CHAPTER V

SUMMARY, CONCLUSION AND RECOMMENDATIONS
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RECOMMENDATIONS

5.0 Introduction

This chapter consists of a very brief summary of all the previous chapters including the major findings. Also it includes the conclusions drawn based on the findings of the study. Recommendations are made keeping in mind the findings of the study. Suggestions for further research are given at the end of the chapter.

5.1 Summary

Researches have proved that the benefits in various forms to investment in education far exceeds than that of investment in other sectors. These include the benefits the economy obtain from educational research the cultivation and discovery of potential talents, increased capability of people to adjust to change of job opportunities, the provision of manpower for sustained economic growth, provision for better citizenship, the ability to appreciate and recognize a wider range of cultural and other services, reduced reliance on the market for such services as the filing of income tax returns, and a chance to give the next generation better education and therefore, a better future. With increasing
enrollments and expanding scope of educational activities, coupled with decreasing resource availability for the educational sector (in view of competing claims from other sectors), the problem of finance becomes increasingly formidable in all the sectors of education. The problems are experienced at three levels. First, at the educational sector as a whole, secondly at the level of sub-sectors of education and thirdly at the level of individual institution. These financial resources—sectoral, sub-sectoral and institutional—could each have its own externalities on students and parents so far as the education of the household is concerned. It also has implications for the quality of education currently provided and the capability of the sector to undertake innovative programmes. Financial pressures, coupled with declining educational standards and the weakening capability of the educational sector to train and educate students according to certain requirements have also given rise to a new class of institutions. These trends emerged more and more clearly over the past decade or so. The general cost escalations have aggravated the problem of finance for higher education. In our federal framework, irritants in intergovernmental relations have created additional dimensions to the problem. Therefore, proper utilization of the available resources in education for deriving maximum benefits has been stressed. It is in this context that the need for conducting researches in the area of financing of education in general and cost analysis studies in particular are emphasized.

The cost of education include the direct costs i.e. institutional cost and private costs i.e. costs incurred by students and/or parents/guardians and indirect costs (earning forgone). Thus, the inputs of education can be measured in terms of money or of the real resources that are used in the educational process namely the
time of teachers, students and other staff, and books, materials, equipment and buildings. All these resources have alternative uses. This means that alternative opportunities for using these resources must be sacrificed or forgone. Opportunity cost of education include all the real resources that are devoted to the educational process and where these cannot be measured directly in terms of earnings foregone by students when they choose to enroll in education rather than seek employment.

Direct cost is classified into two types, viz. Capital Costs and Recurrent Costs. Recurrent costs include all expenditure on consumable goods (e.g. books, fuel, stationery etc.) and services which bring immediate or short term benefits and have to be renewed. Capital costs include the purchase of durable assets such as buildings, equipment etc which yields benefit for a long period. In cost analysis study mostly direct money costs is receiving the bulk of attention because not only statistics on direct school outlays are readily available but also the consequences of such costs are directly and strongly felt by tax payers. In analyzing the cost of education, the expenditure incurred by all the agencies/bodies/individuals and spent on various items (of expenditure) are taken into consideration. Student/pupil is considered as the unit of study and accordingly cost analysis is done in various ways.

Cost analysis in education serves a variety of purposes in educational planning including, testing the economic feasibility of expansion to plans, proposals or targets, estimating the cost of alternative policies and of educational reforms or innovations comparing alternative ways of achieving the same objective, in order to select the most efficient or economic one, comparing the
profitability of alternative investment projects, improving the efficiency of resource utilization and projecting future levels of educational costs.

Moreover, the importance of cost analysis in education has been realized by many scholars from time to time, considering the resource crunch most of the developing countries are facing today. In the words of Fieldon and Pearson (1978), "In the current economic climate, resources for education and training are becoming scarcer. There will be increasing pressure from policy makers for cost reduction and increased efficiency and there is likely to be more resistance to providing extra resources for educational projects. Educational staff will therefore, need even more than before, to make the best use of the resources available, to examine carefully the full resource implications of any proposed new schemes and to support their arguments with qualitative data whenever possible. Cost analysis can be a powerful aid to achieving these aims." It is in this context that the present study is considered significant.

