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CONCLUSION
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In the preceding chapters we have made the studies about the various facets of project appraisal techniques and pitfalls in project management. In this chapter which comes to the end of our dissertation an attempt is made to join together the scattered thread of analysis, so that the whole ground already covered is taken at a glance. This will help in building of a neat profile of what has been done in connection with application of the project management principles.

8.1. INTRODUCTION:

In post liberalisation era and growing global competitiveness, India can only lift herself by adopting a project approach for development. In this context, the study of project management presents a systematic analysis. Rapid industrialisation calls for investing resources which can be analysed and appraised reasonably and independently. In this sense project is an important component of economic development. This dissertation is primarily concerned with appraisal and implementation of investment projects. Although the objective of investment decision is maximisation of the market value of equity, it becomes secondary when a project is being appraised from the larger social point of view. The study of project management acquires greater importance in accelerating the process of industrialisation in particular and economy in general.

In a developing economy like India, infrastructure as become top priority. Economic growth is fast outstripping infrastructure and this predicament could stall future development if not redressed and corrected in the next few years. Nearly every category of
infrastructure is wanting, be it telecommunications, power generation, airports, seaports, water supply and sewage disposal, urban roads or rural highways. India needs more of all these, and needs them fast, to achieve and sustain the desired level of growth. The financial requirements of infrastructure sector are estimated to be of the order of Rs 24,50,000 crores. Pricing and cost recovery, generating new sources of revenues to finance this infrastructure, are some of the areas where the experts can provide workable solutions. The 1992 United Nations Conference on environment and development helped to post sustainable development on the agenda. As a result, environmental consideration plays a more significant role in development projects, particularly those relating to infrastructure and especially if they are funded by international lending agencies such as the World Bank and Asian Development Bank.

India is a rapidly transforming region. To talk of development before transformation has taken place is to put the cart before the horse. The transformation process is under way, and the pace is more rapid than anything the industrialised world has experienced. The real challenge of development is to help make this happen.

A key concern is that the country obtains the full benefits from the substantial investments in infrastructure. Our experience, as well as research regarding infrastructure development, points to the conclusion that institutional issues especially those issues concerning the relating roles of government and the private sector, and the structure of incentives- are the key performance in these sectors. During the last 15 to 20
years, international experience with reform and restructuring of infrastructure activities has been growing rapidly

8.2 THE CASE STUDIES:

The present study is basically concerns about the applicability of the comparative project appraisal techniques in various industries of Orissa. Orissa is an industrially backward state and the Government of Orissa has been trying hard to lure the investors for setting up new industries both in small and large scale sectors. The Government has announced various incentive schemes and concessions. The government has also set up several institutions for promoting industry in private, public and joint sectors. The government has created industrial estates in different areas of the state. The banks and other financial institutions are also responding to the government's call in helping the potential promoters. The promoter(s) has to come forward with a concrete proposal in the form of a project report. The project report has to be prepared with much case by taking into consideration the various technical, financial, marketing considerations. They use various appraisal techniques. The financial institutions also use the appraisal techniques to assess the worthiness of the project. In case of large projects, where the services of a merchant banker are requisitioned, the banker also appraises the project.

In spite of the different type of appraisals taking place at various stages and by different bodies, it has been observed that many a projects have been closed or are on the verge of closure or are perennially sick. There are very few projects, which can be truly called an successful project. The scenario is even worse in case of Public sector.
projects. All these factors were responsible to assess the application of project appraisal techniques and to find out the reasons which have led to the failure of many projects.

To highlight the practical behaviour in this connection, nine case studies reviewing the various aspects of project appraisal techniques among the selected industries of Orissa are done. The discussion is confined to Orissa context. The industries covered are as follows:

Case A Mining
Case B Textile
Case C Rubber
Case D Consumer Durable
Case E Engineering
Case F Plastic
Case G Food Processing
Case H Paper
Case I Agro

This study highlights on the effective project planning, implementation, monitoring and evaluation by private sector sample industrial projects. In contrast to the above, the public sector projects have not availed of proper and adequate project planning, implementation monitoring and evaluation Machinery. The joint sector projects fairly plan, implement, monitor and evaluate their projects when compared to public sector projects. It could be inferred that the medium project managers plan and implement their
projects to a possible extent but they were facing constraints in applying more sophisticated and Modern Project Management strategies owing to dearth of adequate investment. The performance evaluation of the sample projects has been studied and judged from the following angle viz., performance evaluation in terms of promotion of projects, successful promotion and implementation of industrial projects.

