Chapter -7

Conclusions and Recommendations

7.01 Introduction

The primary objective that developed and developing countries aim at is rapid economic development. And it is the human being who plays a crucial role in this development, as pointed out by Gerald M, Meir: "The key to development is man and his abilities, values and attitudes must be changed in order to accelerate the process of development".(Meier, 1975).

Education plays a key role in formulating man's abilities, values and attitude. This is substantiated by theoretical and empirical research. A well planned education system contributes significantly to the growth and economic development of a country. (Agrawal P., 1982) Investment in people through education has drawn the attention of economists across the world. This investment in human capital formation directly results in improving human efficiency and productivity, which in turn improves the factors that complement and supplement the production process. Thus, education influences economic development directly and indirectly.

The direct impact is through productivity, employment, composition of the labour force, division of labour, mobility of labour, and other such factors. The indirect impact of education is through savings, limiting family size, inculcating right attitudes and skills, and removing obstacles to social change and progress(Goel S.C., 1975). This makes education the most essential and important social services provided by the Government. A country's economic progress depends on the level and quality of education imparted to its citizens. (Reddy, 1997)

The quality of higher education decides a country's pace of economic and social development. This importance of higher education is all the more crucial in a world order based on science and technology, privatization of education, and self-financed courses.

7.02 Present status of higher education

India remains far behind the developed countries. India's present population exceeds 100 crores, while Japan has about 12 crores. Yet, India has only 417 universities compared to Japan's 684 universities. The USA, with a population of about 27 crores, has over 2300 universities, and Germany with a population of about 8 crores has about 330 universities.

In recent years, India has liberalized into a rapidly growing service economy that requires workers with higher education and a diverse set of skills. Therefore, education has become the most crucial input for socio-economic development, transforming people into human resources fit for employment. Education makes an impact on both productivity and employment, by inculcating the requisite attitudes and skills for employability and for optimized job performance. The developed world understood much earlier that individuals with higher education have an edge over their counterparts, thus justifying any investment in higher education.

The growing demand for higher education cannot be met without making substantial investment in infrastructure, facilities, teaching staff, student needs, etc. Traditionally, it is the government that subsidised university education in India. However, growth in education has long outpaced government expenditure on higher education. Recent estimates indicate that the goal of allocating six percent of national income to education is still elusive, being only 3.5 percent of GDP. (Tilak J.B.G.2003)

7.03 Higher education in acute crisis: Challenges and Paradigms

Higher education in India has been facing an acute resource crisis with escalating costs and increasing needs on the one hand and shrinking government budgetary allocation on the other. Liberal funding is a critical requirement for making higher education possible. However, the funding pattern has been unsatisfactory. "Part of the problem facing universities is the inadequate provision

of budgetary resources from the Government"(NIEPA 2005). Consequently, several universities and institutions of higher education are in continuous deficit.

This financial crisis in higher education demands urgent attention and alternative provision of the required resources. A serious rethinking is needed on policies relating to financing of higher education including the specific financial reforms that have been introduced during the last decade and a half.

7.04 Review of Literature

In recent times, the burden of the government due to the financing of higher education has been rapidly increasing. Several studies have already clearly shown the inability of the government to provide financial support for higher education. Most of these studies were undertaken during the early 1960s and 1970s, and were micro-level studies on university finance as a whole. More recently, studies have been carried out on financing of higher education in India, with just a few of these being case studies. No study has been undertaken from a holistic perspective, or with special reference to privatization of higher education or introduction f self financing courses. There have been very few analyses of the self-financing courses in the university in context of a changing world which is becoming a global village.

7.05 Rationale of the Study

Higher education is under twin pressures. An enormous increase in student numbers and also the expectations that have traditionally been served by universities. Both the numbers and expectations involved here are huge, having serious repercussions on the system (Tilak JBG, 2005).

In this scenario of financial resource crunch and the emerging challenges of privatization, globalization, quality, and competitiveness, there is a compelled need to analyze the problems and find solutions for higher education to gain and maintain its regard.

7.06 Objectives of the Study

The present study has been carried out with the following objectives:

1. Examine the trends in the growth of the university considering various criterion such as trends in the enrolment of students, teachers.
2. Examine the trends in the major sources of receipts of the university.
3. Examine the trends in the major sources of expenditures of the University.
4. Assess the trends in performance of the university based on receipts and expenditures.
5. Examine the trends in the efforts made by the University for augmenting the income of the University.

7.07 Hypotheses of the study

1. The educational system in the university is predominantly a state funded and directed activity.
2. The financial resources from the government are declining.
3. The university system is developing alternative sources of finance.

