) 1 Cm = 10 lakhs.

GRAPH - 7

TRIVANRUM RUBBER WORKS

COST

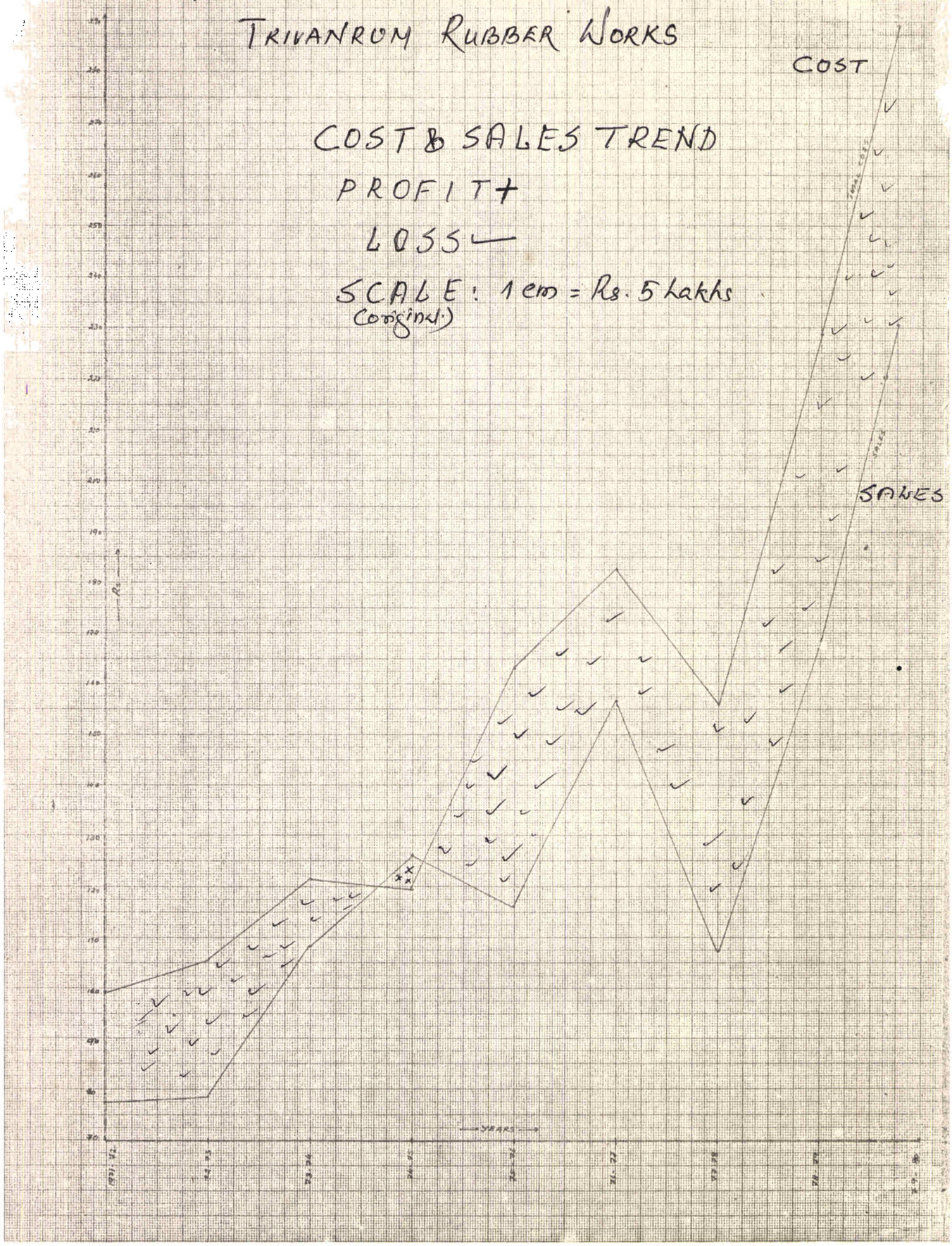
COST & SALES TREND

PROFIT +

LOSS —

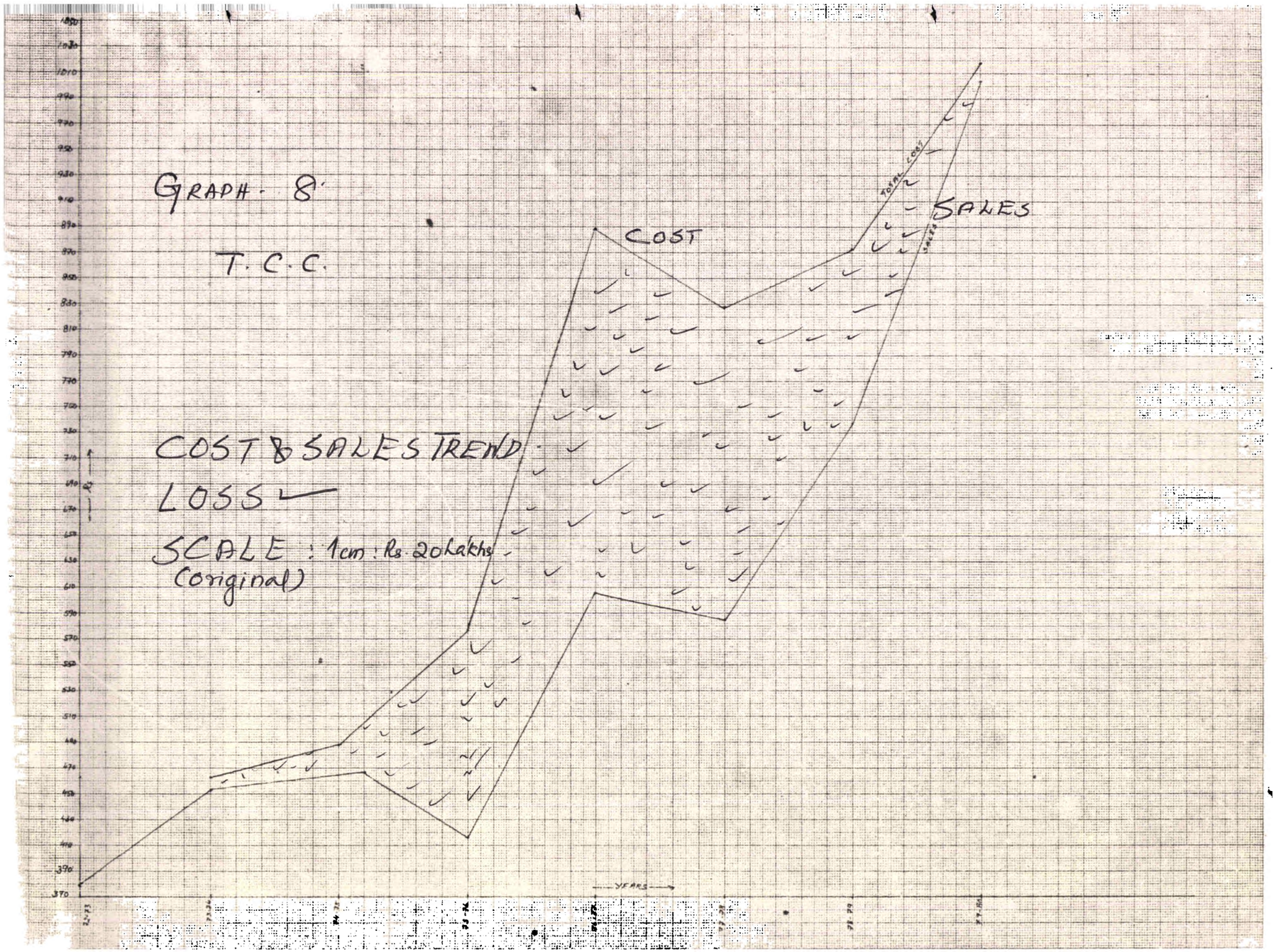
SCALE : 1 cm = Rs. 5 Lakhs

(Consolidated)



GRAPH - 8

T.C.C.


COST
SALES
TOTAL COST
SALES
COST & SALES TREND
LOSS
SCALE : 1cm : Rs. 20 lakhs
(original)
YEARS

