CHAPTER V

A SUMMARY OF CONCLUSIONS AND FINDINGS
CHAPTER - V

CONCLUSION AND SUGGESTIONS

In the preceding chapters the managerial performance of the Oil and Natural Gas Commission has been examined. A multitude of parameters namely the financial adequacy the pattern of liabilities and assets, the structure, working and role of ONGC in the production and distribution of oil has been examined in detail.

The personnel policy of ONGC has also been analysed in view of its utility and role in the efficient functioning of the corporation. It has been established that the Oil and Natural Gas Commission which has recently been converted into a public limited company has a vital role to play in the oil scenario of the country. In the new setting it will shed its three decades old nomenclature and will be vested with structural organizational and financial autonomy to compete better in keeping with liberalization of the economy. The present Chapter contains the conclusions and findings of this work.

The ONGC was found in 1956 as a Directorate in the Ministry of natural Resources & Scientific Research and was upgraded to Oil & Natural Gas Commission - Statutory body by an Act of Parliament. The Commission has assimilated world's
finest petroleum expertise and operates along the lines of renowned international petroleum companies in the world. The ONGC is a corporate body having perpetual succession and a common seal to acquire, hold and dispose off property and contract and by the said name use and be used. It was formed to accomplish the task of exploring, drilling, assessing and producing oil and natural gas. It gained an invisible competitive advantage when it received a mandate to drill anywhere in India, and naturally the prime and most prospective areas went to them. At a time when ONGC was born, about 34 years ago, oil production was a myth in India. Today, within three decades of its existence it has assimilated the technology of over 100 years to emerge as the premier oil company in India and is now looked upon a symbol of model enterprise in the country.

The ONGC has the complete in-house capability, high degree of expertise, professional experience and necessary infrastructure to undertake exploration ventures, job contracts and consultancy services, singly or jointly in India as well as abroad. The ONGC is providing assistance and cooperation to other developing countries in the field of oil exploration and production like Iraq, Vietnam and Sri Lanka.

The Commission has the following objectives:

1. To promote self-sufficiency in crude oil and natural gas.
2. To promote self-reliance in technology.
3. To assist in conservation of oil more efficient use of Energy and Development of alternate sources of Energy.
4. To make regular efforts for new exploration areas.
5. Promoting indigenous efforts in oil related equipment and services.
6. To make long-term planning for oil sufficiency.
7. Obtaining its share in the world oil market.
8. To achieve maximization of the rate of return on investment.
9. To build up relevant technology and techniques, in oil exploration practices.
10. Generation and maximization of internal financial resources, for its own growth and development.
11. Environment protection.

The ONGC, for better managerial accountability and profitability, has grouped its entire activities into two major subdivisions viz. functional and supporting. The functional group has been further divided into exploration, drilling, operations and technical supporting groups are personnel and finance.

The ONGC is a public corporation. It has adopted the functional organizational structure. It is one of the best
organization in public sector in the country and has got the status of excellent performance not only within the country but outside also. It's corporate structure consists of a Chairman, Vice-Chairman, six full-time members like drilling, exploration, natural gas, technical finance, personnel and two part-time members. Various Regional Directors/Group General Manager/General Managers and Deputy General Managers are working under these members.

The ONGC has been able to achieve such a great success in making the country self-reliant, in fulfilling the petroleum requirements of the country to a great extent in such a short period of its operation. This success is partly a result of ambitious men who are engaged in ONGC and their timeless efforts, zeal in the production, and partly to sound organization and administrative structure, which ensure quick decisions-making and efficient planning.

But still the ONGC's organizational structure has suffered due to the following reasons:-

Inadequacy of manpower resources for several critical areas of operation, e.g. horizontal drilling, high pressure in drilling etc. The functional area are not defined to some extent. Lack of workers participation in management. Lack of vision, commitment and professionalism in the organization.