7.08 Geographical Area

Vadodara is an ancient settlement, founded around 1000 B.C. on the banks of the river Vishwamitri in the central-eastern mainland of Gujarat. The city's greatest period was during the Maratha rule of Baroda, starting with the ascension of Maharaja Sayajirao Gaekwad III to the throne in 1875. It was an era of progress and constructive achievement in all fields. The Maharaja was one of the foremost administrators and reformers of his time (MSU, 1980). In particular, he introduced a series of bold socio-economic reforms, and started a higher educational institution in English medium with residential facility for outside students to promote knowledge and development. His foresight led to the conceiving the idea of the university in Vadodara as early as 1909 and establishment and development of The M.S. University of Baroda in 1949, an important centre for higher education in the country, providing advanced professional courses to students not

just from across Gujarat and the nation but also from abroad. The University enjoys a worldwide reputation.

The M.S. University of Baroda started functioning on 30th April 1949 as a Unitary Residential University restricting its jurisdiction to a radius of 10 miles from the University office. Soon after coming into existence, the University brought several institutions into its fold and within a year the various faculties were organized. The M.S. University of Baroda is renowned as one of the premier institutions of higher learning in India and abroad. Since its inception, the university has strived to achieve academic excellence in diverse disciplines. The M.S. University of Baroda is the only English-medium residential university in the state of Gujarat. The University campus spread over 275 acres, is dotted with several beautiful buildings and heritage structures. The University today caters to the educational needs of more than 38,000 students who are imparted knowledge by 1200 teachers and 1800 strong administrative staff. The university offers advanced research facilities, a wide choice of disciplines and courses that cater to the needs of the society and the economy. Teaching and research take place in 86 academic departments organized under 13 Faculties and 3 Colleges. The university has entered into Memoranda of Understanding with prestigious universities abroad such as Oxford, South Florida, and Penn University etc. (MSU 2008). Since the university has distinctive it would be appropriate to begin this study with an overview of the dimensions and directions of the university's development.

The M.S. University of Baroda has been chosen for study.

7.09 Research Techniques

The data has been collected from annual reports and budgeted estimates published by The M. S. University of Baroda for the period 1980-81 to 2006-07. Statistical tools such as simple growth rate, ratios, and Compound Annual Growth Rate, Percentage, Growth Index, have been used in the study. For forecasting of total non-plan revenue expenditure ARIMA model has been used.

The period from 1980-81 to 2006-07 has been chosen for the study. This is to understand the long trends in the revenue and expenditure of the university system. To understand these pre and post reform trends, the study period has been divided into two periods. viz; pre reform period from 1980-81 to 1990-91 and post reform period from 1990-911to to 2006-07.

7.10 Limitations of the study

1. The receipts and expenditures on Non-Plan Capital Account exhibit wide fluctuations from year to year, with trends that are quite inconsistent and disturbing. Therefore, an attempt has been made to take a close look at the overall financial structure of The M.S. University analyzing the contribution of non-plan (Revenue).
2. During the entire period of study the sub-head of expenditures in Faculties and Institutions have been changing and hence only the total figures have been taken into consideration.

7.11 Chapter Scheme

The thesis is divided into seven chapters. Chapter One is an introduction to the growth of higher education in India. Chapter Two presents a review of literature on university finance. Chapter Three deals with the profile of The M.S. University of Baroda. Chapter Four deals with receipts of the university. Chapter Five examines the expenditure of the university. Chapter Six deals with the introduction of self-finance courses in the university. The faculty of commerce has been chosen as a case study, this being the largest faculty. Chapter Seven presents the conclusions and recommendations.

7.12 Chapter wise major Findings of the study are as under

Available statistics show India to have the third largest higher education system in the world, after China and the US. In terms of enrolment, this is around 11.04 million (2005-06). In terms of the number of institutions, India has the largest higher education system in the world. (*Industry Insight* 2008) At the

beginning of the academic year 2006-07, the number of women students was about 44 lakhs, or nearly 40 % of the total enrolment. As of 2006, the number of institutions has grown considerably during the period 2001 and onwards. There has been a sharp increase in the number of state universities and institutions recognised as "deemed to be universities during the recent times". The general education still dominates in India. Arts faculty has the highest percentage of students followed by Science and Commerce where as Agriculture has the lowest percentage of students enrolled. GER at all India level shows that 12 states have GER higher all India average where as other states have GER lower than all India level.

The public expenditure on higher education increased from Rs.23120 million during 1990-91 to 95620 million during 2004-05(BE) in current prices with a compounded annual growth rate of 12.3 percent per annum. Per student expenditure increased in current prices from Rs. 5652 in 1990-91 to Rs. 9310 in 2003-04. Over the years the union and state Governments have considerably decreased their total public expenditure on education while the demand for education at every level is rapidly increasing. The funds for education are not increasing at a commensurate level resulting into the widening gap. It is also clear from the above discussion that public allocation for higher education is not only inadequate but also declining over the years.