Though several studies (Kamat, 1965; Panchamukhi, 1968; Chandrakant et al, 1975; Gogate, 1979; Ramanajan, et al, 1978; Shah & Inamdar, 1980; Garg, 1980; Sharma, 1980; Pandey, 1980; Somaiah, 1980; Chalam, 1981; Sharma & Mridula, 1982; Tewari, 1986; Gupta, 1988; Ansari, 1989; Hebbare, 1989; Gupta, 1990; Kurup and Thatte, 1991; Mridula, 1991) have so far been conducted in India in the area of Cost Analysis, all these studies were limited to either one university or a few selected courses or a particular mode of education. Moreso, in the recent years and after implementation of fifth pay commission/committee scales, no such studies have been reported. In Goa, no researchers have so far made Cost Analysis
of Higher Education in the state. Therefore, the researcher decided to conduct this study.

The study was intended to find out the various sources of income and the main components of institutional cost of different institutions of higher education offering different courses in Goa. The actual institutional unit costs and expected institutional unit costs of Bachelor's and Master's degrees in different disciplines/subjects as well as the difference between the two types of costs have been found out. Also the study was intended to find out the inter-institutional differences in the institutional unit costs in B.A., B.Sc. and B.Com. degrees. The private unit costs of Bachelor's and Master's degrees in different disciplines/courses in relation to gender, place of residence of students (rural/urban), stay during study (hostelites/day-scholars) and family economic status have been investigated. Moreover, the difference in family economic status between the students studying different courses at Bachelor's and Master's degree level was investigated and the correlation between monthly income of the family and pocket expenses of the students was found out.

Methodology

Descriptive comparative survey method was followed in conducting the present study. Data were collected from the office records of the Directorate of Higher Education, Government of Goa; Audited Annual Accounts of Goa University for various years obtained from the office of the Finance Officer, Goa University; and Annual Reports (Various years) of Goa University. Data were also
collected from the Principals of 12 Colleges/Institutions of Higher Education. The data producing sample of students consisted of 662 students studying for Bachelor's degrees in the faculties of Arts, Science, Commerce, Law, Architecture, Education and Nursing; and 115 students studying at the Master's degree level. Students of both the sexes and studying in both Government and Private Institutions as well as the Day-scholars and Hostelites (wherever applicable) were represented in the sample. The students were selected employing stratified random sampling technique. Data for the present study were collected personally by the researcher using the following tools developed by the investigator:

i) Information Schedule (separate information schedules for collection of data from the Directorate of Higher Education, Annual accounts of Goa University and Annual Reports of Goa University).

ii) Information Schedules on Income and Expenditure for Heads of Institutions.

iii) Information schedules for Heads of Institutions about Staff and Student Enrolment.

iv) Preliminary Information Schedules for Students.

v) Final Information schedule for Students.

vi) Economic Status Questionnaire for Students.

The data were analysed by calculating mean (average) and SD (wherever applicable) and by using percentage analysis, coefficient of contingency – C; Chi-square and t-test.
5.1.1 Major Findings:

The major findings of the study are as follows:

1. The sources of income of different institutions/colleges (considered together) were state Government Grants, fees from students, grants from UGC/AICTE, donations and miscellaneous income i.e. sales of students products, exhibitions, seminars, conferences etc. The percentages of income from these sources were 90.7, 6.3, 2.1, 0.1 and 0.8 percent respectively. Variations in terms of percentage of income from these sources were observed from one type of institution to the other.

2. The components of institutional costs were salaries of teaching and non-teaching staff, maintenance of infrastructure, books and journals, stationery, co-curricular activities, laboratory equipments & chemicals etc. and in-service education of teachers. On an average, the percentage of expenditures incurred under these heads in the case of general colleges (colleges having arts, science and commerce streams considered together) were 69.1, 20.5 (teaching and non-teaching staff together 89.6 percent), 1.2, 1.7, 2.5, 1.1, 3.6 and 0.1 percent respectively.