In connection with the case studies we met and sought the views of most of the officers, employees and staff of the unit as well as the vendors, suppliers, subcontractors, industrial consumers, bankers, financiers and other relevant to the study. We elicited their views in the form of a questionnaire. We also studied the manuals, procedures, systems and relevant files of the units and also attended some of the coordination committee meetings. In most of the cases, we got full co-operation from these quarters with an understanding of confidentiality about the organisations and a certain important data.

8.3 FINDINGS

The major findings of the study are summarised in the following paragraphs.

- The study of comparative evaluation of industrial projects clearly illustrates that the private sector projects had better project management performance in terms of minimum project gestation period, higher successful growth of industrial projects, minimum time and cost overruns and finally better financial management performance. The joint sector projects and moderate performance, when compared
to private sector projects. The minimal performance of industrial projects of public sector and medium projects are on account of ineffective Project Management performance, higher cost and time overruns, longer gestation period of project implementation and higher growth rate of weak projects.

- Factor analysis clearly portrays, inter-relationship of internal and external factors and it also emphasises that these factors work in relation with group mechanism study, it could be elucidated that both internal and external factors play a vital role in the matter of constructive, effective and efficient project management performance for successful implementation of projects.

- The average overrun for all the projects had been 30% of the initial project costs. The average delay in implementation was 10 months. The large projects had higher cost and time overrun. The medium projects had lower cost overrun and longer time delay.

- In the entrepreneurial classification of projects, projects promoted by new entrepreneurs had higher cost overrun of 32% and longer time overrun of 19 months. The projects promoted by existing entrepreneurs had minimum cost overrun of 20% and the time delay of 9 months.

- The Public sector projects were more vulnerable to cost and time overruns compared to private and joint sector projects.
• The performance analysis of overrun projects reveals that there is higher and significant variation between successful and weak projects. It is observed that the cost overrun of weak projects is 39% and above.

• It has been proved that the time and cost overruns are not moving in unison. This has been proved for various categories of sample projects. However, the exceptions are MRTP Projects, modernisation projects and expansion projects.

• They are two types of cost overrun causes viz., primary and secondary. The primary cost overrun causes are the escalation in the cost of imported plant and machinery, increasing cost of indigenous plant and machinery and rise in the pre-operative expenses thereof. The secondary causes are the hike in cost of land and buildings, escalation in the technical know-how fees, increasing cost of miscellaneous fixed assets and extra margin money for working capital requirements thereof.

• The time overrun causes are broadly physical factors, legal hindrances and clearances. The physical factors have been categorised as primary and secondary. The time overrun causes due to primary physical factors are delay in receipt of machinery changes in project concept, changes in project location, changes, in project layout technology and late supply of technical know-how. The secondary physical of construction materials, delay in typing-up of financial arrangement, power shortage and project management deficiency etc.
The study of impact of cost overrun analysis indicates that the liquidity, profitability and solvency position are declined in sample industrial projects. The impact of time overrun analysis clearly identifies that the time overrun for industrial sample projects has resulted in loss of production, loss of revenue and loss of profits etc.

- This study reveals that the industrial sample projects suffer heavily due to overruns time and cost. The study identifies that the important project management problem areas are faulty project planning, unrealistic estimation of project cost and undue delay in clearance by Government Departments.

- The assistance supplied by the parent units to the ancillaries was in the form of supply of raw materials, technical know-how and little bit financial help. The nature and extent of the help was industry specific. Regarding the quality of the products supplied by the ancillaries, it was found that on the whole the parent units were satisfied with the quality and found no problem that may discourage them to contract out a part of their work to ancillaries.

- The lead time in the decision making process till awarding the contract is considerably high in case of some projects, specially in mining and paper due to social, political, technological, competitive, regulatory and environmental consideration. Even though all the Senior Executives are consulted and associated with the discussion on the feasibility of project, detail project reports, cost benefit
analysis, pay-back period, technical collaboration, maintainability and credibility of suppliers etc., the final decision is taken by the chairman and the head of finance.