GRAPH. 9

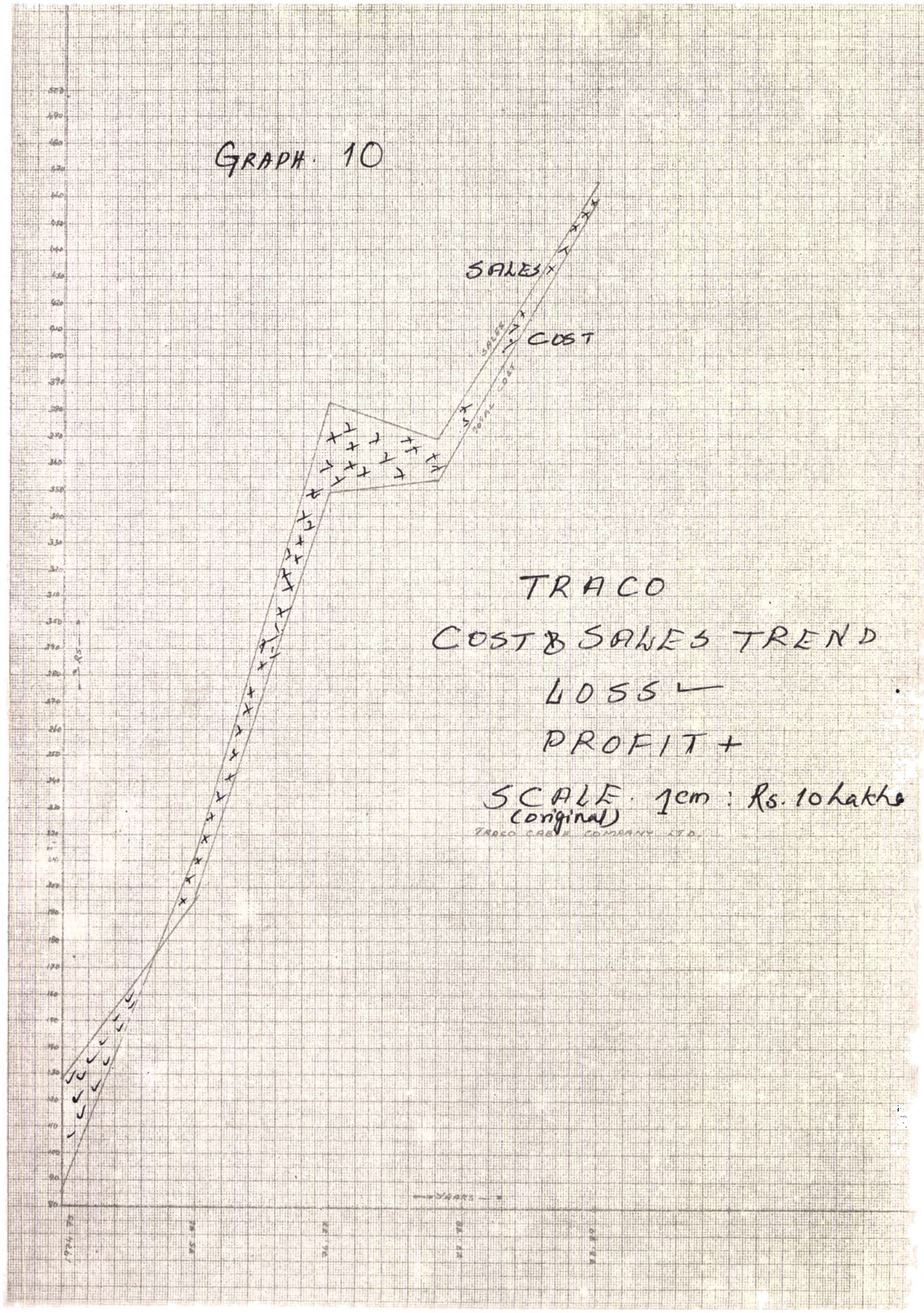
KERALA FISHERIES CORPORATION

COST & SALES TREND

LOSS —

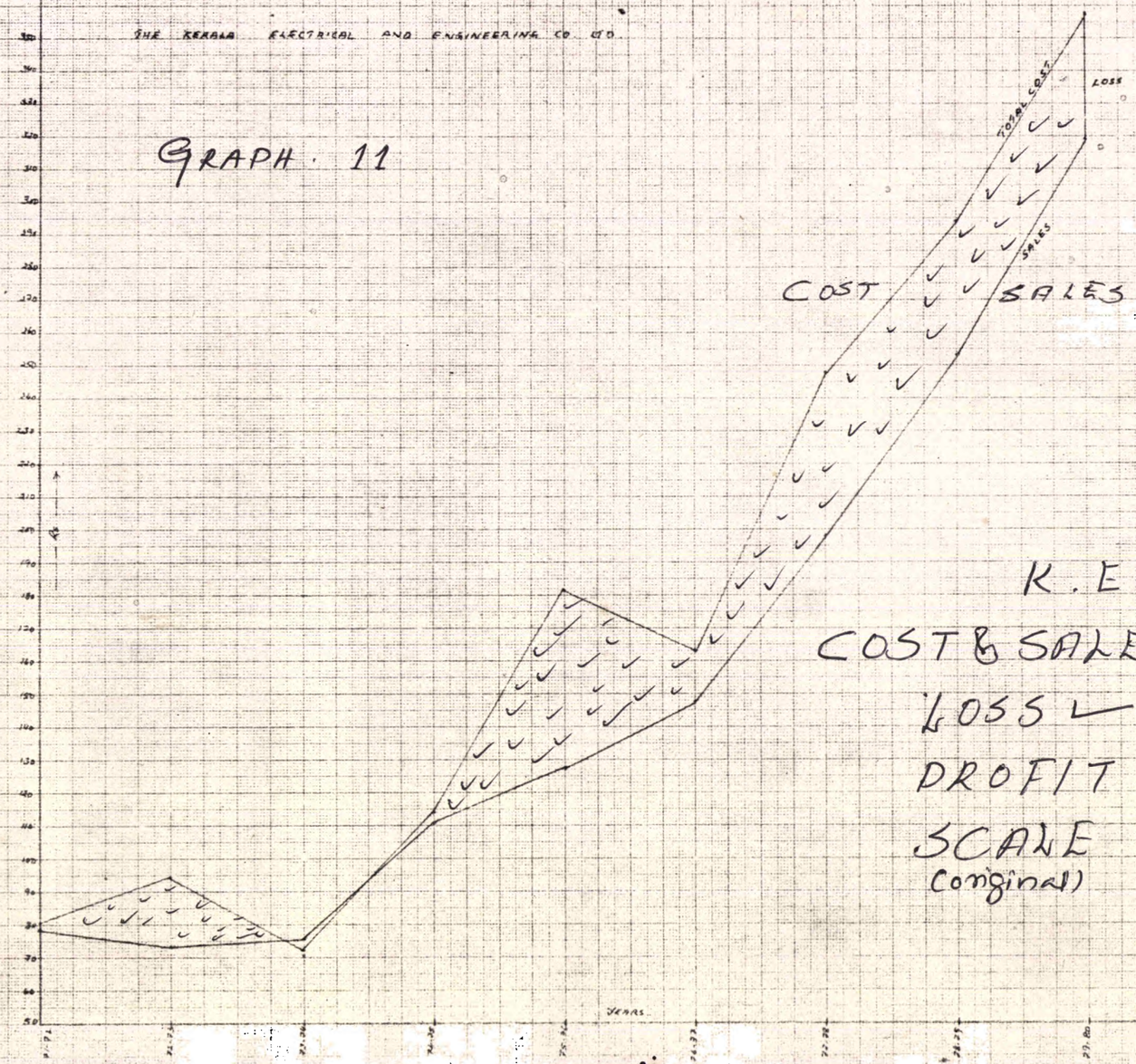
SCALE 1cm = 10 Lakhs
(original)

GRAPH. 10


SALES
COST
TRACO
COST & SALES TREND
LOSS —
PROFIT +
SCALE. 1cm : Rs. 10 lakhs
(original)
TRACO CABLE COMPANY LTD.

THE KERALA ELECTRICAL AND ENGINEERING CO LTD.

GRAPH 11



K.E.L

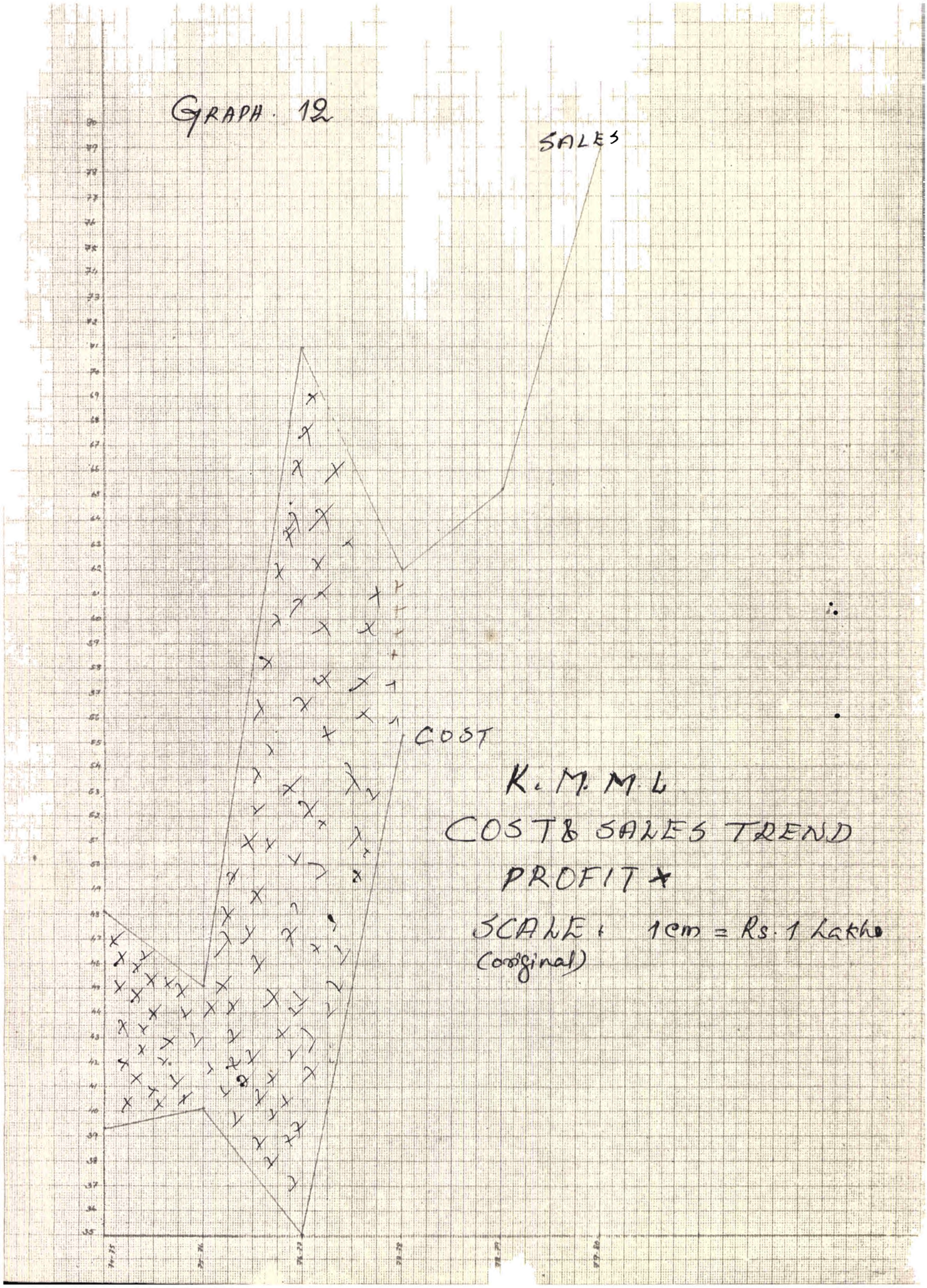
COST & SALES TREND

LOSS —

PROFIT +

SCALE 1 cm = Rs. 10 Lakhs
(original)

GRAPH 12

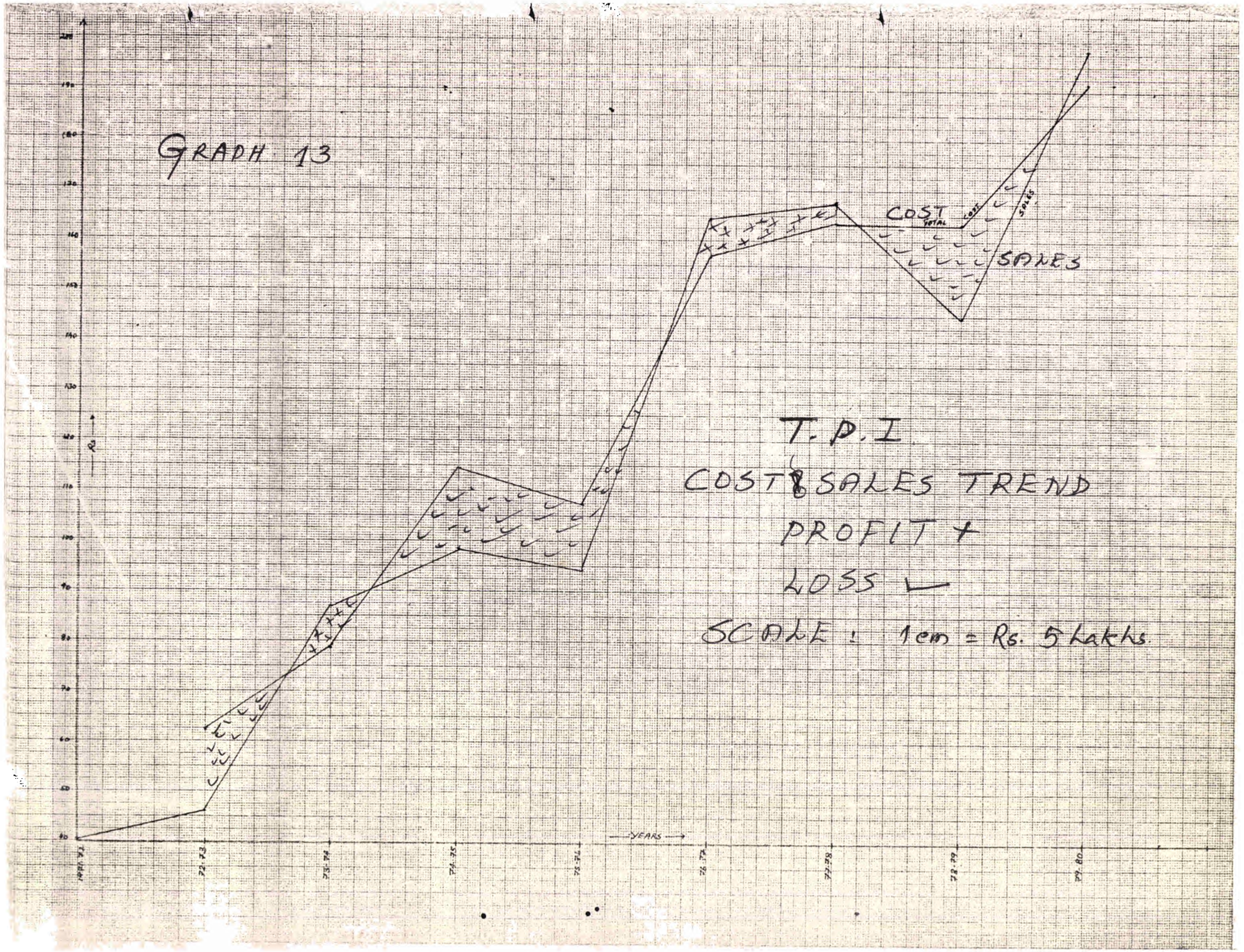


K. M. M. L

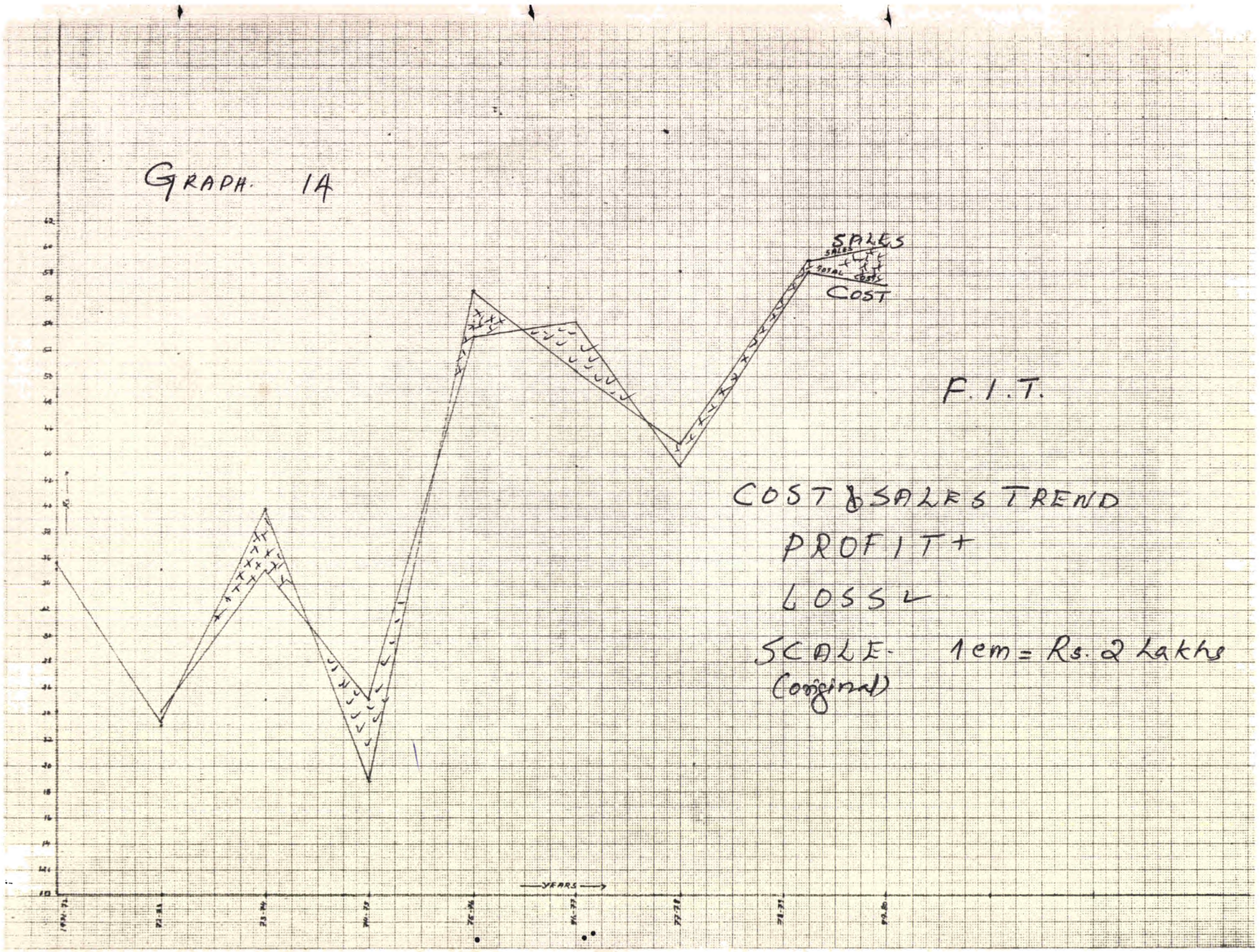
COST & SALES TREND

PROFIT ✱

SCALE: 1cm = Rs. 1 Lakh
(Original)