3. The percentages of expenditure incurred under Salary of Staff (Teaching and Non-teaching) varied between 91 percent to 100 percent in different professional colleges. The Institute of Nursing used to spend nothing under non-salary head of expenditure. The percentage of expenditure incurred for purchasing books and journals varied between 1.77 percent to 2.4 percent from one type of institution to other. None of the institutions used to spend more
than 0.1 percent of their total expenditure on in-service education of teachers. As far as the expenditure on co-curricular activities is concerned, it was found that none of the institutions used to spend more than 1.5 percent of the total expenditure.

4. The actual institutional unit cost of B.Sc., B.A., B.Sc. (Home Science) and B.Com. were Rs. 83,086, Rs. 57,098, Rs. 52,802 and Rs. 27,766 respectively. Among the professional degrees, the unit cost of LL.B. was the lowest (Rs. 28,286) and B.Sc. Nursing was the highest (Rs. 1,94,289).

5. Among the M.A. degrees in different subjects (Languages), the unit cost of M.A. in French was the highest (Rs. 3,02,936) and M.A. in Hindi was the lowest (Rs. 67,846). Among the Social Science subjects, M.A. in Philosophy was exceptional very high (Rs. 4,37,481) and lowest in M.A. in Economics (Rs. 76,077). Among the Science subjects, the institutional unit cost for M.Sc. in Geology was very high (Rs. 4,51,507) compared to all other subjects. The overall unit cost of M.A. degree in Goa University was Rs. 1,11,452 and that of M.Sc. degree was Rs. 2,11,838. The unit cost of M.Com. degree was only Rs. 37,491.

6. No difference was found between the actual and expected institutional unit cost of B.Ed., M.Ed. and B.Arch degrees. In the case of all other degrees in affiliated colleges, the actual institutional unit costs were higher than the respective expected institutional unit costs.
7. No difference was found between the actual and expected institutional unit cost in MBA, MCA and M.Sc. degrees in the subjects of Microbiology, Botany, Chemistry and Physics. The actual institutional unit costs of Master's degrees in all other subjects/disciplines were found higher than the respective expected institutional unit costs. The difference in terms of percentage was found very high in most of the subjects in the Faculty of Languages and Social Sciences. The difference between actual and expected unit costs in M.Sc. degree (all subjects combined together) was 15 percent whereas in M.A. (all subjects considered together) was 116 percent.

8. The actual institutional unit costs of all the degrees i.e. B.A., B.Sc. and B.Com. were higher in the government colleges than in private (government aided) colleges.

9. The actual institutional unit cost of B.A. degree varied between Rs. 40,989 to Rs. 82,948 from one institution to the other. In the case of B.Sc. degree it varied between Rs. 57,970 to Rs. 1,06,218. In the case of B.Com. degree the difference between the highest and lowest unit cost was Rs. 10,411.

10. The actual institutional unit cost of B.Com. degree in colleges having only Commerce stream was lower than the unit cost of the same degree offered in institutions having Arts, and/or Science streams along with the Commerce stream.
11. The private unit cost of Bachelor's degrees in the general stream was found to vary between Rs. 38,263 to Rs. 53,806. Among the Masters degrees, the private unit cost of M.Sc. degree was the highest (Rs. 96,119) and M.Com. degree was the lowest (Rs. 53,227).

12. The private unit cost of B.Com., LL.B. and M.Com. degrees were higher than the respective actual institutional unit costs. In the case of B.A., B.Sc., B.Sc. (Nursing), B.Arch., B.Ed., M.A. and M.Sc. degrees the institutional unit costs were higher than the respective private costs.

13. The actual non-salary institutional unit costs of different Bachelor's and Master's degrees varied between Rs. 677 (M.Com.) and Rs. 10,961 (M.Sc.).

14. The private unit cost of B.Sc. degree was significantly higher (P < .01) than both B.A. and B.Com. degrees. The private unit cost of B.Com. degree was significantly higher than the private unit cost of B.A. degree.