Over the years, a significant body of literature has emerged based on studies carried out on the economic aspects of higher education. However, virtually all these studies were carried out in the pre-liberalized era and very few address the issue of privatization of higher education. Books and articles on the subject were relatively few and the number of micro studies small with only a few of these having reference to India. Moreover, no study has been undertaken fro the holistic point of view. The present study is an attempt in this direction.

In the M.S. University of Baroda, Vadodara, over a period of more than half a century, during 1950-51 to 2006-07, though the number of students in

absolute terms is increasing, the rate of growth (CAGR) of the enrolment of students shows a declining trend. The proportion of women in total students has reached almost equity. In fact, in some of the faculties, there has been a significant rise in the proportion of female students compared to males such as those in the faculties of Fine-Arts, Education & Psychology, Commerce, and Social-Work. Similarly, the proportion of students belonging to SC, ST and SEBC has been increasing continuously indicating a trend towards caste equity. However, when one looks at the proportion of students belonging to these categories as per the prescribed norms, the proportion of students belonging to these categories still remains low. During the entire period of 1950-51 to 2006-07, commerce faculty has witnessed the highest rate of growth in total strength of students' enrolment. A look at the trend in course wise enrolment of students shows that much of the decline in the growth rate of students is mainly due to negative growth rate of the enrolment of students in post graduates courses. This may perhaps be due to some change in the policies of admissions of the faculties. There has also been a decline in the number of research students not just proportionately but also in absolute terms. The teacher student ratio is highest in Commerce faculty. This faculty has also witnessed a continuous rise in the teacher student ratio.

It is important to note that there has been certain stability so far as the growth of fees during the post reform period is concerned. There has been some fluctuation in the grants. In addition, if the influence of price rise is eliminated, the government grants and the fees from students show considerable decline.

The important to note that there has been certain stability so far as the growth of fees after post reform period is concerned, while there has been some fluctuation in the grants. Share of grant to total receipt has been fluctuating during the period of 27 years. It has been lowest at 67.56% and the highest at 95.18% during the year of 1980-81 to 2006-07. On an average the share of grant in total receipt remained 86.97%. On the other hand, the share of fees, both tuition and hostel fee has been declining continuously over the years.

So far as the sources of receipts of the university are concerned, auxiliary services such as university press, publication and sales unit of the university plays a major role in receipts. The rest of the heads need to be improved, if receipts have to go up. There have not been noticeable variations in per student receipts from the university's own activities. During the entire period of 1980-81 to 2006-07 per student receipts from university's own activities has been 1% per annum.

Total Expenditures of The M.S. University increased more than 11 fold during the study period. The rate of growth during the period 1980-81-1990-91 has been 15% per annum. Though in absolute terms, the expenditure has increased but when one looks at the growth, the trend has been towards decline and during the period 1990-91 to 2006-07, the rate of growth declined to 10% per annum. The scenario changes significantly when one looks at these figures at constant price. The compound annual rate of growth at constant price which was 8.27% per annum during the pre reform period declined to 2.86% per annum. This means that the growth of expenditure of the university have declined to almost one third, a significant decrease.

The plan expenditure was as low as 9.2% during 1995-96 whereas the share of non-plan expenditure was around 90% and has been increasing over the years reflected in the growth index.

Under the non-plan revenue account, expenditure on faculties and institutions constitutes one of the leading head of expenditure. The other is the students' welfare activities. On an average university spends around 78% on these two heads. The growth of expenditure under both these heads saw a declining trend during the post reform period to 10% per annum on faculties and other institutions and to 9% per annum on students' welfare activities during the period from 1990-91 to 2006-07. However, when one looks at these figures at constant price, a significant decline has been observed in the expenditure on both these heads. This means that both the faculties and the students' welfare activities are

badly affected due to resource crunch. Further, these are not just two heads that are hit. University general administration is another.

Expenditure on capital account and revenue account had been 38% and 62% respectively during 1980-81. Over the years the scenario has changed and the share of capital and revenue account changed to 3% and 97% respectively during the 1990s to 2006-07. This is also a reflection on the restrain in building of infrastructure necessary for the growth of a higher education system.

The recurring expenditure has been higher than the non-recurring expenditure through the whole period though there are fluctuations in the share of both the recurring and the non-recurring expenditure, at current price and also at constant price. The share of recurring expenditure declined sharply during the late 1990s.

When higher education is an investment and there are higher private returns, it is imperative to understand the contribution of the individuals and households to the total cost of higher education. This issue becomes all the more important in the wake of financial stringency on the part of government. Such an exercise becomes important in the policy making as well. An attempt has been made to calculate the total cost per student in the university. An attempt is also made to examine the private and social cost per student. This however, is only a very broad exercise.