It is further suggested that the Manpower should be sent to foreign countries for training and development to
improve the inadequacy of manpower resources for several critical areas of the operations such as horizontal drilling, high pressure in drilling and so on. Functional areas should be clearly defined. The workers participation in management should be introduced. For minimization of the complexity involved in it the authority and responsibility of directors, the group general manager, the general manager and supervisors should be clearly defined.

At present the Headquarter of ONGC is located in Dehradun. the continuing increase in demand for oil as a major source of energy for industry, transportation as well as other sectors in India warrants the need to find and produce more oil and gas. The total area of sedimentary rocks in India is 17,20,000 square km. The total area has been divided into 26 sedimentary basins. The ONGC Geological and Geophysical Survey is satisfactory and it is done through use of modern techniques of surveys like use of dynamite in explosion, higher level of technology in geophysical instrumentation and data acquisition are being applied. The total geological survey involves the use of 367 party years of field work during 25 years. ONGC has established 3771 MMT of oil and 1271 MMT of oil and 1271 MMT of oil equivalent of gas as on 1.1.1990. In addition to geological surveys, geophysical surveys involved use of 181 field party years of gravity-magnetic, 530 party years of seashore parties on level and
offshore. In 1963 ONGC started its offshore surveys in the Gulf of Cambay with the help of vessel 'S.S. Mahindra'. The projected number of seismic surveys remain constant from the year 1984-85, about 15.0 thousands of time kilometers in both the coast i.e. West Coast and East Coast. ONGC has to make substantial improvements in this regards, technical audit of the quality of data collected, accelerate seismic survey and better interpretation of data.

Drilling of the first offshore well was started in 1970's at the south of Narmada river in the Gulf of Cambay. In 1974 drilling of the Bombay High was taken up. In 1991 the total number of offshore rigs were 35. Thus it observed that the exploratory and development drilling of offshore rigs is satisfactory. The first onshore exploratory well was started at Jawalamukhi in 1957. In the year 1991 the total number of onshore rigs were 106. The total metreage drilled in 1981 was 212 thousand metres. During the year 1990 and 1991, the total metreage drilled was 1323 thousand metres and 1053.26 thousand metres. At a time when ONGC was born, about 34 years ago oil production was a myth in India. Today, within three decades of its existence it has assimilated the technology of over 100 years to emerge as the premier oil company in India. In 1974, oil was struck at Bombay High and commercial production began from May 1976. The Bombay High has played a significant role in offshore oil production.
During the sixth plan (1981-85) ONGC discovered 41 hydrocarbon. The total accretion to the existing total reserves in 1980-1985 has been 894 million tonnes of oil and gas. ONGC expects to establish for the future additional reserves of 1,400 million tonnes of hydrocarbons through new exploration of the new 1,400 million tonnes to be established within the next five years (1985-90) 810 million tonnes will be established in category 1 basins, 545 million tonnes in category II basins and the remaining in category III basins. Recoverable reserves increased from 328.42 million tonnes in 1980-1981 to 450.90 million tonnes in 1984-85. In the year 1983 the reserves were 482.81 million tonnes. This figure fell to 465.10 million tonnes in 1984. This clearly shows that in 1984 and 1985 Indian oil reserves were occurring faster than ever before.

In the Seventh Plan, the activities of the Oil and Natural Gas Commission operating in designated blocks in the offshore and onshore areas did not result in any significant increase in output. The progress in the eight plan may be more comforting as it is targetted that the crude output should rise by 16.5 million tonnes to 51 million tonnes by 1994-1995 and Natural Gas to 100 million cubic metres daily from 40 million cubic metres in 1989-90. Thus the total production should be 215.09 million tonnes and Natural Gas 138.61 bcm (in 1990-95) as compared to 157.38 million tonnes and 56.13 cum in
the Seventh Plan an increase of 36.7 per cent and 146.9 per cent respectively.

In 1980 the crude oil production and natural gas production were 9.20 million tonnes and 1013.91 million cubic metres. It rose to 33 million tonnes in 1990 and gas production 8610.03 million cubic metres. The actual crude production during the year 1991 was 30.345 million tonnes and gas production 9865.71 million cubic metres.