15. The private unit cost of M.Sc. degree was found significantly higher (p < .01) than both M.A. and M.Com. degrees. Whereas the private unit cost of M.A. degree was significantly higher (P < .01) than M.Com. degree.

16. Differences were found in private unit costs between different professional Bachelor's degrees.
17. The private unit cost of M.A., M.Sc. and M.Com. degrees were found significantly higher than B.A., B.Sc. and B.Com. degrees respectively indicating that the students studying for Master's degree used to spend more for their study than the students studying for the Bachelor's degrees in the same streams/disciplines.

18. The students from urban areas, students studying in government institutions and hostelites were found to have incurred significantly more expenditure (P < .01) than the students belonging to rural locality, students studying in private institutions and the dayscholars respectively. No significant difference in private unit cost of Bachelor's degrees was found between boys and girls.

19 a) It was found that the Arts graduates belonging to urban areas had incurred significantly higher (P < .01) expenditure than the students from rural areas. No significant difference was found between students studying in government and private institutions and between boys and girls in expenditure incurred during their study leading to B.A. degree.

b) The Science graduates belonging to rural areas and the students who had studied in government institutions had spent significantly higher amount than the students belonging to urban areas and the students who had studied in private institutions respectively. No significant difference was found between boys and girls in expenditure incurred by them during their study leading to B.Sc. degree.
c) No significant differences in expenditure incurred during study leading to B.Com. degree were found between rural and urban students, students studying in government and private institutions and between boys and girls.
d) No significant difference in private unit cost of LL.B., degree was found between rural and urban students and boys and girls.
e) The costs incurred by the students belonging to urban areas and girl students for obtaining B.Ed. degree were found significantly higher (P < .01) than students belonging to rural areas and boys respectively.
f) The expenditure incurred by the students belonging to urban areas and girls for obtaining B.Arch. degree were found significantly higher than students belonging to rural areas and boys respectively.
g) No significant difference (P > .05) was found in expenditure incurred during study leading to B.Sc. (Home Science) degree between the students belonging to urban and rural areas.

20. The male students and the hostilites had incurred significantly higher expenditure during their study leading to Master's degrees in different subjects compared to the girls and day-scholars respectively. Students belonging to rural and urban areas had spent nearly the same amount for their studies leading to Master's degrees.

21. a) Boys had spent significantly more than the girls during their study leading to M.A. degree. No significant difference was found in expenditure incurred between the students from rural and urban areas.
b) The students belonging to urban areas and boys had incurred significantly higher expenditure than the students belonging to rural areas and girls respectively during their study leading to M.Sc. degree.

c) No significant differences were found in average expenditure incurred during study leading to M.Com. degree by the students belonging to rural and urban areas and boys and girls.

22. Significant positive correlation was found between family economic status and private unit cost of higher education at both Bachelor's and Master's degree level.

23. Significant positive correlation was found between monthly income of the family and pocket expenses of the students.

24. a) The family economic status of the students studying professional courses was significantly higher (P < .05) than the students studying general (academic) courses.

b) The family economic status of the students studying for B.Sc. degree was found higher than the students studying for B.A. and B.Com. degrees. No difference was found in family economic status between the students studying for B.A. and B.Com. degrees.

c) The economic status of the students studying for LL.B., B.Arch., M.B.A. was found significantly higher than the students studying for B.Ed. degree. No significant difference was found in family economic status between the students studying in other professional courses.
25. a) The family economic status of the students studying at Master's degree level was significantly higher than the students studying at Bachelor's degree level.

b) The family economic status of the student studying for M.A. degree was found significantly higher (P < .01) than the students studying for B.A. degree.

c) The family economic status of the students studying for M.Sc. degree was found significantly higher (P < 0.01) than the students studying for B.Sc. degree.

d) The family economic status of the students studying for M.Com. degree was found significantly higher (P < .01) than the students studying for B.Com. degree.

5.2 Conclusions

Based on the findings of the study, the following conclusions were drawn:

1. Government grant/finance is the main source of finance of higher education in the state of Goa. The fees collected from the students constitute a negligible percent (merely 7.2 percent) of the total income of the institutions of higher education.