GRADH 13
COST
TOTAL COST
SALES
T.P.I
COST & SALES TREND
PROFIT +
LOSS -
SCALE : 1cm = Rs. 5 lakhs
Rs.
YEARS
71-72
72-73
73-74
74-75
75-76
76-77
77-78
78-79
79-80

GRAPH. 1A



F. I. T.

COST & SALES TREND

PROFIT +

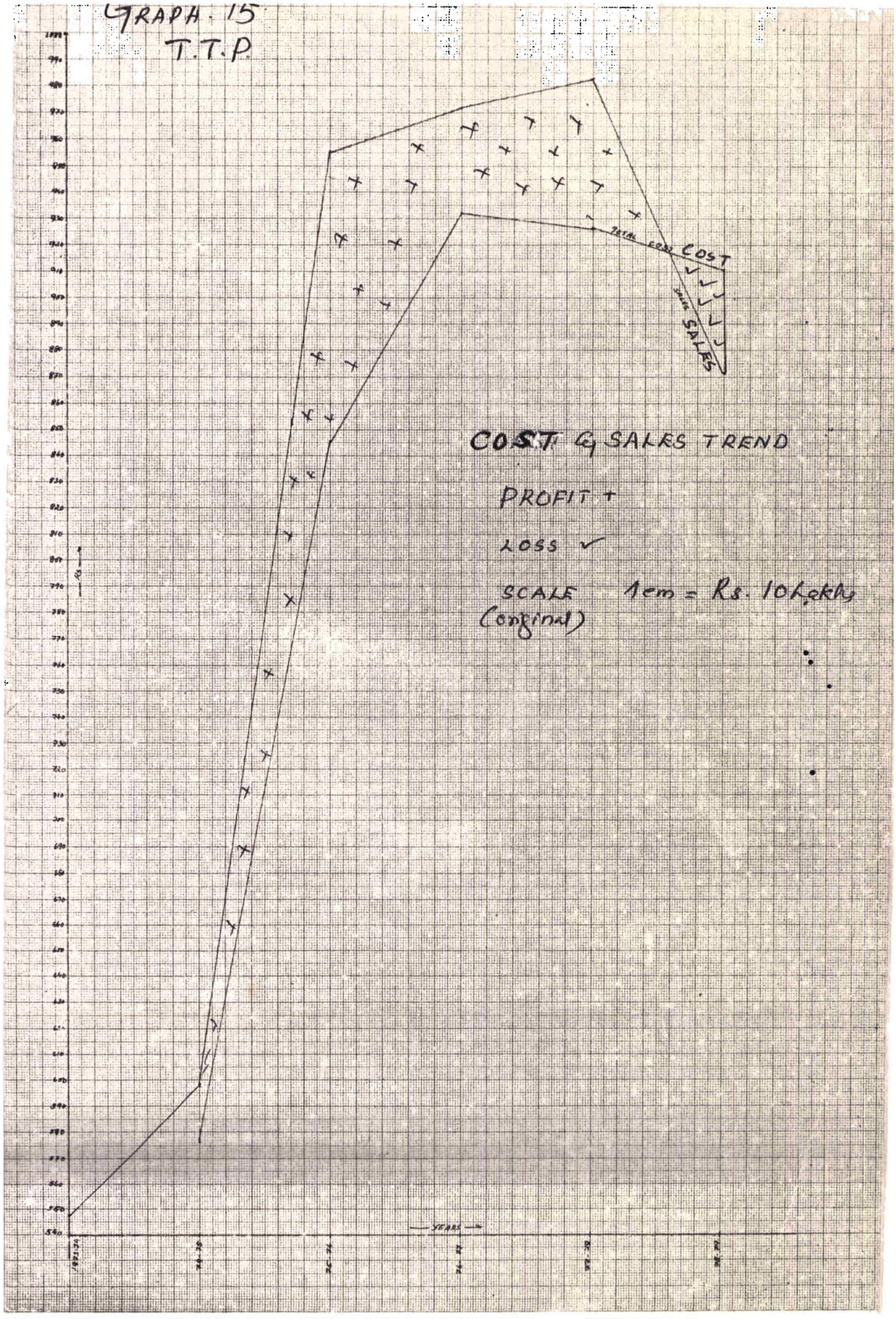
LOSS -

SCALE- 1cm = Rs. 2 Lakhs

(Original)

GRAPH. 15

T.T.P.



COST & SALES TREND

PROFIT +

LOSS ✓

SCALE 1cm = Rs. 10 Lakhs

(Confined)

GRAPH 16

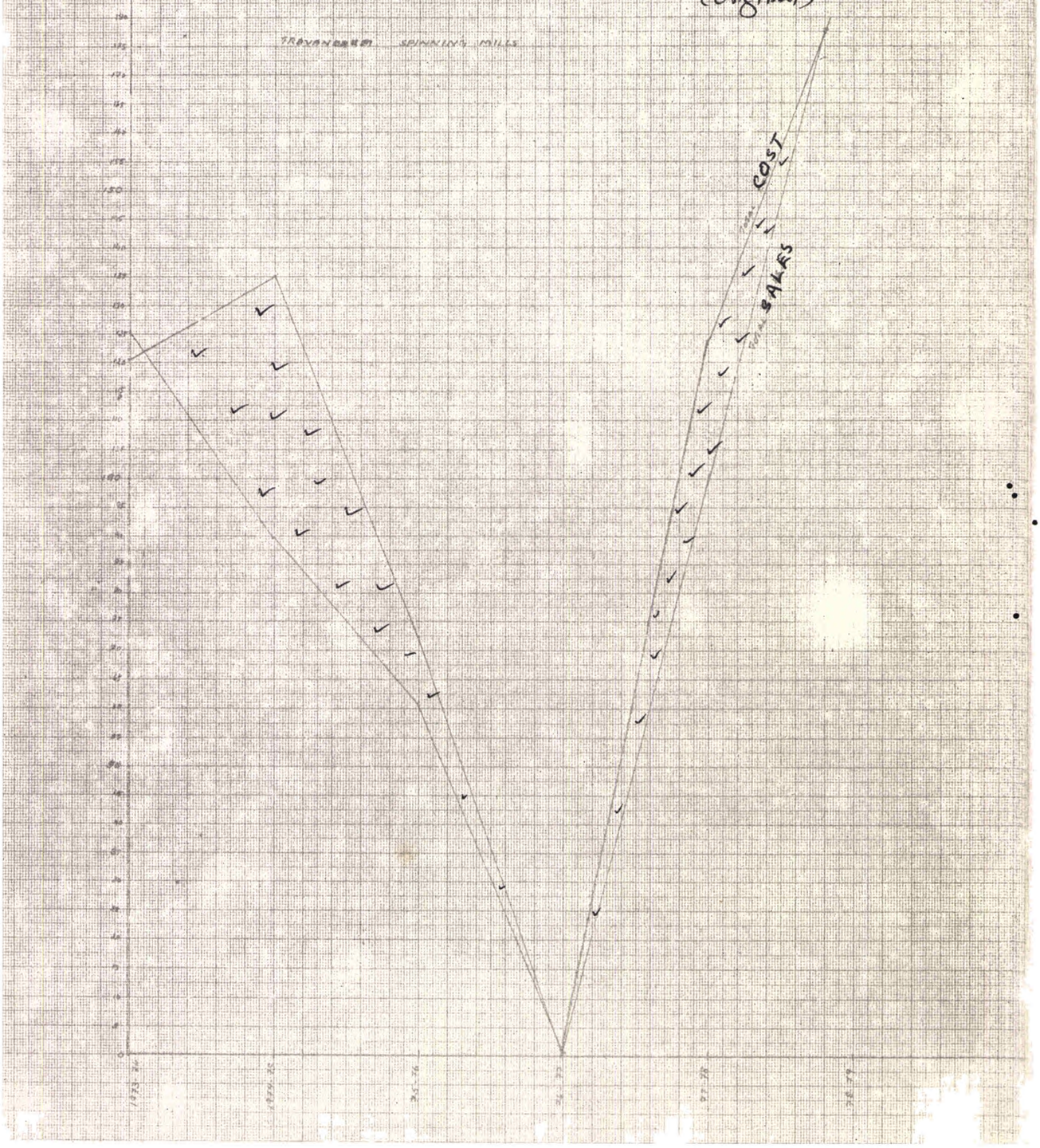
T.S.M.