It is noteworthy that the private cost of education per student has not only been low but it is declining over the years. The private cost per student which was around 37% during the early 1980s declined to around 7% by 1999-2000. This has slightly improved since then but has still been around only 13-14% presently. On the other hand, the social cost has reached a level of around 86% from nearly 63%. Hence, the contribution of households and individuals to higher education has declined considerably.

The figures for cost per student at constant price are much more revealing. In fact, during the entire period from 1985-86 to 2005-06, the private cost declined at a compound annul rate of growth of 9% and social cost at a rate of 4% per annum. This means that the decline in the private cost per student is much sharper than the decline in the social cost.

The results for forecasting of the university's expenditure based on ARIMA model show that on an average, the total expenditure of the university is likely to grow at the compounded annual rate of 2.75% per annum. This means that over the coming years the expenditures of the university are likely to grow at a much lower rate compared to even the 1990s. Whereas decline in expenditure is a positive sign, it is important at the same time that the quality of education does not suffer in the process to meet the challenges of globalisation and increasing competition.

As public funding of higher education declined in the 1990s, private sector institutions burgeoned in India. Many states have now framed legislation for setting up private universities. Accordingly, there has been an explosion of private institutions in higher education and technical education in India. In fact, private engineering colleges have been a key success factor behind India's IT boom. (Kale .R.K.2007) The M.S. University of Baroda has been making efforts to generate its own resources over the years and the case study of faculty of commerce shows that during the last few years (2001-02 to 2006-07) the faculty and the university have been able to generate a substantial amount of income through the introduction of the self finance courses.

7.13 Recommendations

Over the past few years, higher education in India is confronted with grave financial problems. The major problem which Universities are facing is inadequacy of finances available to universities and colleges. Increased requirements for funds despite the substantial contributions which the Central and State Governments are making towards the financing of higher education and

research, the finances of Universities and Colleges are inadequate as they have not increased in proportion to increased enrolment and the increased requirements for modernization and diversification of tertiary education.

To confront the challenges faced by India today and tomorrow, the health and vitality of higher education and research is crucial. The development of higher education would determine the extent of success in improving the social and economic standards of people as well as in facilitating the task of laying solid foundation for maintaining a high quality of life over a long period of time. It is, therefore, imperative that deficiencies in financing Universities and Colleges, which impinge upon the effectiveness of higher education and research, should be identified and rectified (Gupta Arti, 2003).

An analysis of the situation indicates that there is need to give serious thought to the problems. The various findings so arrived at as a result of the present study as detailed in different chapters lead to the interface that there is great scope for the improvement of the existing financial management system of the University. The effective and efficient financial management system can go a long way in bringing the faculties and institutions out of the present financial crises and in helping them to achieve set future developmental objectives. In view of the problems faced by the university and anticipated high growth of students it is imperative that

1. Honest attempt should be made by the University for making optimum utilization of the scarce resources available to it and tapping its existing and potential new sources of revenue.
2. Both tuition fees and fees for other services need to be increased in accordance with the level of inflation in the economy so that the fee component would contribute significantly to the cost of university education. This however, has to be based on the principle of ability to pay. In this regard, the expenditure structure of the University should be studied in order to arrive at the unit cost per student once in frequent years and the same could be made the basis for determining the fee structure. Since the

income from fees can never match with the expenditure, it should at least reduce the increasing burden of government to the extent possible.

3. Though the Government/U.G.C. may continue to be the major funding agency, the universities must generate internal resources to meet the recurring expenditure. It is high time that more faculties and departments of the M.S. University start self-funded courses, which have different standard of fees. Such courses may not impose additional responsibility of finance on university as well as the funding bodies of the university.
4. The M.S. University should make special efforts to strengthen strong financial position through university-industry liaison and mobilization of additional resources through donations. This will also promote research and development needed for economic advancement and four upgrading knowledge and skill levels of the work force.
5. The university needs to reduce the extent of its dependence on the State Government by raising its own resources by increasing the operational efficiency of its halls of residence, auxiliary services, running profit making non-conventional auxiliary enterprises etc.
6. University may consider adopting the alternative mode of financing of its hostels, residential quarters for staff, auxiliary services and fixing the charges in such a way that these can be assets with built-in income generating potentiality.
7. The rent of residential quarters should be revised periodically and the fees charged from students residing in hostel should also be revised periodically such that it at least matches with expenditure incurred
8. University through such a machinery for planning and co-ordination may look into the plans and programmes of development of various departments and faculties, distribution of resources among faculties and institutions so as to avoid small departments being allocated "unjustifiably bigger resources" and larger faculties being denied their rightful requirements.

9. It may also be suggested that relatively more resources should be allocated to post-graduates and Research students in comparison to other level of education.