- The manufacturing, transporting and inspection lead time, after the award of contract till the commissioning of the plant, is considerable sometimes extending up to three years in few cases. In view of the long lead time, disputes arise with regard to the payment, particularly, because of the fluctuating foreign currency equivalent of rupee values and global inflational escalation price spiral. The foreigner supplier generally insists on payment after completion of each stage of fabrication of manufacturing.

- The study reveals that there is poor communication and co-ordination between the different parties in the game, namely the equipment manufacturers, the sub-contractors, fabricators, inspection, insurance, transporters, purchase, follow-up and stores.

- Inspite of continuous monitoring, sometimes the equipment is damaged and corroded due to marine transportation and it takes a long time for the insurers to settle the amount. Fresh equipments are to be reordered delay in the plant operations resulting in cost over run and time overrun. Sometimes instructions on safety handling and technical catalogue are not complete. Occasionally, the operating manual in English language is not available.
The temporary staff involved in materials handling, construction, sons of the soil on which the project is located, and contractors' labourers insist on getting permanent appointments as soon as the project is commissioned.

The stipulated capacity utilisation by the manufacturers and the guarantees offered by them remain theoretical only on paper. The manipulation of capacity-by specifying fine paper and producing paper board, thereby capacity for productivity awards - is well-known in India.

A major irritant is the providing of drawing for critical spares, and invariably the original equipment manufacturer refuses to give the drawings. The pre-qualification of foreign suppliers, is a tough assignment, which cannot be done without visiting them and such visits, known as foreign jaursats, are usually disallowed by the finance. This is also disallowed in case of indigenous suppliers on ethical grounds. The bid evaluation criteria - either single bid or two bid system basis- is not fully scientific, since only few suppliers respond to the notice inviting tenders. The established and renounced suppliers ignore the invitation for tenders. The make/buy/lease criteria are only a theoretical exercise, since many foreign agencies are interested in quoting only on turn-key basis of supply-cum-erection - cum-commissioning contract. The suppliers do not take the risk of the company buying from different sources or making the assemblies in the workshop of the plant.
Even though the contract mentions penalty, liquidity damage, fall clause, risk purchase, it is difficult to practise as the adjudication process is time consuming.

The suppliers do not give the reliability of the equipment/part/subassemblies/assemblies as they do not get the same from their subcontractors. Another complex area is the supplier dumping unwanted, slow moving spares, as mandatory spares. This usually increases the quantity of obsolete spares. The supplier does not agree to operation of buyback clauses for such spares. The recommended part list for the first initial overhauling are too costly and high volume replacement for the Indian culture, but, no one wants to take any risk. The service after sales during the warrantee period desires much to be improved, and the suppliers' agents do not attend to the faults immediately.

Even though network diagrams have been made for all the jobs—from planning and project to commissioning the equipment—the chart serves only as a good wallpaper since all activities consume extra time with several paths becoming critical simultaneously. It is humanly impossible to update all the activities.

The validity of the contract period, changes in the contract, agency for disputes, etc, are not sometimes specified in the contract.

The life-cycle costing is not given by many suppliers as according to them, the life varies with economic life, tax life, technological life, operating life, physical life, which in turn depends upon the maintenance system/documentation and policy of
- the company, as it is usual to prolong the life of equipments in Indian culture due to scarcity of capital.

- The different phases of contract manager and project management are conceived by the professionals of the company as-Enthusiasm-Dissillusion-LCP system on cost and quality-delays-punish innocent and reward unconnected

Eventhough the standard set of ratios have been recommended for liquidity, Debt Equity and Debt Service Coverage. These are not applicable for all units at all time. There are several cases were the difference between the standard and actual ratios differ. Therefore the standard ratios as such cannot be used as a tool of appraisal. The other factors have to be considered Further which ratios are relevant under the specific circumstance or for a specific unit depends on the objective with which the ratio is worked out and the opinion of the analyst. The norms for the ratio also differ for different industrial groups. The financial analyst works out a fresh set of standard ratio for his group. The normal Debt-Equity Ratio is total long term debt to total equity is 2 : 1 However a higher Debt Equity Ratio is used in capital intensive projects and lower in case of other projects A current ratio of 2 : 1 is also not safe at times. It substantial amount of current liabilities are to be liquidated in the immediate future and only 10 to 20 per cent of current assets can be converted into cash by that time. The liquidity of the unit will be really threaten if the payment of such liabilities cannot be postponed and there exists no other source for raising funds.
Even though the DSCR is projected as satisfactory by all the units of the study, a discussion with the financiers reveal that more than 75 per cent of the unit were making default in repayment of interest and principal. The repayment schedule originally shown by them in project report is not adhered to. About 50 per cent of the units have approached the financial institutions to redraft the repayment schedule or to make final settlement by waving the interest payment.