COST & SALES TREND

PROFIT +

LOSS ✓

SCALE (Original) 1 cm = Rs. 5 lakhs



GRAPH- 17

CHALAKUDY

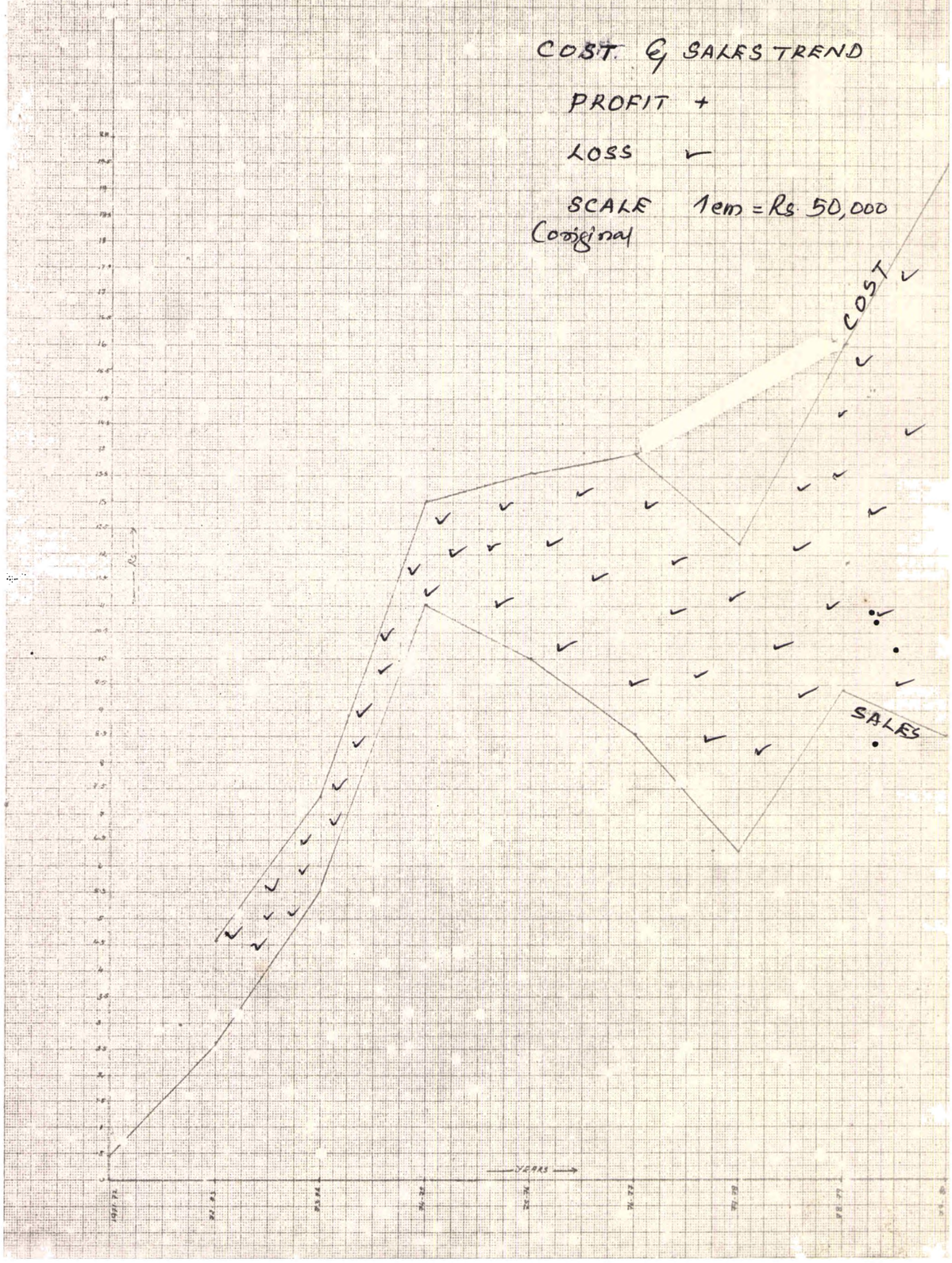
COST & SALES TREND

PROFIT +

LOSS −

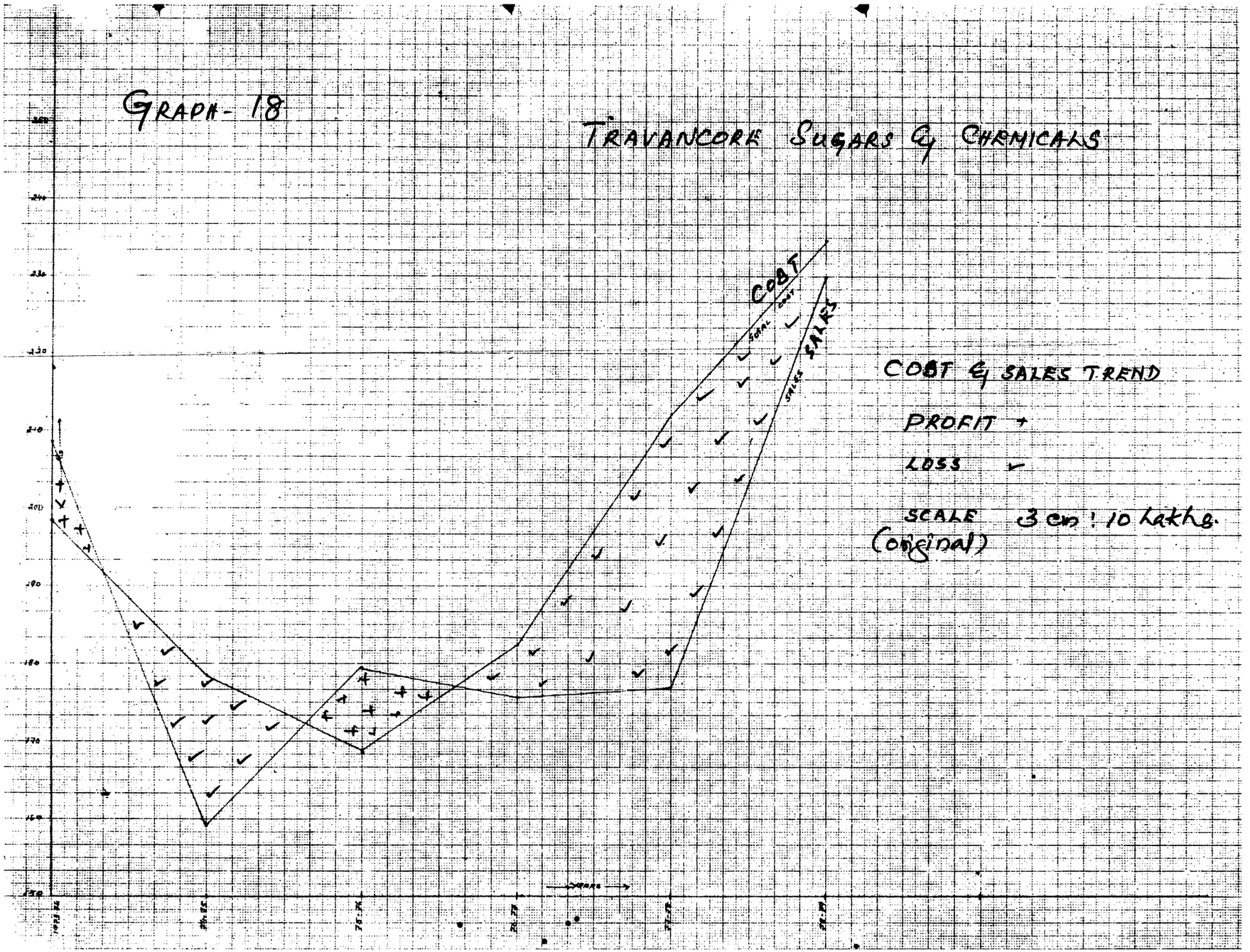
SCALE 1cm = Rs. 50,000

Consigned



GRAPH - 18

TRAVANCORE SUGARS & CHEMICALS



COST & SALES TREND

PROFIT +

LOSS -

SCALE 3 cm : 10 Lakhs.

(original)

TABLE I

Investment in the Public Sector under the Plans

	Public sector	Private sector	Total	Percentage of the public sector to the total
I Plan	1960	1800	3760	52%
II Plan	4672	3100	7772	60%
III Plan	8577	4190	12767	67%
IV Plan	13655	8980	22635	60%
V Plan	31400	16161	47561	66%
VI Plan*	69380	46860	116240	60%

* Tentative figures. Soure. Narayan, Laxmi op.cit. P.5

TABLE 2

Public Sector Outlays in Industries and Minerals

(Rs. in crores)

	First plan	Second plan	Third plan	Fourth plan	Fifth plan	Sixth plan
Industries and Minerals	55	938	1726	2864	7362	10350
	(2.8)	(20.1)	(20.1)	(18.2)	(18.7)	(14.9)
Total outlay	1960	4672	8577	15776	39322	69380

(Figures in brackets represent percentages to total outlay)

Soure: Narayan, Laxmi op. cit. p. 7

TABLE 3

Growth of Public Sector Enterprises in India

Period	Total Investment (Rs. in crores)	Number of enterprises
At the commencement of First Five year plan		
on 1-4-1951	29	5
on 1-4-1956	81	21
on 1-4-1961	953	48
End of Third Five Year Plan	2415	74
Commencement of 4th Five Year Plan	3902	85
Commencement of Fifth Five Year Plan		
on 1-4-1974	6237	122
on 1-4-1975	7261	129
on 1-4-1976	8973	129
on 1-4-1977	11097	145
on 1-4-1978	12851	153
on 1-4-1979	15602	159

Source: Narayanan
Narayan, Laxmi Op. cit. p 12

TABLE 4

Total Assets and Net Sales of Top 25 Corporate Giants in India

1977-78

(Rs. in crores)

Sl.No.	Name of the Enterprise	Total assets	Net sales
1.	Food Corporation of India	2914.4	1635.5
2.	Hindustan Steel	1562.3	914.0
3.	Bokaro Steel	1382.3	167.1
4.	Fertilizer Corporation of India	1149.7	217.0
5.	Bharat Heavy Electricals	871.5	445.0
6.	Indian Oil Corporation	845.5	2380.4
7.	Shipping Corporation of India	785.4	270.4
8.	Oil and Natural Gas Commission	579.2	188.3
9.	Coal India Limited	449.4	147.3
10.	Hindustan Aeronautics	433.9	121.9
11.	Indian Petro Chemicals	365.7	45.1
12.	Heavy Engineering Corporation	331.5	75.5
13.	Tata Iron and Steel Company	328.3	287.9
14.	Air India	306.9	288.4
15.	Bharat Aluminium	263.3	44.8
16.	Tata Engineering and Locomotives	246.2	259.6
17.	Neyveli Lignite Corporation	236.1	59.6
18.	Indian Air Lines	229.5	147.0
19.	National Textile Corporation	219.0	29.9
20.	Cotton Corporation of India	212.0	307.8
21.	Hindustan Copper	209.9	68.8
22.	Damodar Valley Corporation	209.4	86.9
23.	Scindia Steam and Navigation Co.	196.2	98.0
24.	State Trading Corporation	193.9	963.8
25.	M.M.T.C.	185.3	711.9

Source. Narayan, Laxmi. op. cit. P.25

	1968-69	1969-70	1970-71	1971-72	1972-73	1973-74	1974-75	1975-76	1976-77	1977-78
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
ber of units	85	91	97	101	113	122	129	129	145	153
estment (Rs. crores)	3902	4301	4682	5052	5571	6237	7261	8973	11007	12851
nover (Rs. crores)	2057	2996	3309	3974	5299	6777	10217	11688	14542	17556
ss Profit before Tax (Rs. crores)	95.45	139	146	172	245	273	559.2	668.46	1054	447
profit before Tax (Rs. crores)	N.A	14	20	22	83	149	312.5	305.63	476.17	236.03
profit/loss er tax(Rs. crores)	12.55	-5	-3	-19	17.8	64.4	183.5	129.11	239.59	-14.42
losses of losing erns (Rs. crores)	52.81 (25)	66.83 (27)	78.28 (36)	118.46 (N.A)	86.72 (34)	78.50 (33)	138.79 (39)	101.54 (36)	146.91 (43)	391.61 (61)
ribution to onal Exchequer (Rs. crores)	N.A	482	535	615	717	771	1130	1368	1597	1802
rnal sources rated(Rs. crores)	142	194	204	215	260	387	580	526	719	731
of Return on tal employed(%)	4.3	4.2	3.9	3.9	5.1	5.2	8.4	7.6	9.7	8.3
oyment (in lakhs)	5.97	6.12	6.59	7.02	9.32	13.14	14.08	15.05	15.75	16.38

\ - Not Available. Figures within brackets stand for number of losing concerns.

nnual Reports on the Working of Industrial and Commercial undertakings of Central Government for the respective years.

).F. Kothari's Economic & Industrial Guide of India - 1980-81, P-5.

(Rs. in lakhs)

I.T		Premo Pipe		
les	Profit/ Loss	Year	Sales	Profit/ Loss
.96	+4.69	1970-71	64.63	-1.49
.81	-0.76	1971-72	29.00	-9.22
.88	+4.88	1972-73	54.54	+3.53
.81	-5.78	1973-74	46.05	+5.65
.64	+4.81	1974-75	70.80	+1.97
.51	-3.08	1975-76	44.08	-0.38
94	+2.87	1976-77	63.28	+3.63
02	+2.50	1977-78	54.26	+3.06
15	+0.61			

ial Statements of F.I.T. & Premo Pipe y.

1.L	
s	Profit/ Loss
	+ 2.65
	+12.28
	+30.77
	+ 9.16
	+10.70
	+17.95

(Rs. in lakhs)

Traco Cables			K.S.D.P			T.T.P		
Year	Sales	Profit/ Loss	Year	Sales	Profit/ Loss	Year	Sales	Profi loss
1971-72	102.95	+10.21	1974-75	67.83	+1.66	1973-74	547.63	+63.0
1972-73	48.67	- 1.83	1975-76	154.51	+2.17	1974-75	598.16	+ 2.56
1973-74	81.44	+ 4.20	1976-77	177.62	+3.37	1975-76	955.30	+98.83
1974-75	86.01	-32.50	1977-78	273.62	+2.25	1976-77	972.04	+42.58
1975-76	210.75	+13.87	1978-79	310.61	+2.86	1977-78	983.34	+30.62
1976-77	382.70	+33.69				1978-79	871.56	-33.74
1977-78	369.60	+18.28						
1978-79	465.10	+17.01						

Source: Financial Statements of Traco Cables, K.S.D.P, T.T.P and K.M.M.L

TABLE 9

Dependency on a single customer leading to Unconditional Sales

(Rs. in lakhs)

	K.E.L.		United Electricals			Pallathara Bricks & Tiles		
Year	Sales	Profit/ Loss	Year	Sales	Profit/ Loss	Year	Sales	Profit Loss
1971-72	78.95	- 0.76	1974-75	105.27	-13.02	1971-72	2.90	-1.92
1972-73	73.30	-10.31	1975-76	133.44	-20.84	1972-73	3.17	-2.62
1973-74	80-88	+ 0.49	1976-77	152.19	-17.25	1973-74	2.11	-2.75
1974-75	110.91	+ 1.37	1977-78	225.58	+ 2.20	1974-75	1.22	-3.14
1975-76	127.66	-44.67	1978-79	173.55	+17.79	1975-76	8.08	-1.42
1976-77	147.85	-23.38	Source: Financial State-			1976-77		

	K.C.L	K.E.L	K.S.O	K.S.D.P	T.P.I	T.R.W
re our plans for						
ear (only)	12	14	11	16	10	12
ears	--	--	--	--	--	--
years	--	--	--	--	--	--
years	--	--	--	--	--	--
ther please specify.	--	--	--	--	--	--
es of my Company are	Social objective (3) Providing employment (3) Natural resource exploitation (1) Employment (2) Memorandum of Association (2) Profit (2) Manufacture and Sell spraydried paper (2)	No objectives (2) Profit (2) Not defined(3) Memorandum of Association (2) Optimum production & Sales (2) Labour and Social (2) Electrification (1)	Employment (2) Memorandum of Association (2) Making money for employees & labour(1) Maximum production (1) Social Objective(2) I do not know (3)	Employment (2) Profit (4) Service(3) Social Objective(4) Memorandum of association (2) Kwality, Service, dependability and progress(1)	Social Objective (2) Employment(4) Wipe of loss (1) Exploitation of Natural resources (3)	Wipe of loss (1) Social Objective (4) Employment (3) Making quality products (1) Buy Indian (1) I do not know (2)
of my company are evolved						
ernment	4	6	3	3	--	--
of Directors	4	--	4	4	3	3
cs (inside)	--	3	1	1	1	2
ding Company	3	4	1	1	--	1

	No	6	5	3	6	4	2
cies change according nment	Yes	4	10	2	2	4	10
	No	8	4	9	14	6	2
ime the above changes radictory	Yes	2	8	1	1	2	9
	No	10	6	10	15	8	3
(important) of our are :	Employment (1) Quality (1) Profit (2) Memorandum of association (2) something not against (2) not clear (1) good relations with labour (1) quality products (1) Try to reduce loss (1)		same as objectives (2) I do not know (2) Memorandum of association(1) Maximum sales & profit (1) Sales and quality (2) As per government (2) Help the government(3) Making the organisation economically viable (1)	How to improve (1) How to sell (1) What to produce (1) How to employment(1) service (2) Employmen (2) Sell at a higher price (1) Make profit(1) maintain market as per govt. quality (1)	Quality (3) Service (2) Profit (1) Same as objectives(3) Employment (2) Maximum sales (2) production optimisation (3)	Wipe of loss (4) I do not know (4) Quality products (1) cost reduction (1)	I do not know (5) Quality (2) Social objective (2) Same as Memorandum of association (3)
uthorities and respon- s were clearly defined perform better	Yes	7	11	8	10	6	11
	No	5	3	3	6	4	1
horities and responsi- are not clearly defined blames the other	Yes	8	13	8	12	8	12
	No	4	1	3	4	2	0
defined authorities and bilities could tell us to report and discuss	Yes	8	12	8	11	7	10
	No	4	2	3	5	3	?