It is concluded that oil production was increasing from 1980 to 1990 but at a slow rate of growth. Natural gas products was better than crude oil production. The crude oil production during the year 1991 suffered a serious setback on account of certain technological and environmental constraints.

So it is suggested to increase the availability of indigenous crude production within the permissible technical parameters following sound and established reservoir management practices. The following salient features of the strategy being adopted for increasing the crude production:

1. Exploitation of the reserves already established.
2. Optimising oil production through special emphasis on maintaining reservoir health.
3. Monitoring liquidation programme of sick wells to enhance oil production potential.
4. Maximising oil production from existing fields with the application of EOR techniques wherever applicable.

5. Efforts to maintain R & P ratio at a level of less than 20 by bringing in more reserves to exploitation stage.

The total number of wells drilled both offshore and onshore has improved several folds during 1981 to 1990. The onshore growth rate during the year 1985 and 1991 was not satisfactory because the growth rate was 7.5% in 1985 and 27.96 in 1991. It has been observed that the drilling performance was not satisfactory which was responsible for slow growth rate of wells during 1981 to 1991. Highest even LPG production of 876 thousand tonnes was recorded during the year 1990-91. This represented an increase of 22 per cent over the previous year 1989-90. The growth rate during the year 1983 was 120.55 per cent and in 1991 it was 22 per cent. It has been observed that the growth rate has been fluctuating throughout the period under study. So the Commission should take the following steps to improve the performance of oil production and its efficiency.

Use of computers in interpretation of data. Use of Early Production System (EPS) in operational fields and commercial production because this system reduces the time which would minimise the cost of rigs and other equipments.
ONGC should increase productivity to the maximum. The Commission should decentralize their exploration and operation activities among the other basins where oil has been found and which are left as poorly explored.

The Commission continues to look after its employees as a model employer in the public sector ensuring good level of remuneration, career growth and job satisfaction. At present ONGC have 48,000 well trained and well disciplined personnel. The manpower planning has always received high priorities in the organization. The manpower of ONGC is classified in four classes as class Ist employees, class IInd employees, class IIIrd employees and class IVth employees. The ONGC manpower is divided into three main heads (1) Engineering, (2) Geoscience and (3) Administration and other supportive services. The personnel policy of ONGC consists of recruitment, promotion, transfer, manpower development, scales of pay and other welfare facilities such as housing, education and medical benefits etc. Methods of filling posts in the Commission are direct recruitment from outside the organization by recruitment advertisements in daily newspapers and employment newspapers for fresh candidates and the indirect method of recruitment through promotion of employees already in the service of the Commission. ONGC personnel policy provides special recruitment facilities to Scheduled tribes (SC and ST) candidates without examination fees and also provides fares to candidates.
Every new candidate will have to submit the certificate of age, character certificate, oath of allegiance, declaration of marital status, home town declaration, medical fitness examination report, attested copies of degrees/Diploma, certificate of educational, technical and professional qualifications, attestation form for character and antecedents verification, experience certificate, executive card and certificate of SC/ST. The criterion for promotion is both seniority and merit. The Commission gives at least two promotions during the period of total service. Every new appointed employee shall be on probation for one year. Transfer of employees is decided by the Headquarters. The Commission can transfer any employee at any time and to any place. Normally an employee can be posted at any place for a period of five years. Employees likely to retire can have choice of place. There is only one date of increment in the Commission. It is 1st January each year. All the training facilities are available at the training centre. The Commission has set up the training and development division within the campus of Keshav Dev Malviya Institute of Petroleum Exploration at Dehradun. The Commission conduct the graduate training programmes, induction training programmes, refresher programmes, orientation and reorientation programmes, seminars/workshops and management development programmes for employees training in various fields. ONGC also sends out its employees
rainy days. Grievance committees are functioning in all the projects of the Commission for resolving grievances of the employees and management in the organization.