The Break Even Point (BEP) of most of the units under the study range between 40 to 70 per cent of the installed capacity. Since the BEP depends on the estimated figures of sales and cost, it was observed that there were divergence between the estimated and actual BEP. The actual BEP was more due to poor estimate and cost overrun.

The study reveals that the cash flows (Fund Flows) prepared by the units, submitted with the project report have high degree of accuracy level for the outflows. However, in case of inflows, the budgeted and actual figures have often differed.

Tax concessions namely Income-tax, Central Excise and Sales Tax have played a very important role in influencing the investment decisions of the unit.

The decision making in relation to project proposal may be either to except or to reject or to select the best out of several alternatives available. From among the various techniques of financial appraisal, it was observed that large scale unit in both public and private sector have employed both traditional and modern techniques. However, for the
small projects, all the units employed only pay back period method. This is primarily due to the simplicity of the method. We feel that investment decision on the basis of DCF techniques are not that relevant for small projects in Indian conditions. This is due to the following reasons:

a. The sources of borrowed funds are controlled directly or indirectly by the Government causing a continuous change in Debt Equity Ratio. This results into a change in the weighted average cost of capital.

b. The tax concessions and depreciation rates available and tax status of the investing company also affects the after tax return considerably. The present reduction in the corporate income tax rate is pointer in this direction.

c. The Debt Equity Ratio (DER) for different projects can also be different because of the difference in the cost of borrowed funds. Some projects are entitled to lower interest rates and other payment concessions. This also reduces the weighted average cost of capital.

- The study reveals that the small sector unit do not make sensitivity analysis nor they make SWOT (Strength, Weakness, Opportunity, Threat) analysis. This probably the main reason why many such projects have become damp squib.

8.4 SUGGESTIONS:

- A project is a specific activity on which money is spent in the expectation of returns. Every project has three basic attributes: the input characteristics, output characteristics, and the social cost benefit characteristics. The input requirement of
the project includes raw materials, energy, manpower, financial resources and an organisational set-up. It is necessary to evaluate the nature as well as magnitude of each of these essential inputs. The project output may take the shape of production of goods and/or services. It is essential to have a broad idea about the quantitative and qualitative aspect of output.

- An appraisal of the project must be carried out in explicit, well defined preferably standardised terms and should be based on sound economic logic. Informal and cursory treatment should give way to thorough and rigorous analysis. Project appraisal not only brings credibility to a project, it also protects it from in-built weaknesses.

- A project, be it a gigantic scheme like a multipurpose river valley project or a venture of small investment, it provides enough details and analysis of technical, financial, marketing and economic aspects. It contains plans and programmes for implementation. It comprises of several stages with sub-projects interwoven and interlinked. A sound project will definitely work towards economic development.

- The problems and risks facing each project are unique. It is not possible to prescribe a standard format. The selection of project risks to be presented must thus be based on the appraisal mission's judgement. Nevertheless, the discussion of the project risks in the appraisal report should be concise and brief.

- Regulations governing the small scale industry both protective as well as promotional have to be strictly adhered to and complied with.
regulations call for detailed and exhaustive information regarding the proposed unit. These information the entrepreneur has to give to the Director of Industries, to the National Small Industries Corporation, to financial institutions and to the government. The entrepreneur has to follow the regulations governing the various schemes as they are in his own interest and in the interest of the public.

- Project design and network analysis are effective tools of management to achieve the objectives of the project. Network analysis could raise timely warning to management and efforts could be made on that basis to eradicate the problems. The case studies suggest that network analysis can provide radar-like sensitivities, raising signals and indicating directions for managerial action. The function of planning, scheduling, and controlling are essential for execution of a project. Network techniques help the management of the organisation in performing all these functions more efficiently. Orissa entrepreneurs from the large project segment of the case studies have used the network techniques of PERT and CPM to a considerable extent. The schedule of construction furnished by the promoters of the project in most cases simply indicate the period within which major items of project implementation like acquisition of land and site preparation, commencement and completion of civil construction, placing of orders and delivery of imported and indigenous machinery and commencement of commercial production. The above schedule neither provides any indication of relationship between the various operations nor does it show the extent to which delays in a
particular operation would affect the remainder project duration time in comparative appraisal of ideas. Both the techniques of PERT & CPM are complimentary and beneficial in implementing the project.