	No 10	6	10	16	8	2
epartmental conflict of co-operation is ere	Yes 1	5	1	2	0	2
	No 11	9	10	14	10	10
ecisions are made in this						
ging Director alone	--	10	3	--	1	6
ging Director and top utives	8	2	--	10	8	2
ging Director, Top execu- s and executives of that tional area	2	2	3	2	0	2
not know	2	--	5	4	1	2
epartment my boss discuss the decision	Yes 3	13	9	14	8	2
	No 9	1	2	2	2	10
makes a decision						
: discussing with me and akes the alternatives	2	1	--	8	6	2
iscuss the alternatives but akes the decision	8	8	6	6	2	10
.scuss the alternative and I the decision	2	--	3	2	--	--
ikes the decision and iss with me after that	--	2	2	--	2	--
makes the decision but 's ready to change	--	3	--	--	--	--
ther please specify	--	--	--	--	--	--

method	--	--	--	--	--	--
method	6	4	0	5	6	4
rience	3	1	8	6	4	8
gerial insight	3	6	3	5	--	--
ny other please specify	--	3 highly centralised	--	--	--	--
ars budget different from s years						
ifference	--	6	1	2	2	2
increase over last years actual	7	3	2	4	--	--
years budget is new with no ection to the past	--	..	--	--	--	--
increase over last years	2	--	6	8	1	2
years budget with some fications here and there	3	5	2	2	6	8
other please specify	--	--	--	--	I do not know 1	--
inion general nature of the is						
ne affair	6	3	3	2	2	4
d (To cover inefficiency)	--	--	--	--	--	--
ealistic	3	5	5	8	4	6
et government requirements	1	4	1	3	1	0
tly adhered	2	2	2	3	3	2
ther please specify	--	--	--	--	--	--

	No 12	14	11	16	10	12
nterfere with our planning trol process	Yes 2	2	6	1	4	9
	No 10	12	5	15	6	3
ng system in our is						
ly and sufficient	5	1	5	7	5	--
icient but not timely	2	--	1	1	--	--
ly but not sufficient	--	5	--	2	1	--
her sufficient nor timely	5	8	5	6	4	12
tion available to us in this is						
r and relevant	3	2	1	2	2	--
vant not clear	1	3	2	7	--	..
r but not relevant	4	--	5	2	2	--
her clear nor relevant	4	9	3	5	6	12
ness of the deviation between the and actual is decided on the f						
difference	4	--	4	--	4	--
cience	2	--	5	3	4	4
possible	--	--	..	--	--	--

	No 12	14	11	16	10	12
interfere with our planning ntrol process	Yes 2	2	6	1	4	9
	No 10	12	5	15	6	3
ing system in our y is						
ely and sufficient	5	1	5	7	5	--
ficient but not timely	2	--	1	1	--	--
ely but not sufficient	--	5	--	2	1	--
:her sufficient nor timely	5	8	5	6	4	12
tion available to us in this is						
r and relevant	3	2	1	2	2	--
vant not clear	1	3	2	7	--	..
r but not relevant	4	--	5	2	2	--
ıer clear nor relevant	4	9	3	5	6	12
ıess of the deviation between the ınd actual is decided on the						
lifference	4	--	4	--	4	--
ience	2	--	5	3	4	4
ossible	--	--	..	--	--	--

evising the standard	2	3	4	4	2	5
bothered	5	8	3	5	3	2
ing displeasure	5	3	4	7	2	2
other please specify	--	--	--	--	Never done 3	Never done 1
pinion planning and review in our company is						
utine affair	3	8	6	5	4	8
ing games like blaming each r	1	2	--	--	1	2
ussing some other irrelevant gs	4	2	1	3	1	2
p fighting	--	--	--	1	--	--
seriously done	4	2	4	7	4	--
other please specify	--	--	--	--	--	--
hieve the target or not						
n't gain or loose anything	6	3	7	12	4	10
ffects my satisfaction	4	--	2	4	2	--
might express his displeasure	2	10	1	--	4	2
other please specify	--	I feel responsibility	I may loose the job	--	--	--
company costs are reduced by						
ding waste	3	4	2	2	3	2
cious efforts to reduce cost	5	2	5	2	3	--
reative ideas of cost reduction	--	--	--	--	--	--
fferent to cost of production	4	8	4	12	4	10

T.R.W	K.C.L	K.S.O
Debtors	Debtors	Debtors
30.75	9.65	14.33
27.40	11.65	14.64
33.16	13.19	26.74
29.16	7.62	29.59
29.14	9.07	148.53
69.02	11.06	175.70

ncial Statements of T.R.W., K.C.L and K.S.O 1974-75 to 1979-80

K.S.D.P	T.P.I
Year	Closing stock of finished goods	Closing stock of finished goods
1974-75	8.20	28.96
1975-76	14.53	43.94
1976-77	27.42	30.51
1977-78	16.53	25.72
1978-79	13.01	39.80
1979-80	--	34.23

Source: Financial Statements of K.S.D.P and T.P.I from 1974-75 to 1979-80

TABLE 12

Budgeted and Actual Production in T.C.C

(Production in tonnes)

Caustic soda lye		Sodium Hydrosulphite		Sodium Sulphide	
Budgeted	Actual	Budgeted	Actual	Budgeted	Actual
26,000	25,029	1,200	1,261	1,000	478
24,750	23,509	1,200	871	1,000	675
26,800	23,336	1,200	1,127	1,000	680
15,800	17,016	1,200	1,099	6,000	2,343
15,989	14,819	1,200	1,478	9,046	2,314
29,472	20,272	1,200	---	---	---

ets and Financial Statements of T.C.C. from 1971-72 to -77

TABLE 13

Budgeted and Actual Production of T.T.P

Year	Titanium Dioxide Targeted Production	Actual Production
1971	6000	5456
1972	6000	5886
1973	6000	4369

Source : Budgets and Financial Statements of T.T.P

Ilmenite		Rutile		Zircon		Sillimanite		Lexicoxide		Monozite	
udg.	Actu.	Budg.	Actu.	Budg.	Actu.	Budg.	Actu.	Budg.	Actu.	Budg.	Actu.
0300	21564	1500	1656	600	395	---	230	150	242	.110	90
5000	28662	1800	1954	500	154	300	123	250	265	110	43
7000	22155	2400	2030	500	520	300	124	250	113	100	86

udgets and Financial Statements of K.M.M.L.

TABLE 16

Budgeted and Actual Sales Perofrmance of K.M.M.L

(Sales in Tonnes)

Ilmenite		Rutile		Zircon		Sillimanite		Leucoxens		Motor	
udg.	Actu.	Budg.	Actu.	Budg.	Actu.	Budg.	Actu.	Budg.	Actu.	Budg.	Actu.
0000	12269	1500	1325	900	366	7	101	300	108	120	82
0000	25784	2000	177	100	267	100	50	450	189	120	60
5000	21634	2400	1737	1000	377	350	9118	500	48000	120	65

udgets and Financial Statements of K.M.M.L.

Products	Year	Budgeted Production	Actual Productio
Meters:	1973	1,65,000	1,46,790
	1974	1,36,000	1,28,805
	1975	1,38,000	1,42,932
	1976	1,46,590	1,44,208
Oil Immensed Flasters			
(a) OSR	1973	1200	1213
	1974	2400	2015
	1975	1200	350
	1976	600	987
(b) NSD	1973	3600	3081
	1974	3600	3005
	1975	2400	2412
	1976	2400	2762
(c) ATS	1973	480	611
	1974	900	566
	1975	720	414
	1976	600	505
Air break	1973	1800	450
(a) ND	1974	300	235
	1975	600	1025
	1976	1800	31
(b) ASD	1973	600	64

Guaranteed off-take	Actual off-take (Rs. in lakhs)	Value of Short fall	% of actual offtake to guaranteed offtake
60	26.60	33.40	44.3
36	11.08	24.92	30.8
36	2.65	33.35	7.4

t assessed that the working of the three depots
6 and 1976-77 had resulted in a total loss of
(Bombay depot Rs.14.34 lakhs, Madras depot Rs.2.59
ad depot Rs.0.65 lakhs).
t of C & A.G. 1976-77

TABLE 18

wing the budgeted production and actual production of K.S.O.

Tiole..t		Laudries		Carbolic		Sudanes		S.L.D	
d.	Act.	Bud.	Act.	Bud.	Act.	Bud.	Act.	Bud.	Act.
-	227.2	--	120.2	--	265.5	--	125.1	--	62
5	22.9	630	108.9	995	279.3	157	94	100	53
)	81.9	750	301.9	2250	1635	157	9.90	100	57
.50	81.96	543.5	291.0	3375	2127	102.5	65.9	63	47

minimum offtake prescribed for each agent. The actual off-take between the agent was far below the minimum fixed, as indicated in the table below. The company has not levied any penalty for shortfall in the offtake as per the selling agreements

The table showing the shortfall in the performance selling Agents

Agent	Minimum offtake (Rs. in lakhs)	Value of Short-fall			% of shoftfall to the minimum offtake		
		72-73	73-74	74-75	72-73	73-74	74-75
A	5.00	---	0.28	0.58	---	5.6	11.6
B	11.00	6.97	5.07	2.74	63.4	46.1	24.9
C	6.00	5.17	4.91	4.44	86.2	81.3	74.0
D	6.00	3.00	2.78	3.81	50.0	46.3	63.5

Source : Report of C & A.G. 1974-75

TABLE 20

The table showing the budgeted and actual production of K.C.L

Products : Year	Paper Coating (Clay)		Ceramic grade (Clay)		Porcelain unit	
	Budget	Actual	Budget	Actual	Budget	Actual
1975-76	127	11.45	23.16	14.26	31.56	31.23
1976-77	113.64	33.15	26.88	12.88	40.00	24.00
1977-78	173.52	41.23	26.96	13.62	36.95	28.04
1978-79	86.90	37.55	25.95	17.92	50.55	30.01

K.S.O aterial nsumption	K.E.L material consumption	Traco Cables material consumption
45.51	53.92	61.81
14.57	63.56	137.17
73.62	89.13	276.08
94.93	121.21	285.88
186.83	152.24	338.92
333.01	182.17	--

ial Statements of K.S.O., K.E.L. and Cables from 1974-75 to 1979-80.

	PVC 1974-75, 1975-76 (in Kg.)		Lead 1974-75, 1975-76 (in Kg.)	
Quantity of material required as per standard	73,344	51,995	41,461	3,25,407
Wastage allowance at 3%	2,230	1,560	1,244	9,762
Total requirement	76,574	53,555	42,705	3,35,169
Quantity actually consumed	80,279	62,219	50,093	3,38,071
Excess consumption (Percentage)	3,705	8,664	7,388	2,902
	(4.8)	(16.2)	(17.3)	(0.9)
Value of material(allowing for value of scrap) consumed in excess Rs. in lakhs)	0.33	0.70	0.18	0.12

Source: Report of C & A.G. 1975-76, Page-21.

TABLE 27

w indicates the norms fixed by the company, actual r tonne and value of excess consumption of the material, during the three years ending 1973-74.

(T.C.C.)

Standards as per norms fixed	Consumption of raw materials (actuals)	Excess consumption 1971-72, 1972-73 & 1973-74	Value of consumption per tonne (Rs.) 1971-72, 1972-73 and 1973-74
ion e of a lt 1,900	2,090,2,060 & 2,055	0,190,0.160 & 0.155	18.63, 16.27 & 17.49
ion of f sodium te t (Kg)510	536,525,500	26,15, -	136.08, 99.63

TABLE 28

Increasing trend in Rumuneration in K.C.L, T.C.C, and K.S.D.P from 1974-75 to 1979-80

(Rupees in lakhs)

Year	K.C.L. Remuneration	T.C.C. Remuneration	K.S.D.P. Remuneration
1974-75	36.04	115.86	3.89
1975-76	43.04	118.63	14.38
1976-77	44.14	128.48	21.12
1977-78	54.13	151.38	30.76
1978-79	60.11	152.30	34.30
1970-80	63.86	160.45	--

ow indicates the extent of surplus labour
ious categories during the three years
on the basis of actual requirement as per
eport (K.E.L.)

	Structural Division			Transformer Division		
	72-73	73-74	74-75	72-73	73-74	74-75
	4	6	7	4	6	6
l :s	48	36	48	18	13	22
	6	7	10	3	2	5
	58	49	65	25	21	33

l to the surplus labour amounted to Rs. 3.22
04 lakhs during 1972-73, 1973-74 and
tively.

t of C & A.G. 1974-75, Page - 39.

TABLE 31

The Extent of Overtime (T.T.P)

table gives particulars of the amount
ompany towards wages, salaries and allow-
time claims both workmen and staff during
s ending December 1973.

	1971	1972	1973

The following table indicates the overtime allowances paid to the staff as a percentage of total wages bill during the three years ending 1973-74.

	Factory Staff	Admini. Staff	Factory Staff	Admini Staff	Factory Staff	Admini. Staff
Salaries & Wages	33.66	9.71	31.43	8.83	41.18	11.41
Overtime allowance	6.35	1.36	7.20	1.64	9.18	2.32
% of overtime allowance to total salaries	18.86	14.01	22.91	18.57	22.29	20.33

Source : Report of C & A.G., Page -42, 1973-74.

TABLE 32

The Projected and Actual Balance Sheet of T.R.W.

Projected Balance Sheet of for 1977-78

Source of funds	Rs.	Application of funds	Rs.
Share Capital	1,07,95,000	Net Assets	1,44,45,000
Reserves & Surplus	56,000	Investment	5,000
Secured loan from bank	17,00,000	Current assets	54,07,000
Export packing credit	25,00,000	Profit & Loss Account	1,79,31,000
Loan from K.S.I.E.	43,50,000		
Government loan including interest	1,24,76,000		
Current liabilities	59,11,000		

700	413	59%	300	78	26%	260	"	--
"	377	54%	"	62	21%	"	"	--
"	729	104%	"	62	21%	"	"	--
4300	505	12%	"	53	18%	"	"	--
"	2029	47%	"	57	19%	"	"	--
7000	2566	37%	"	47	12%	"	47	18%
7000	4347	62%	"	58	19%	"	70	27%
9000	6079	68%	"	63	21%	"	57	22%

ancial Statements of K.S.O.

TABLE 39

Capacity Utilisation (K.C.L.)