2. The main component of the institutional cost is the salary of the teaching and non-teaching staff which constitutes more than 90 percent of the total expenditure. Very insignificant amount is spent by the institutions of higher education on in-service education of teachers, co-curricular activities and in
maintaining and equipping the science laboratories. Some of the institutions particularly, the private non-professional ones, do not spend any thing for professional development of their teaching and non-teaching staff.

3. The actual institutional unit cost of B.Sc. degree is very high compared to both B.A. and B.Com. degrees. Moreover, the actual institutional unit cost of B.A. degree is much higher than B.Com. degree.

4. The institutional facilities in terms of students enrolment in the general colleges as well as in the colleges of Home Science, Law and Nursing are underutilized.

5. The actual institutional unit costs of M.A. and M.Sc. degrees in almost all subjects/disciplines in Goa University are very high. The unit costs of these two Master’s degrees are much higher compared to professional degrees like M.B.A. and M.C.A.

6. The institutional facilities in terms of students enrollment in almost all the departments in the faculties of Languages and Social Sciences are mostly unutilized

7. The institutional facilities in terms of students enrollment provided for B.Ed., M.Ed., MBA and MCA are fully utilized. However, in the case of M.Com., M.Sc., B.Arch., LL.B. and B.Sc. (Home Science) the institutional facilities are still to be fully utilized.

8. The institutional unit costs of B.A., B.Sc. and B.Com. degrees are lower in private colleges than in government colleges.

9. The institutional facilities in terms of students enrolment provided for B.A., B.Sc. and B.Com. degrees are better utilized in the private colleges compared to the government colleges.
10. The actual institutional unit cost of B.Com. degree is less when it is offered in Commerce colleges than in colleges having Arts and/or Science streams alongwith Commerce stream. B.Com. degree is cost effective when it is offered in exclusively Commerce colleges.

11. The private unit cost of B.Sc. degree is higher than B.A. and B.Com. degrees whereas the private unit cost of B.Com. degree is higher than B.A. degree.

12. The private unit cost of M.Sc. degree is much higher than M.A. and M.Com. degrees.

13. The social unit cost of B.Sc. degree is very high compared to many other degrees.

14. The private unit costs in the case of B.A. and B.Sc. degrees are lower than the respective actual institutional unit cost whereas the private unit cost of B.Com. Degrees is higher than the actual institutional unit cost. Also, the private unit costs of M.A. and M.Sc. degrees are lower than the respective actual institutional unit costs. Whereas, the private unit cost of M.Com. degree is much higher than the actual institutional unit costs. In the case of the professional degrees except LL.B. the private unit costs of all other professional degrees are lower than the actual institutional unit cost.

15. Most of the colleges (having the general streams of Arts, Science & Commerce) and a few colleges having only Commerce stream have not utilized adequately their institutional facilities in terms of the student enrollment.

16. The private unit costs of M.A., M.Sc. and M.Com. degrees are significantly higher than the private unit cost of B.A., B.Sc. and B.Com. degrees.

17. The students coming from urban areas, students studying in government institutions and the hostelites spend very higher amount during their studies
than the students coming from rural localities, students studying in private institutions and the day scholars respectively.

18. Gender is a factor not associated with private unit cost at the Bachelor's degree level but it is a factor significantly associated with private unit cost at the Master's degree level.

19. Students from urban areas studying for B.A. degree spend more for their study compared to their rural counterparts.

20. Students from rural areas studying science and the students studying in Government colleges spent more than the students belonging in urban areas and the students studying in private institutions respectively.

21. Gender, locality and type of institution are the factors not associated with private unit cost of B.Com. degree.

22. The students belonging to urban areas and the girl students studying for B.Ed. and B.Arch. degrees spend more during their study compared to the students from rural areas and the boys respectively.

23. The students who study B.Sc. (Home Science) belonging to both rural and urban areas spend equal amount for their study.

24. The students belonging to rural and urban areas studying for M.A. degree spend equal amount for their study. However, boys spend more than the girls.

25. The students from urban areas and girls studying for M.Sc. degree spend more for their studies compared to the students from rural areas and boys respectively.