- Project appraisal is a science as well as an art. While the basic principles of appraisal could be mastered in a short time span, the successful practice of the art of carrying out the appraisal requires keen observation, a knack for details, objectivity, decision making. It is also necessary to look ahead of the project. Project appraisal is a key to broad-based, balanced industrial growth of the country. It calls for a judicious judgement and perspective outlook.

- Among other things, the entrepreneur has to give special emphasis to the location of his project, equipment and layout to derive maximum benefits. Selection of site and equipment is governed by various variables. Taking into consideration all these aspects, the entrepreneur has to select the site and equipment for his enterprise.

- The selection of the most economical site is possible where an entrepreneur prepares a comparative cost statements, taking into account the different sites available. Recent trends in plant locations are:

1. to locate plants away from cities
2. the development of industrial estates
3. competition among states to develop industries
4. clamour for decentralisation
5. pollution control
Location of an industrial enterprise plays an important role in the development of the industry in terms of cost structure, growth potential and profitability of an enterprise. An optimum location is essentially an idealistic concept, it is difficult to obtain and still more difficult to retain. Taking into consideration the ground realities and the basic needs of an enterprise, the entrepreneur has to select the best among the lot and then develops the area as he needs it to be. In fact, location is a most important factor next only to the choice of an industry, in laying a sound foundation for an industrial enterprise. A critical evaluation of the industrial location policies reveals that a thorough overhauling is required in the approach towards location of industries based on economies of scale and marketing.

In the years ahead, industrial location will be guided primarily by commercial considerations and sustainability rather than by regulatory or social demands alone. An investment does not maximise the generation of surpluses cannot contribute to the country's social goals. Thus, location in backward regions where there is a great deal of willingness and native skills among the first generation workers provides very attractive scenario to the decaying environment of cities where industry has been traditionally located.

The success of an enterprise to a greater extent depends upon the factory design and layout. The location, layout, amenities will influence productivity and facilitate...
better management. More importantly, the efficiency of the production flow depends largely on how well the various machines, production facilities and employee amenities are located in a plant. In a properly laid out plant, the movement of materials, from the raw material stage to the end product stage, is smooth and rapid, the movement is generally in forward direction, the materials do not criss-cross, or go backward and forward for further operations. Moreover, production bottlenecks and delays are few, materials handling costs are reduced.

- The financial analysis is a unique technique useful in the sphere of financial control, planning and review of financial condition of the organisation. The objective of financial analysis is to develop the project from the financial angle and to identify financial characteristics.

- It is a tool in judging the performance of the project. It helps the entrepreneur, banker and other concerned people to know about the health of the enterprise. Financial analysis gives a clearer picture of a project as far as its financial factors are concerned. Financial statements, particularly the ratios, require a detailed and critical examination to text their validity. This examination is possible by looking into internal management of the concern.

- Funds flow analysis is a tool in judging the performance of a project. It tells about the various sources from which working capital was obtained and the uses for which it was applied during a particular period. The estimate for the Funds Flow
statement should be made with great care by using statistical techniques wherever necessary.

- Ratio analysis is of major importance for financial analysis. Ratio is both a quantitative as well as qualitative index of measurement. Though it is primarily related to financial management, there are vast and fruitful opportunities for its application to production, marketing, personnel, and general management. Thus, ratio analysis equips the entrepreneur with timely and correct status of varied activities of his enterprise. Its utility enhances with the deepening knowledge and involvement of the entrepreneurs in their project. The ratios to be used in the analysis should be carefully selected and the industry norms should be adhered to.

- Rapid industrial development would involve mobilisation of productive resources, investment, and entrepreneurial energies. Investment is a continuous process of economic development. In particular, an enterprise needs for investment is an ongoing business. The entrepreneur invests in enterprise and services after ascertaining adequate returns, power, and wealth. Thus, investment is one of the basic foundations of development. Inflated investment figures should be avoided as such tendency would lead to over-capitalisation.