(in tonnes)

Porcelain			China Clay			Spary Dried Koalin		
Installed	Actual	Percentage Utilisation	Installed	Actual	Percentage Utilisation	Installed	Actual	)Percentage Utilisation
450	540	120%	5000	5169	103%	--	--	--
"	510	113%	"	7469	149%	--	--	--
"	594	132%	"	5063	101%	--	--	--
"	602	134%	"	5939	119%	18,000	1559	9%
595	531	89%	"	4962	99%	"	3820	21%
"	564	95%	"	4859	97%	"	5260	29%
"	543	91%	"	5708	114%	"	4237	24%

lled	Actual	Percentage utilisation	Installed	Actual	Percentage utilisation	Installed	Actual	Percentage utilisation	Installed	Actual	Percentage utilisation
00	23,336	70%	3000	1127	38%	1000	680	68%	29,040	23,336	80%
00	22,574	34%	3000	800	27%	2100	621	25%	58,080	19,865	34%
00	21,468	33%	3000	387	13%	"	695	33%	"	18,892	33%
00	29,394	49%	2100	498	24%	"	911	43%	"	25.867	45%
	27,440	46%	"	242	12%	"	573	23%	"	24,147	42%
	26,883	45%	"	352	16%	"	456	22%	"	23,657	41%
	31,002	52%	"	110	5%	"	344	16%	"	27,282	47%

ial Statements of T.C.C.

	TABLETS		CAPSULES		LIQUIDS		INJECTIONABLES						GRANULES	
							BOTTLES		VIALS		AMPOULES			
	Inst-alled	Actual	Inst-alled	Actual	Inst-alled	Actual	Inst-alled	Actual	Inst-alled	Actual	Inst-alled	Actual	Installed	Actual
Nos. in lakhs)														
	2514	972	149	42.63	2.25 litres	0.60	4.50	0.43	15	0.72	60	0.77	--	--
	"	1340	"	119.84	"	1.85	"	2.63	"	5.18	"	21.52	--	--
	"	1481.69	"	76.01	"	1.55	"	2.81	"	8.24	"	15.21	20000 Kg.	6326
	"	1650.52	"	63.03	"	0.79	"	--	"	--	"	14.94		12643
	"	2483	"	85.00	"	1.02	"	3.54	"	5.55	"	15.99	"	4700

inancial Statements of K.S.D.P.

Table - 42

CAPACITY UTILISATION IN K.E.L

Distribution Transformers		Electric Motors		Meter Components		Electrical wiring accessories		C.I. Special and pipes		Contactors/ Starters		Steel Structures	
Inst-alled	Actual	Inst-alled	Actual	Inst-alled	Actual	Inst-alled	ACtual	Inst-alled	Actual	Inst-alled	Actual	Inst-alled	Actual
120000 K.V.A	34916	500 Nos.	258	252000 Nos.	260832	133000	--	240	187	12000	5626	1200 tonnes	600
"	63695	"	172	"	284035	"	24353	"	138	"	3326	"	707
	56685	"	103	"	79271	"	14994	"	127	"	--	"	746
	76837	"	6	"	46266	"	21988	"	129	"	--	"	546
	80028	"	3	"	39312	"	6330	"	41	"		"	303

Actual Kg.	Inst-alled Nos.	Actual Nos.	Inst-alled Nos.	Actual Nos.	Inst-alled Nos.	Actual Nos.	Inst-alled	Actual Mts.	Inst-alled	Actual	Inst-alled	Actual Kg.	Inst-alled	Actual Nos.
1768	1500000	246471	180000	37123	300000	92182	N.F.	48670	N.F	347387	N.F	17356	N.F	243983
23906	"	378422		165712	"	244983		34386		464011		94246		1489
42462	"	466650		--	"	230727		28065		408339		295625		--
34161	"	288918		--	"	85816		24765		30063		378243		372
54012	"	367260		--	"	27059		22853		156123		659289		606
12918	"	347034		--	"	72710		7276		88510		9882		31

ial Statements of T.R.W. N.F = Not Fixed.

Table 44

ITY UTILISATION IN T.S.M

Installed	Actual
	6,68,108 Kg.
	5,89,483 Kg.
	2,99,556 Kg.

	4,85,657 Kg.

Table 45

CAPACITY UTILISATION IN TRAVANCORE SUGARS & CHEMICALS

Year	Installed Capacity	Actual
1973-74	900 tonnes per day	5126 tonnes
1974-75	"	3815 "
1975-76	"	2684 "
1976-77	"	2666 "
1977-78	"	4272 "

(In Tonnes)

ILLIMENITE		RUTILE		SELIMANITE		ZIRCON		BROWN ILLIMENITE		MONOZITE	
Inst-alled	Actual	Inst-alled	Actual	Inst-alled	Actual	Inst-alled	Actual	Inst-alled	Actual	Inst-alled	Actual
16000	19324	2200	1449	1200	8	300	731	149	128	240	126
"	21565	"	1633	"	225	"	377	"	237	"	90
"	22603	"	1954	"	126	"	155	"	265	"	43
25000	22155	2400	2023	"	124	"	521	300	144	"	87
"	23544	"	2052	"	981	"	124	"	83	"	109

cial Statements of K.M.M.L

Table - 47

CAPACITY UTILISATION IN UNITED ELECTRICALS

K.W.H. Meters		Motor G. Gears		L.T. Switchgear		Magneto Generator		11 K.V. Switch gear		Plastic F.C		Electronic items	
Installed	Actual	Inst-alled	Actual	Inst-alled	Actual	Inst-alled	Actual	Inst-alled	Actual	Inst-alled	Actual	Inst-alled	Actual
200000 Nos.	128805	11800	5838	600	129	Not fixed	1019	Not fixed	1019	10 Million Nos.	--	Not fixed	--
"	122620	"	4469	"	81	"	254	"	254	"	0.71	"	878
"	121370	"	4335	"	132	"	766	"	31	"	26.63	"	484
"	115997	"	4445	"	115	"	1522	"	"	"	7.09	"	253
	125010	"	4703	"	164	"	752	"	10	"	7.16	"	62

Sea Food		Ice		Twine		Fish Meal		Canning		Fish Oil		Welbing	
Installed	Actual	Installed	Actual	Installed	Actual	Installed	Actual	Installed	Actual	Installed	Actual	Installed	Actual
30 tonnes per day	557	60 tonnes per day	6684	250 Kg per day	3369	3 tonnes per day	43	10,000 per day	82955	0.8 tonnes per day	3	200 Kg per day	3103
	9546		268		1587		53		29565		9.5		1724
	98		5342		2399		--		--		--		3382
	348		5878		4817		150		--		420		3853
	471		4997		1224		336		--		--		4840

nancial Statements of K.F.C.

Table - 49

CAPACITY UTILISATION IN TRACO CABLES LTD.

YEAR	A.A.C & A.C.S.R		P.V.C.		Telephone Cables	
	Installed	Actual	Installed	Actual	Installed	Actual
1975-76	1500 M.T.	577.245	10.972	7.42	1000 LKM	543

Production (Man hours)			(Production M.T)			Bricks & Tiles (No. Bricks		
alled	Actual	Percentage Utilisation	Year	Installed	Actual	Percentage Utilisation	Year	Installed	Actual	Percent Utilisat
,000 hours	2,42,305	33%	1972-73	5000 M.T.	1070	21%	1972-73	1,20,00,000	42,29,573	35%
"	3,32,640	46%	1973-74	" "	1690	34%	1973-74	" "	26,73,239	23%
"	2,90,400	40%	1974-75	" "	2308	46%	1974-75	" "	25,85,722	22%
"	2,56,096	35%	1975-76	" "	1863	38%	1975-76	" "	5,60,571	5%
"	3,08,488	42%	1976-77	" "	2113	42%	1976-77	" "	94,08,395	78%
"	2,41,316	33%	1977-78	" "	1142	23%	1977-78	" "	50,41,000	42%
"	2,74,368	38%	1978-79	" "	1578	31%	1978-79	" "	55,48,477	46%
"	3,23,408	45%	1979-80	" "	2077	42%	1979-80	" "	82,11,499	68%
cial Statement of F.I.T.			Source: Financial Statements of Chalakudy Refractories.				Source: Financial Statements of Pallathara Bricks & Tiles.			

TABLE 53

Capacity Utilisation (T.P.I)

(Sq.M.M. in lakhs)

Year	Installed	Actual	Percentage Utilisation
1971-72	22.8	8.11	36%
1972-73	"	9.14	40%
1973-74	"	11.91	52%
1974-75	"	12.39	54%
1975-76	"	10.72	47%
1976-77	"	11.53	51%
1977-78	27.38	10.01	37%

TABLE 54

Capacity Utilisation (T.T.P.)

(in Tones)

Year	Installed	Actual	Percentage Utilisation
1970	24,500	4709	19%
1971	"	5456	22%
1972	"	5886	24%
1973	"	4369	18%
1974	"	7611	31%
1975	"	5379	21%
1976	"	9717	40%

Remuneration to Employees / Total cost	Financing charges / Total cost	F.O / Total Cost	A.O / Total Cost	N.P / C.E	N.P / Sales	Sales / C.E	Sales / F.A	Sales / C.A	Cost of goods sold / Sales
---	---	---	---	$\frac{63.05}{740.73}$=.09	$\frac{63.05}{547.63}$=.12	$\frac{547.63}{1230.34}$=.45	$\frac{547.63}{845.02}$=.65	$\frac{547.63}{385.32}$=1.42	$\frac{484.58}{547.63}$=0.88
$\frac{131.75}{576.05}$=23%	$\frac{38.92}{576.05}$=7%	$\frac{274.93}{576.05}$=48%	$\frac{5.30}{576.05}$=1%	$\frac{2.56}{1230.34}$=.003	$\frac{2.56}{598.16}$=.04	$\frac{598.16}{1147.13}$=.52	$\frac{598.16}{716.06}$=.84	$\frac{598.16}{431.07}$=1.39	$\frac{595.60}{598.16}$=1.00
$\frac{151.27}{845.16}$=18%	$\frac{40.44}{845.16}$=5%	$\frac{353.59}{845.16}$=42%	$\frac{8.85}{845.16}$=1%	$\frac{98.83}{1309.85}$=.08	$\frac{98.83}{955.30}$=.10	$\frac{955.30}{1309.85}$=.73	$\frac{955.30}{577.90}$=1.65	$\frac{955.30}{731.95}$=1.31	$\frac{856.47}{955.30}$=.90
$\frac{211.10}{932.30}$=23%	$\frac{36.31}{932.30}$=4%	$\frac{347.05}{932.30}$=37%	$\frac{8.5}{932.30}$=1%	$\frac{42.58}{1309.98}$=.03	$\frac{42.58}{972.04}$=.04	$\frac{972.09}{1309.98}$=.74	$\frac{972.09}{479.39}$=2.03	$\frac{972.09}{830.59}$=1.17	$\frac{929.51}{972.09}$=.96
$\frac{205.67}{926.90}$=22%	$\frac{35.27}{926.90}$=4%	$\frac{319.57}{926.90}$=34%	$\frac{9.83}{926.90}$=1%	$\frac{30.62}{1372.97}$=.02	$\frac{30.62}{983.34}$=.03	$\frac{983.34}{1372.97}$=.72	$\frac{983.34}{444.32}$=2.21	$\frac{983.34}{928.65}$=1.06	$\frac{952.72}{983.34}$=.97
$\frac{242.79}{910.52}$=27%	$\frac{35.17}{910.52}$=4%	$\frac{324.85}{910.52}$=36%	$\frac{11.02}{910.52}$=1%	$\frac{-33.74}{1019.36}$= -	$\frac{-33.74}{871.56}$= -	$\frac{871.56}{1019.36}$=.86	$\frac{871.56}{391.61}$=2.23	$\frac{871.56}{969.40}$=.90	$\frac{900.08}{817.56}$=1.03

s	Sales / Finished goods	Sales / Cash & Bank	Cost of goods sold / Net Work Cap.	Total Raw material consumed / Average Stock	Debt to Equity	Current Ratio	Quick Ratio	Tangible Net Worth / Equity +Res.
54	$\frac{547.63}{63.86}$=8.58	$\frac{547.63}{3.39}$=161.54	$\frac{484.58}{177.35}$=2.73	---	$\frac{667.23}{355.22}$=1.88	$\frac{385.32}{207.97}$=1.85	$\frac{17.6}{207.97}$ .08	$\frac{355.14}{355.22}$=1
73	$\frac{598.16}{44.31}$=13.50	$\frac{598.16}{82.40}$=7.26	$\frac{595.60}{317.97}$=1.87	$\frac{129.58}{13.83}$=1.76	$\frac{698.61}{335.41}$=2.08	$\frac{431.07}{113.10}$=3.87	$\frac{107.61}{113.10}$=.95	$\frac{335.41}{335.41}$=1
92	$\frac{955.30}{33.00}$=28.95	$\frac{955.30}{261.45}$=3.65	$\frac{856.47}{534.01}$=1.60	$\frac{219.42}{68.10}$=3.22	$\frac{628.37}{483.55}$=1.30	$\frac{731.95}{197.94}$=3.70	$\frac{341.59}{197.94}$=1.73	$\frac{483.54}{483.55}$=1
86	$\frac{972.09}{36.10}$=26.98	$\frac{972.09}{209.91}$=4.63	$\frac{929.51}{581.34}$=1.60	$\frac{235.62}{87.83}$=2.68	$\frac{575.03}{502.09}$=1.15	$\frac{830.59}{249.25}$=3.33	$\frac{280.03}{249.25}$=1.12	$\frac{485.2}{502.09}$=.97
45	$\frac{983.34}{10.28}$=95.66	$\frac{983.34}{205.14}$=4.80	$\frac{952.72}{609.03}$=1.56	$\frac{266.65}{98.43}$=2.71	$\frac{552.28}{516.32}$=1.07	$\frac{928.65}{319.62}$=2.91	$\frac{298.86}{319.62}$=.94	$\frac{501.09}{516.32}$=.97