The Commission's employee can avail casual leave, special casual leave, earned leave, study leave, half pay leave, commuted leave, leave not due, quarantine leave, accident and disability leave, maturity leave. The Commission provides medical facilities to its employees. It provides educational facilities and children's education allowance, merit scholarship and hostel subsidies to its employees. Commission also provides special facilities for Assam and other North-Eastern states, special facilities for Bombay Offshore Project, special facilities for Calcutta Offshore Project and for Gandak Project. The Mahila Samities play a very significant role in the cultural and social activities in the Commission. ONGC has also given fully facilities to retired employees and their dependent. Employees guilty of misconduct may get following type of penalties like censure, withholding of increments, withholding of promotion, postponing future increments, of pay, compulsory retirement, dismissal from services and suspension. Every employee of the Commission can resign through prior notice to the Commission.

Lastly it is concluded that the personnel policy of ONGC is quite satisfactory in every respect and gives more emphasis to the welfare of its employees. It provides
financial and non-financial incentives to employees for hard work and loyalty towards the Commission. There are some criticism about Commission's personnel policy and certain suggestions are given in this regard.

The workers participation in management in the organization does not take into account in the personnel policy of the Commission. It should be included in the personnel policy of the Commission for evolving an open management and democratic culture in the organization. The children educations policies and facilities are very poor in the commission. Most of the employees are not satisfied because the commission is not providing schooling facilities in their own schools (Central Kendriya Schools) to all children of the employees. So the Commission should open more schools for the employees children. So that they can get easily admission in schools. The recruitment policy of the Commission is faulty because it strictly emphases the condition of first class or maximum 60 per cent marks in degree classes. The Commission should follow flexible and dynamic recruitment policy, and this first class condition should be removed. The Commission should fix 55 per cent marks in degree courses as the basic qualification or eligibility qualification to apply for job in the Commission. Appeals Committees and Grievance Committees are not functioning satisfactorily in the Commission which is demoralizing employees and reducing their efficiency and
productivity of the organization. These committees should function properly for resolving the grievances of the employees. They provide dearness allowance, house rent allowance, travelling allowance, housing facilities, daily allowance but overtime allowance, city compensatory allowance and winter allowance are not properly provided in the Commission to its employees. So the Commission should give overtime allowance, winter allowance, city compensatory allowance because they are provided in the personnel policy of the commission but are not in full practice among the employees.

The working capital of ONGC registered steadily increasing trend over the years. From 1982 it has increased so much that in 1991 the working capital was ₹.3517 crore an increase of about ₹.1385.6 per cent over 1982. This increase is however, a phenomenal by any standard. This proves that the ONGC has been efficiently utilizing its working capital. The trends in percentage of reserve and surplus to total liability has been steadily increasing upto the year 1988 from 24.5 per cent in 1980 it increased to 66.7 per cent in 1988. The year 1989, 1990 and 1991 seems to be declining year and during these years the percentage of reserve and surplus to total liability worked out to be 63.4 per cent, 63.8 per cent and 62.8 per cent. The reserve and surplus has increased 50 times, whereas the increase in liability is out to be 20 times
over the years. This proves that the increase in reserve and surplus has been faster than the increase in liability of the company. The capital employed, right from the year, 1980 has been increase over the years it increased so much so that it registered a capital employed to the tune of ₹1226521 crores in 1991 recording an overall rise of 1528.2 per cent over 1980. The net worth of the Corporation from 1980 to 1991 has been consistently increasing. In the year 1980 the net worth of the Corporation was 525.58 crores which increased to 11052.13 crores in 1991, an overall rise of 20028 per cent. The net worth of the ONGC is an indicating of the fact that the corporation has been considerably fairing well in maintaining the consistence net worth. The current ratio is highly satisfactory and falls within the standard parameter by any standard.