- Break even analysis is a valuable control technique and a planning device for assessing the profitability of a project. It depicts the relation between total cost and total revenue at a particular level of output. If the promoter is aware of the product cost and its selling price, he can plan the volume of his sale in order to achieve a
certain level of profit. The break-even point (BEP) establishes the level of output which evenly breaks the costs and revenues. It is the level of production at which the contribution just covers the fixed overheads and the unit starts making profits. From the financier's point of view, the project should achieve a break-even position within a reasonable time from the start of production.

- The project which reaches the BEP earlier is considered as a viable project by bankers/financiers. They not only expect earlier repayments of their advances from such projects but also are assured that the project can fairly adapt itself to the day-to-day developing technology. The projects which are unlikely to reach the BEP in the third or fourth year of its commencement of production will not be viable proposal for the financiers.

- Profit motive is the prime mover of business activity. In fact, profitability is the most useful overall measure to the health of an enterprise. In other words, the profitability of an enterprise in any one year is the relationship between the profit made and the funds employed to earn the profits. Profitability analysis is a useful technique to take right decisions in maximising profits. The financiers should know about the viability and the financial needs of the enterprise by using this technique.

- The social cost-benefit analysis is a very significant tool to access the overall feasibility of a project, both in private and public sector by providing a useful framework for clarifying important issues and separating factors and judgements. Even though the process is bound by certain limitations, its value does not
dimmish in any case. Broadly, it is applicable to tactical decision making with the planning framework that is based on a wider range of considerations, which are usually socio-political and socio-cultural in nature. As for the entrepreneurs, an awareness of social-cost benefit enhances their contribution to society.

- In the coming years, efforts will be made by social scientists to perfect this analytical process by overcoming the limitations and universally accepting it in deciding on a project. As in all matters of social evaluation, we would be on safer grounds if we could rely on objective standards of social minima and measure social costs in terms of shortfalls or deficiencies from such minima. Thus, social costs, social returns, and social values are important dimensions in project analysis which should not be overlooked while appraising a project.

- Budgetary control is an effective tool of profit planning and accelerated growth. By introducing budgetary control, the project manager imposes a rational pattern on the external statistics of his business, a process which provides him with a basis for further effective planning and control. The promoter should use this technique to keep an effective control over the project during and after its completion.

To make finance available for a project there is a need for prudent financial management. All along there is the need for planning the flow of funds for the smooth functioning of a project. A successful project is one which generates its own finances to a greater extent and finances its diversified activities.
resources will serve as a backbone of a project. The generation of internal resources not only benefits the enterprise, but also the investors and society. Above all, a prudent management of internal resources may also assist the natural growth of the capital market.

- Finance which has been aptly described as the 'life-blood' of industry is a prerequisite for the conversion of real resources to organise production and marketing. Depending upon the nature of the activity to be financed, business requires short-term, medium-term and long-term finance.

Financial management is an integral part of industry and ranks equally in importance with other key components like production and marketing. Capital and finance form the bed-rock foundation of industrial development. They are provided by a number of financial institutions. The saga of industrial development in the post-independence period is the story of these core institutions.

More finance is needed for the projects because the industrial base is getting bigger and bigger. More importantly, the stress will have to be placed on prudent and efficient finance management in the coming decades. This calls for strengthening the capital market and giving fillip to savings and investment in the country as well as opening her doors to foreign capital - a larger inflow of external funds for faster economic development.

The most important development in the post-independence period has been the growth of a number of key institutions to promote, assist and develop entrepreneurs.
to initiate industrial growth in the country. These institutions have been striving to mould new entrepreneurs to accelerate the process of the industrial economy. The country has not obtained the changes it envisaged, but it has laid a strong foundation, broad based its infrastructure and provided the much needed support and assistance. One may consider that there are a number of institutions to cater to the numerous needs of entrepreneurs. The need of the hour is nucleus centre in each industrial pocket where all these services are provided through one centre. Effective linkages will provide the necessary impetus to entrepreneurs to embark upon innovative ventures to become the prime mover of the industrial development. The accent ought to be on institutional innovation and efficiency. It is on the foundation of a strong and efficient institutional infrastructure so that we can build a vibrant and dynamic industrial economy.