al st	Remuneration to Employees / Total cost	Financing charges / Total cost	F.O / Total cost	A.O / Total cost	N.P / C.E	N.P / Sales	Sales / C.E	Sales / F.A	Sales / C.A	Cost of goods sold / Sales
48%	$\frac{13.02}{128.32}$=10%	$\frac{10.80}{128.32}$=8%	$\frac{3.96}{128.32}$=3%	$\frac{5.78}{128.32}$=4%	$\frac{-1.61}{241.29}$= -	$\frac{-1.61}{86.01}$= -	$\frac{86.01}{241.29}$= .36	$\frac{86.01}{117.74}$= .73	$\frac{86.01}{123.55}$= .70	$\frac{87.60}{86.01}$=1.
70%	$\frac{15.26}{195.58}$=8%	$\frac{15.40}{195.58}$=8%	$\frac{4.07}{195.58}$=2%	$\frac{7.58}{195.58}$=4%	$\frac{+13.81}{266.87}$=+.05	$\frac{+13.81}{210.75}$=+.07	$\frac{210.75}{266.87}$= .79	$\frac{210.75}{108.70}$=1.94	$\frac{210.75}{158.17}$=1.33	$\frac{196.94}{210.76}$=.9
78%	$\frac{16.06}{349.69}$=5%	$\frac{13.77}{349.69}$=4%	$\frac{5.45}{349.69}$=2%	$\frac{8.67}{349.69}$=2%	$\frac{+33.64}{318.30}$=+.11	$\frac{+33.64}{382.70}$=+.09	$\frac{382.70}{318.30}$=1.20	$\frac{382.70}{104.56}$=3.66	$\frac{382.70}{213.74}$=1.79	$\frac{349.06}{382.70}$=.9
81%	$\frac{20.95}{353.9}$=6%	$\frac{10.19}{353.9}$=3%	$\frac{4.24}{353.9}$=1%	$\frac{9.45}{353.9}$=3%	$\frac{+18.28}{315.72}$=+.06	$\frac{+18.28}{369.60}$=+.05	$\frac{369.60}{315.72}$=1.17	$\frac{369.60}{94.41}$=3.91	$\frac{369.60}{221.31}$=1.69	$\frac{351.32}{369.60}$=.9
77%	$\frac{28.36}{459.33}$=6%	$\frac{13.02}{459.33}$=3%	$\frac{5.94}{459.33}$=1%	$\frac{9.55}{459.33}$=2%	$\frac{+17.01}{400.63}$=+.04	$\frac{+17.01}{465.10}$=+.04	$\frac{465.10}{400.63}$=1.16	$\frac{465.10}{85.00}$=5.47	$\frac{465.10}{315.60}$=1.47	$\frac{436.85}{465.10}$=.9

les	Sales / Finished goods	Sales / Cash and Bank	Cost of goods sold / Net wrok Cap.	Total Raw material consumed / Average Stock	Debt to Equity	Current Ratio	Quick Ratio	Tangible Net Worth / Equity + Res.
1.95	$\frac{86.01}{7.57}$ =11.36	$\frac{86.01}{.14}$ = -	$\frac{87.60}{108.73}$= .81	$\frac{61.81}{22.01}$=2.80	$\frac{145.77}{129.44}$=1.13	$\frac{123.55}{14.82}$=8.34	$\frac{44.22}{14.82}$=2.98	$\frac{80.7}{129.44}$ +.62
2.22	$\frac{210.75}{6.21}$ =33.94	$\frac{210.75}{.75}$= -	$\frac{196.94}{117.82}$=1.67	$\frac{137.17}{28.53}$=4.81	$\frac{132.03}{128.97}$=1.02	$\frac{158.17}{40.35}$=3.92	$\frac{95.16}{40.35}$ =2.36	$\frac{94.49}{128.97}$=+.73
3.63	$\frac{382.70}{6.83}$ =56.03	$\frac{382.70}{.15}$= -	$\frac{349.06}{167.09}$=2.09	$\frac{276.08}{38.06}$=7.25	$\frac{146.83}{157.53}$= .93	$\frac{213.74}{46.65}$=4.58	$\frac{105.63}{46.65}$=2.26	$\frac{124.82}{157.53}$=+.79
4.12	$\frac{369.60}{9.41}$ =39.23	$\frac{315.72}{.07}$= -	$\frac{351.32}{153.04}$=2.24	$\frac{285.88}{57.25}$=4.99	$\frac{113.44}{143.43}$= .79	$\frac{221.31}{64.22}$=3.45	$\frac{89.77}{64.22}$ =1.40	$\frac{138.06}{143.43}$=+.96
5.10	$\frac{465.10}{20.65}$ =22.52	$\frac{315.72}{.75}$= -	$\frac{436.85}{195.75}$=2.23	$\frac{338.92}{73.29}$=4.62	$\frac{133.36}{224.84}$= .59	$\frac{315.60}{119.85}$=2.63	$\frac{114.28}{119.85}$= .95	$\frac{147.43}{224.84}$=+.66

al ost	Remuneration to Employees / Total Cost	Financing charges / Total Cost	F.O / Total Cost	A.O / Total Cost	N.P / C.E	N.P / Sales	Sales / C.E	Sales / F.A	Sales / C.A	Cost of goods sold / Sales
4%	$\frac{33.89}{39.31}$=86%	$\frac{1.38}{39.31}$=3%	---	---	$\frac{+2.65}{68.57}$=.04	$\frac{+2.65}{48.13}$=.70	$\frac{48.13}{68.57}$=.70	$\frac{48.13}{27.81}$=1.73	$\frac{48.13}{40.76}$=1.18	$\frac{45.48}{48.13}$=.94
1%	$\frac{32.23}{40.16}$=80%	$\frac{1.21}{40.16}$	---	---	$\frac{+12.28}{114.23}$=.11	$\frac{+12.28}{45.19}$=.27	$\frac{45.19}{114.23}$=.40	$\frac{45.19}{34.27}$=1.36	$\frac{45.19}{79.96}$=.57	$\frac{32.91}{45.19}$=.73
4%	$\frac{29.87}{35.70}$=83%	$\frac{.02}{35.70}$	---	---	$\frac{+30.77}{229.39}$=13	$\frac{+30.77}{70.96}$=.43	$\frac{70.96}{229.39}$=.31	$\frac{70.96}{63.91}$=1.11	$\frac{70.96}{165.48}$=.43	$\frac{40.19}{70.96}$=.57
2%	$\frac{32.31}{55.32}$=58%	$\frac{.03}{55.32}$	---	---	$\frac{+9.16}{680.79}$=.01	$\frac{+9.16}{62.03}$=.15	$\frac{62.03}{680.79}$=.09	$\frac{62.03}{278.86}$=.22	$\frac{62.03}{401.98}$=.15	$\frac{52.27}{62.03}$=.84
	---	51.15	---	---	$\frac{+10.70}{458.23}$=.02	$\frac{+10.70}{65.25}$=.16	$\frac{65.25}{458.23}$=.14	$\frac{65.25}{26.88}$=2.43	$\frac{65.25}{431.35}$=.15	---
	---	122.89	---	---	$\frac{+17.95}{214.61}$=.08	$\frac{+17.95}{79.13}$=.23	$\frac{79.13}{214.61}$=.37	$\frac{79.13}{31.80}$=2.49	$\frac{79.13}{177.81}$=.45	---

es ables	Sales / Finished goods	Sales / Cash & Bank	Cost of goods sold / Net Work Cap.	Total Raw Material consumed / Average Stock	Debt to Equity	Current Ratio	Quick Ratio	Tangible Net Worth / Equity + Res.
4.82	$\frac{48.13}{8.60}$=5.60	$\frac{48.13}{1.54}$=31.25	$\frac{45.48}{13.12}$=3.47	$\frac{1.74}{1.21}$=1.44	---	$\frac{40.76}{27.64}$=1.47	$\frac{11.53}{27.64}$= .43	---
86.90	$\frac{45.19}{15.85}$=2.85	$\frac{45.19}{43.91}$=1.03	$\frac{32.91}{43.91}$= .49	$\frac{.60}{1.37}$= .44	---	$\frac{79.96}{12.66}$=6.32	$\frac{44.43}{12.60}$=3.51	---
10.31	$\frac{70.96}{11.36}$=6.25	$\frac{70.96}{109.43}$= .65	$\frac{40.19}{131.97}$= .30	$\frac{1.39}{1.07}$=1.30	---	$\frac{165.98}{33.51}$=4.95	$\frac{116.31}{33.51}$=3.47	---
5.69	$\frac{62.03}{13.81}$=4.49	$\frac{62.03}{319.34}$= .19	$\frac{52.27}{367.75}$= .14	$\frac{1.24}{1.16}$=1.07	---	$\frac{401.93}{34.38}$=11.69	$\frac{330.24}{34.38}$=9.61	---
10.49	$\frac{65.25}{12.83}$=5.09	$\frac{65.25}{140.00}$= .47	---	$\frac{1.78}{1.10}$=1.62	---	$\frac{431.35}{82.97}$=5.20	---	---

	Remuneration to Employees / Total Cost	Financing charges / Total cost	F.O / Total Cost	A.O / Total Cost	N.P / C.E	N.P / Sales	Sales / C.E	Sales / F.A	Sales / C.A	Cost of goods sold / Sales
6	$\frac{3.89}{74.34}$=.05	$\frac{3.04}{74.34}$ =.04	$\frac{12.31}{74.34}$=.17	$\frac{7.23}{74.34}$=.10	$\frac{+1.66}{90.5}$=.02	$\frac{+1.66}{67.83}$=.02	$\frac{67.83}{90.5}$=.75	$\frac{67.83}{51.01}$ =1.33	$\frac{67.83}{39.49}$=1.72	$\frac{66.17}{67.83}$.98
9	$\frac{14.38}{158.67}$=.10	$\frac{10.96}{158.67}$ =.07	$\frac{11.78}{158.67}$=.07	$\frac{7.65}{158.67}$=.05	$\frac{+2.17}{144.21}$=.02	$\frac{+2.17}{154.51}$=.01	$\frac{154.51}{144.21}$=1.08	$\frac{154.51}{54.01}$ =2.86	$\frac{154.51}{90.20}$=1.71	$\frac{152.34}{154.51}$.99
4	$\frac{21.12}{187.14}$=.11	$\frac{14.66}{187.14}$ =.08	$\frac{10.11}{187.14}$=.05	$\frac{8.02}{187.14}$=.04	$\frac{+3.37}{325.91}$=.01	$\frac{+3.37}{177.62}$=.02	$\frac{177.62}{325.91}$=.54	$\frac{177.62}{57.42}$=3.11	$\frac{177.62}{148.29}$=1.20	$\frac{174.25}{177.62}$.98
5	$\frac{30.76}{313.36}$=.10	$\frac{20.37}{313.36}$ =.07	$\frac{16.01}{313.36}$=.05	$\frac{8.66}{313.36}$=.03	$\frac{+2.25}{254.16}$=.009	$\frac{+2.25}{273.62}$=.008	$\frac{273.62}{254.16}$=1.08	$\frac{273.62}{68.71}$=3.98	$\frac{273.62}{185.45}$=1.48	$\frac{229.4}{273.62}$.84
2	$\frac{34.30}{310.30}$=.11	$\frac{19.73}{310.30}$ =.06	$\frac{15.08}{310.30}$=.05	$\frac{8.75}{310.30}$=.03	$\frac{+2.85}{253.03}$=.01	$\frac{+2.86}{310.61}$=.009	$\frac{310.61}{253.03}$=1.23	$\frac{310.61}{65.96}$=4.71	$\frac{310.61}{187.07}$=1.66	$\frac{305.22}{310.61}$.98

les	Sales / Finished goods	Sales / Cash & Bank	Cost of goods sold / Net work cap.	Total Raw material consumed / Average Stock	Debt to Equity	Current Ratio	Quick Ratio	Tangible Net Worth / Equity +Res.
4.94	$\frac{67.83}{8.20}$= 8.27	$\frac{67.83}{.32}$= -	$\frac{66.17}{26.95}$=2.46	---	$\frac{63.23}{14.87}$=4.25	$\frac{39.44}{}$=3.15	$\frac{3.04}{12.54}$= .28	$\frac{14.73}{14.87}$=.99
.69	$\frac{154.51}{14.53}$=10.63	$\frac{154.51}{.52}$= -	$\frac{152.34}{63.93}$=2.38	$\frac{92.85}{29.07}$=3.19	$\frac{78.14}{41.29}$=1.89	$\frac{90.20}{26.27}$=3.43	$\frac{27.69}{26.27}$=1.37	$\frac{39.80}{41.29}$=.96
.53	$\frac{177.62}{27.42}$=6.42	$\frac{177.62}{.64}$= -	$\frac{174.25}{109.31}$=1.59	$\frac{100.46}{46.08}$=2.18	$\frac{126.64}{42.87}$=2.95	$\frac{148.29}{38.39}$=3.81	$\frac{27.85}{38.89}$= .72	$\frac{39.84}{42.87}$=.93
.94	$\frac{273.62}{16.53}$=16.55	$\frac{273.62}{10.32}$=26.51	$\frac{229.4}{128.62}$=1.78	$\frac{110.63}{55.86}$=1.98	$\frac{81.74}{107.66}$=0.76	$\frac{185.45}{81.31}$=2.28	$\frac{79.71}{81.31}$=0.98	$\frac{76.32}{107.66}$=.71
32	$\frac{310.61}{13.01}$=23.87	$\frac{310.61}{30.80}$=10.08	$\frac{305.22}{130.24}$=2.34	$\frac{131.46}{60.84}$=2.16	$\frac{121.01}{159.41}$=0.76	$\frac{187.07}{56.83}$=3.29	$\frac{102.73}{56.83}$=1.81	$\frac{89.95}{159.41}$=.5