The Corporation has been maintaining steadily rising trend so far as the quick ratio is concerned. From the year 1984 the quick ratio was within the accepted parameter, that is 1:1. The working capital turnover ratio of the ONGC was 4.36 times which increased to 5.37 times in 1982 but plummented to 9.08 times in 1983. The year 1984 was spectacular as it recovered the highest working capital turnover ratio that is 13.36 times. The subsequent years starting from 1985 to 1991 registering declining working capital turnover ratio ONGC also ranks 7th among the most profitable industrial corporations of the world. It has been observed that the net profit has been
steadily increasing up to the year 1990. The net profit of ONGC has declined by ₹.574.54 crores during the year 1991. Two factors are mainly contributing to this decline are:

1. Increase in recouped cost by ₹.613 crores.
2. Increase in exchange loss by ₹.555 crores.

Commission is consistently contributing heavily to exchequer and contributed ₹.204.03 crores to the Central and State Exchequer during the year 1980 to ₹.5365 crores during the year 1990-91. The working capital turnover ratio is fluctuating over the years. From 1985 to 1991 registers declining working capital turnover ratio. ONGC is also the fourth largest company in the country in terms of assets. The net fixed assets of the company for the year 1988-89 have been 1,6,160.83 crores. The profitability ratios have been equally impressive. The gross profit (before interest charges but after depreciation) have increased from 2117 crores in 1987-88 to 2171 crores in 1988-89. ONGC also retains number one position for its gross profit (before depreciation but after interest charge). The total sales of ONGC was 394.87 crores in 1980 against the inventory of 155.13 crores. It increased so much so that sales was 9469.42 crores in 1991 against the inventory of 1362.36 crores.

The sources of funds register a rising trend with a marginal decrease in the year 1990-91.
In view of the above conclusions, the following suggestions may be offered for making improvements in the financial spheres and financial management practices that the corporation in its new shape gives the best performance in financial arena.

The working capital turnover has registered a consistent decline during the years starting from 1985 to 1991. This implies that the net working capital turnover is not being utilized effectively to generate enough earnings. Thus the Commission should see to it that the net working which has been consistently increasing during this period should be put to more effective use to generate more sales. The net profit have registered a sharp decline during the year 1990-91. Two factors mainly contributing to this decline. Increase in recouped cost by Rs. 613 crores and increase in exchange loss by Rs. 555 crores. Though the management attributes this decline to factor beyond their control, still certain measures to check this downward trend is the need of the hour. The profit margin have also registered a sharp decline during the three accounting years. The management of the ONGC should take certain measures to check this downward trend. The sources of fund register a rising trend with a marginal decrease in the third year 1990-91. But if the decreasing return on investment of ONGC is taken into consideration then the implication is that the assets are not being optimally utilized though the
sources are rising. Therefore the management of ONGC have to find out ways and means of increasing the utilization of assets. ONGC's income before interest and tax to capital employed %, Income before interest but after tax to capital employed % and Net income to equity have also registered a downward trend during the three accounting years from 1989 to 1991. This suggests that a more efficient use of the shareholders equity is needed.

The country's Energy security is largely dependent on the indigenous petroleum resources. Therefore, ONGC has to put in its best efforts to strengthen the National Security of the country. For this ONGC has to remain effective, competitive and also efficient both financially and physically, for the future challenges and changes like others in this industry. ONGC, has to generate access to new petroleum resources at a high competitive cost to ensure economic returns on investment in the future business.

The successful implementation of an effective mix, ONGC can and will achieve this goal through the following approaches.

a) There should be technological advancement and application of conceptual in all the up-end exploration and activities specially to set up 'new' leads from the 'old-data'. For this, in addition to acquisition of new data, the 'old' seisnological data has to be intensively processed through constantly
advancing geophysical computers soft-ware. Then these outputs would be passed through extensive reiterative interpretation work outs using the fast changing conceptual sieves of geological perceptions.

b) To achieve optimal increase in the rate of recovery, fast installation of new 'cost cutting' drilling technologies improved techniques of reservoir management and cost effective production technologies should be taken into consideration.

c) To intensification of focussed exploration campaigns abroad, specially in the Third World countries and for developing structural cooperation with SAARC countries in the petroleum exploration, production and transportation sectors.

d) The ONGC should have major thrust for increase in natural gas supplies to bulk consumers, and intensifying efforts for the underground storage of the natural gas in the areas where adequate number of the consumers are not readily available.