- It is essential that financial institutions should safeguard their interest with adequate security. At the same time, small industrial projects should not, as far as possible, be denied the assistance they deserve. Lack of finance is often not the cause but the result of difficulties in other areas. In such cases, what is needed is measures to set right those factors which would render financial assistance fruitful. It is common knowledge that the small scale sector needs non-financial assistance namely marketing assistance, technical guidance and training in management etc. In order to assist it, the Government has already established specialised institutions.
like SISI, NSIC and industrial estate which necessary facilities. Further, there is need for greater co-ordination at all levels between the financial and non-financial institutions and agencies engaged in the promotion of industries and financing of projects.

In the present Indian context, the socio-economic obligations of a development financial institution include identification of project ideas, formulation of projects, location of managerial talents and provision of technical and managerial guidance to new ventures with a view to broadbasing entrepreneurial talent and assisting in the creation of more employment opportunities in the country. The banker who controls the credit is a "supply leader" as opposed to his erstwhile role of a "demand follower". He is no longer a "wholesale" banker sitting in an ivory tower. His new role as an agent of economic development is to assist in the development and growth of economic activities.

- Both Central and State Governments offer various fiscal incentives and subsidies for setting up new projects in certain areas. The entrepreneurs are attracted to some states for their package of incentives and subsidies. The foremost incentive is a stable government with excellent law and order situation followed by availability of disciplined, dedicated and skilled labour force. States attract industries by giving incentives with regard to sales tax, octroi, subsidised power and loan.
These incentives have helped in large measure in attracting new projects to accelerate the process of industrialisation but still much has to be done in this direction.

- Over the years, the government has formulated a number of policies governing industrial development in India. But the frequent changes in policies affect entrepreneurs greatly. The government should minimise the changes and should formulate a comprehensive policy for all sectors of industry. There is a need for integration of trade and industry, management of public sector by entrepreneurs and not by bureaucrats. The political interference should be minimum. The liberalisation process should be phased in such a manner that entrepreneurs are least hit. A deepening and widening of the recent initiatives would further increase competition and industrial flexibility, thereby sustaining and further raising the growth rates of manufacturing.

In a developing state, it is natural to seek consultancy from abroad in the initial stages of its growth. As it gathers experience in economic development, there is knowledge formulation akin to capital formulation. Consultancy expertise should become increasingly available within the country. At the same time, since many development projects are carried out with the help from developed countries or international agencies like the World Bank, it is commonplace to see the consultants from developed countries being entrusted with the task of project implementation.
It is being increasingly realised by aid agencies that best course of action in consultancy is to have a combination of Indian and Foreign talents in the field. In a selection exercise of Indian consultants to work with Swedes in a development project, an important criterion applied by the Swedes was whether the Indian Consultants had preconceived notions or were willing to learn and modify their approach as the situation demanded. In another case, the Germans after identifying Indian talent went about encouraging the development of their expertise in applying a new German problem solving approach in India.

In the recent years young management graduates are coming to the consultancy profession substantially. They welcome the challenges and variety of the assignments. But there is no formal course to develop them as Consultants except for the Institute of Management Consultants of India, a recently metamorphosed body of the erstwhile Management Consultants of Association India.

- The promoters should seek the assistance of financial consultants in making a sensitivity and SWOT analysis for the project. This technique will guide them in future for drafting their strategies.

8.5. FUTURE RESEARCH POTENTIAL:

This study has been pursued with limited objectives and it was confine to the assess the applicability of project appraisal modules and pitfalls in the industry of Orissa. However the findings of the study have provided enough feed back to undertake
further research both Micro and Macro in the following areas

- It is observed that appraisal techniques are employed by all unit to a certain degree. In spite of this, many units become sick. The reasons of sickness have to be further probed into by carrying out separate studies in different regions.

- This study has been organized to find out the application of project appraisal technique at the initial stage. But the efficacy of technique can be found by making a comparative study of the forecast and actual after the implementation of the project.

- This study has focused on the appraisal techniques for the industrial sectors of the state as a whole. But the findings suggest that the industrial composition of the state has undergone a sea change during the past two decades. It is necessary to study the application techniques separately for different industrial groups.

- Another important researchable area is to study the application of appraisal and other project management techniques in industrially advanced countries with comparative study of the application of such techniques in India. This will help us in knowing our pitfalls and learning their positive points.

Last but not the least, the studies confined to the industrial sector of Orissa only. Scope for further comparative study with industrially forward and backward states exists. This will help in formulating a viable technique suitable in different areas.