---	---	---	---	$\frac{-3.32}{30.79}$=.11	$\frac{-3.32}{.23}$=14.43	$\frac{.23}{30.79}$=7.47	$\frac{.23}{9.24}$= .02	$\frac{.23}{21.55}$=.01	$\frac{3.55}{0.23}$=15.43	
$\frac{13.54}{67.73}$= 20%	$\frac{.83}{67.73}$= 1%	$\frac{2.23}{67.73}$= 3%	$\frac{.50}{67.73}$= 1%	$\frac{-1.49}{40.99}$= .04	$\frac{-1.49}{64.63}$= .02	$\frac{64.63}{40.99}$=1.58	$\frac{64.63}{8.50}$=7.60	$\frac{64.63}{32.44}$=1.99	$\frac{66.12}{33.63}$=1.02	
$\frac{11.32}{43.52}$= 26%	$\frac{1.79}{43.52}$= 4%	$\frac{2.78}{43.52}$= 6%	$\frac{.81}{43.52}$= 2%	$\frac{-9.22}{50.30}$= .18	$\frac{-9.22}{29}$= .32	$\frac{29.00}{50.30}$= .58	$\frac{29.00}{16.06}$=1.81	$\frac{29.00}{34.24}$=.85	$\frac{38.22}{29.60}$=1.32	
$\frac{17.42}{48.03}$= 36%	$\frac{1.96}{48.03}$= 4%	$\frac{2.24}{48.03}$= 5%	$\frac{1.23}{48.03}$= 3%	$\frac{3.53}{60.98}$= .06	$\frac{3.53}{54.54}$= .06	$\frac{54.54}{60.98}$= .89	$\frac{54.54}{19.24}$=2.83	$\frac{54.54}{41.74}$=1.31	$\frac{51.01}{54.54}$= .94	
$\frac{14.30}{53.49}$= 27%	$\frac{2.13}{53.49}$= 4%	$\frac{4.26}{53.49}$= 8%	$\frac{1.25}{53.49}$= 2%	$\frac{5.65}{55.13}$= .10	$\frac{5.65}{46.05}$= .12	$\frac{46.05}{55.13}$= .84	$\frac{46.05}{22.2}$=2.07	$\frac{46.05}{32.93}$=1.40	$\frac{40.40}{46.05}$= .88	
$\frac{22.35}{59.24}$= 38%	$\frac{2.66}{59.24}$= 4%	$\frac{4.03}{59.24}$= 7%	$\frac{1.71}{59.24}$= 3%	$\frac{1.97}{74.12}$= .03	$\frac{1.97}{70.80}$= .03	$\frac{70.80}{74.12}$= .96	$\frac{70.80}{21.98}$=3.34	$\frac{70.80}{52.14}$=1.36	$\frac{68.80}{70.80}$= .97	
$\frac{18.72}{53.07}$= 35%	$\frac{2.96}{53.07}$= 6%	$\frac{3.76}{53.07}$=7%	$\frac{2.10}{53.07}$= 4%	$\frac{-.38}{87.62}$=4.34	$\frac{-.38}{44.08}$= .62	$\frac{44.08}{87.62}$= .50	$\frac{44.08}{21.62}$=2.04	$\frac{44.08}{66.00}$= .67	$\frac{44.46}{44.08}$=1.01	
$\frac{16.79}{55.26}$= 30%	$\frac{3.31}{55.26}$= 6%	$\frac{3.23}{55.26}$= 6%	$\frac{2.91}{55.26}$= 5%	$\frac{3.63}{98.28}$= 4%	$\frac{3.63}{63.28}$= 6%	$\frac{63.08}{98.28}$= .64	$\frac{63.08}{21.93}$=2.88	$\frac{63.08}{76.35}$= .83	$\frac{63.64}{63.08}$=1.01	
$\frac{18.87}{44.61}$= 42%	$\frac{2.95}{44.61}$= 6%	$\frac{3.02}{44.61}$= 7%	$\frac{2.50}{44.61}$= 6%	$\frac{3.06}{108.34}$= 3%	$\frac{3.06}{54.26}$= 6%	$\frac{54.26}{108.34}$= .50	$\frac{54.26}{21.79}$=2.49	$\frac{54.26}{86.55}$= .63	$\frac{57.79}{54.26}$=1.07	

Sales / Finished goods	Sales / Cash & Bank	Cost of goods Sold / Net Wrok Cap.	Total Raw material consumed / Average Stock	Debt to Equity	Current Ratio	Quick Ratio	Tangible Net Worth / Equity + Res.
$\frac{.23}{5.73}$= .04	$\frac{.23}{.52}$=.44	$\frac{3.55}{14.03}$= .25	---	$\frac{9.84}{18.76}$= .52	$\frac{9.23}{2.52}$=1.23	$\frac{21.55}{7.52}$=2.87	$\frac{13.43}{18.76}$= .72
$\frac{64.63}{7.39}$ =8.75	$\frac{64.63}{1.87}$=34.56	$\frac{66.12}{11.91}$ =5.55	$\frac{15.38}{5.07}$=3.03	$\frac{9.62}{18.28}$= .53	$\frac{12.32}{20.58}$= .60	$\frac{32.44}{20.58}$=1.58	$\frac{16.79}{18.59}$= .59
$\frac{29.00}{12.69}$ =2.29	$\frac{29.00}{.61}$=47.54	$\frac{38.22}{16.4}$ =2.33	$\frac{20.17}{6.70}$=3.01	$\frac{25.15}{17.94}$=1.40	$\frac{8.35}{17.84}$= .47	$\frac{34.24}{17.84}$=1.92	$\frac{7.31}{17.94}$= 41
$\frac{54.54}{9.71}$ =5.62	$\frac{54.54}{6.92}$=7.88	$\frac{51.01}{18.92}$ =2.75	$\frac{22.09}{5.67}$=3.90	$\frac{24.95}{19.27}$=1.29	$\frac{16.98}{23.52}$= .72	$\frac{41.74}{23.52}$=1.77	$\frac{12.51}{19.27}$= .65
$\frac{46.05}{22.80}$ =5.62	$\frac{46.05}{7.38}$=6.24	$\frac{40.4}{-50.49}$ = .80	$\frac{23.37}{5.02}$=4.66	$\frac{27.55}{19.6}$=1.91	$\frac{22.32}{83.92}$= .27	$\frac{32.93}{83.92}$= .39	$\frac{-95.7}{19.60}$=-4.88
$\frac{70.80}{13.21}$ =5.36	$\frac{70.80}{3.25}$=21.78	$\frac{68.83}{22.02}$ =3.13	$\frac{22.31}{4.59}$=4.86	$\frac{33.09}{20.03}$=1.65	$\frac{28.34}{30.12}$= .94	$\frac{52.14}{30.12}$=1.73	$\frac{16.91}{20.03}$= .54
$\frac{44.08}{21.82}$ =2.02	$\frac{44.08}{4.46}$=9.88	$\frac{44.46}{32.53}$ =1.37	$\frac{18.99}{5.10}$=3.72	$\frac{35.35}{19.29}$=1.83	$\frac{25.2}{33.47}$= .75	$\frac{66}{33.47}$=1.97	$\frac{18.8}{19.29}$=

---	---	---	$\frac{-26.02}{718.36}$=-	$\frac{-26.02}{378.30}$=-	$\frac{378.30}{718.36}$=.53	$\frac{378.30}{475.16}$=.80	$\frac{378.30}{243.20}$=1.56	$\frac{404.32}{378.30}$=1.07	=22%
$\frac{18.42}{463.73}$= 4%	$\frac{180.08}{463.73}$=39%	$\frac{6.7}{463.73}$= 1%	$\frac{-10.60}{984.24}$=-	$\frac{-10.60}{453.09}$=-	$\frac{453.09}{984.24}$=.46	$\frac{453.09}{624.09}$=.73	$\frac{453.09}{365.15}$=1.24	$\frac{463.69}{453.09}$=1.02	=24%
$\frac{20.17}{488.91}$= 4%	$\frac{187.47}{488.91}$=38%	$\frac{6.14}{488.91}$= 1%	$\frac{-14.34}{1741.49}$=-	$\frac{-14.34}{467.49}$=-	$\frac{467.49}{1741.95}$=.27	$\frac{467.49}{1369.33}$=.34	$\frac{467.49}{372.62}$=1.25	$\frac{481.83}{467.49}$=1.03	=21%
$\frac{65.15}{577.43}$=11%	$\frac{282.93}{577.43}$=49%	$\frac{8.29}{577.43}$= 1%	$\frac{-134.18}{2053.87}$=-	$\frac{-134.18}{417.17}$=-	$\frac{417.17}{2053.87}$=.20	$\frac{417.17}{1512.16}$=.28	$\frac{417.17}{541.71}$=.77	$\frac{551.35}{417.17}$=1.32	=14%
$\frac{150.51}{889.18}$=17%	$\frac{423.06}{889.18}$=48%	$\frac{10.12}{889.18}$ = 1%	$\frac{-267.08}{1950}$=-	$\frac{-267.08}{606.67}$=-	$\frac{606.67}{1950.00}$=.31	$\frac{606.67}{1412.55}$=.43	$\frac{606.67}{537.45}$=1.13	$\frac{867.55}{606.67}$=1.43	=18%
$\frac{158.39}{828.20}$=19%	$\frac{378.06}{828.20}$=46%	$\frac{9.51}{828.20}$ = 1%	$\frac{-258.65}{1799.2}$=-	$\frac{-258.65}{585.00}$=-	$\frac{585.00}{1799.2}$=.33	$\frac{585.00}{1336.20}$=.44	$\frac{585.00}{463.00}$=1.26	$\frac{843.68}{585.00}$=1.44	=17%
$\frac{168.89}{873.55}$=19%	$\frac{323.56}{873.55}$=37%	$\frac{22.33}{873.55}$ = 3%	$\frac{-134.24}{1584.66}$=-	$\frac{-134.24}{737.83}$=-	$\frac{737.83}{1589.66}$=.46	$\frac{737.83}{1003.91}$=.73	$\frac{737.83}{585.72}$=1.26	$\frac{870.59}{737.83}$=1.18	=17%
$\frac{172.03}{1019.78}$=17%	$\frac{423.56}{1019.78}$=42%	$\frac{19.63}{1019.78}$ =2%	$\frac{+4.70}{1575.27}$=-	$\frac{+4.70}{1025.69}$=-	$\frac{1025.69}{1575.27}$=.65	$\frac{1025.69}{902.97}$=1.14	$\frac{1025.62}{672.30}$=1.53	$\frac{1022.20}{1025.63}$=1.00	=16%

Sales / nished goods	Sales / Cash & Bank	Cost of goods sold / Net work cap.	Total Raw material consumed / Average Stock	Debt to Equity	Current Ratio	Quick Ratio	Tangible Net Worth / Equity+ Res.
$\frac{78.30}{2.93}$=129.11	$\frac{378.30}{75.75}$=4.99	$\frac{404.32}{151.02}$2.68	---	$\frac{186.69}{422.68}$= .44	$\frac{243.20}{92.18}$=2.64	$\frac{137.73}{92.18}$=1.49	$\frac{439.49}{422.68}$=1.04
$\frac{53.09}{3.01}$=150.53	$\frac{453.09}{40.14}$=11.29	$\frac{463.69}{211.25}$=2.19	$\frac{152.00}{33.19}$=4.58	$\frac{417.35}{421.68}$= .99	$\frac{365.15}{153.90}$=2.37	$\frac{115.90}{153.90}$= .75	$\frac{413.01}{421.68}$= .98
$\frac{67.49}{17.09}$=27.35	$\frac{467.49}{7.44}$=68.23	$\frac{481.83}{79.69}$=6.05	$\frac{169.77}{34.63}$=4.90	$\frac{1001.79}{478.44}$=2.09	$\frac{372.62}{292.93}$=1.27	$\frac{95.52}{292.93}$= .33	$\frac{447.23}{478.44}$= .93
$\frac{17.17}{55.16}$=7.57	$\frac{417.17}{7.93}$=52.66	$\frac{551.35}{154.52}$=3.57	$\frac{128.69}{37.01}$=3.48	$\frac{1225.41}{740.99}$=1.65	$\frac{541.73}{387.19}$=1.40	$\frac{119.63}{387.19}$= .31	$\frac{361.27}{740.99}$= .49
$\frac{06.67}{47.96}$=12.52	$\frac{606.67}{7.54}$=80.46	$\frac{867.75}{190.22}$=4.56	$\frac{183.65}{39.46}$=4.65	$\frac{1359.92}{635.14}$=2.14	$\frac{537.45}{347.23}$=1.55	$\frac{140.13}{347.23}$= .40	$\frac{242.85}{635.14}$= .67
$\frac{85.00}{24.26}$=24.11	$\frac{585.00}{5.99}$=97.66	$\frac{843.68}{148.93}$=5.66	$\frac{150.10}{29.3}$=5.12	$\frac{1492.00}{635.14}$=2.40	$\frac{463.00}{314.07}$=1.47	$\frac{139.94}{314.07}$= .45	$\frac{-14.8}{635.14}$= -
$\frac{37.83}{25.74}$=28.66	$\frac{737.83}{11.64}$=63.39	$\frac{870.59}{342.12}$=2.55	$\frac{170.90}{37.40}$=4.57	$\frac{1734.08}{635.14}$=2.73	$\frac{585.72}{243.60}$=2.40	$\frac{190.49}{243.60}$= .78	$\frac{-378.02}{635.14}$= -

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