26. Both gender and locality are the factors not significantly associated with the private unit cost of M.Com. degree.
27. There exists significant positive correlation between family economic status and private unit costs of higher education. Generally the students from higher economic status families spend more during their study compared to the students from lower economic status families.

28. There exists significant positive correlation between monthly income of the family and pocket expenses of the students. The higher the monthly income of the families, the more the pocket expenses of the children during the period of their study.

29. Family economic status is a factor significantly associated with the types of courses (General vs. Professional) the children study.

30. Comparatively the children from higher economic status families study professional courses whereas the children from lower economic status families study is general streams of education (i.e. Arts, Science and commerce streams).

31. Comparatively the children from higher economic status families study in Science stream than in Arts or Commerce streams.

32. Economic status of the family is significantly associated with the types of professional courses the children study. Comparatively the children from higher economic status families pursue study in professional courses like Architecture and Management whereas children from lower economic status families study professional courses like Education.

33. The economic status of the family is a factor associated with the levels of education of children (Bachelor’s and Master’s degrees). Comparatively the children from higher economic status families pursue studies beyond
Bachelor's degree whereas the children belonging to lower economic status families discontinue their study after completion of Bachelor's degree.

5.3 Recommendations

Based on the findings of the study, the following recommendations are made/action points suggested for implementation by the concerned authorities.

5.3.1 Actions Needed to be taken by the College Authorities

1. The institutions of higher education in the state have yet to realize their responsibility as far as the financing of education is concerned. Instead of depending only on the state government, all the institutions of higher education in the state should find the ways and means to generate as much revenue as possible for their own expenses. The institutions should also use the available financial resources judiciously.

2. All the institutions must increase expenditure under the non-salary heads. Expenditure incurred under the non-salary heads of expenditure should be increased to a significant percentage of the total expenditure. All the institutions need to spend a significant percentage of the total expenditure for purchasing books and journals, in-service education of teachers and for conducting co-curricular activities for the improvement of the quality of education.

3. In view of the large difference between the actual and expected institutional unit cost of B.A., B.Sc., B.Com., B.Sc. (Home Science), LL.B. and B.Sc. (Nursing) degrees, it is necessary for the institutions
offering these courses to make maximum use of the institutional facilities in terms of students enrolment. Appropriate measures should be taken to ensure that all the students who are enrolled in the first year not only continue their study till the end of the course, but also complete the course successfully. The colleges offering courses leading to B.A. and B.Sc. degrees should close down those departments/subjects in which enrolment is very less provided that such subject/s is/are offered in at least one/some of the colleges in the state. To implement this all the colleges in the state need to work in coordination.

4. Since the costs of B.A., B.Sc. and B.Com. degrees are more in government colleges than in private colleges, it is necessary for the government colleges to make maximum use of the institutional facilities in terms of students enrolment to bring down the institutional unit cost of these degrees. The government colleges should stop offering those subjects in which student enrolment is very low, if such facilities exists in other institutions in the state.

5.3.2 Actions Needed to be taken by the Goa University

1. In view of the exceptionally very high institutional unit cost of M.A. and M.Sc. degrees in general and these degrees in some of the subjects in particular the following steps should be taken:

   - The prescribed students intake in first year for all the departments (subjects) in the faculties of social sciences and languages should be reduced to 10. This is necessary because of the decrease in demand for these courses over the last many years.
The existing uniform staffing pattern of Professor-1; Readers-2; and Lecturers-3 should be changed as follows:

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<th>Professor</th>
<th>Reader</th>
<th>Lecturer</th>
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<tr>
<td>In Faculties of Social Science &amp; Languages except in Philosophy, Sociology French and Portuguese</td>
<td>1</td>
<td>1</td>
<td>2</td>
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<tr>
<td>In the Departments of Philosophy, Sociology French and Portuguese</td>
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<tr>
<td>Faculties of Natural and Life Sciences (Except Geology and Zoology)</td>
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<tr>
<td>In the Departments of Geology and Zoology</td>
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In the case of departments of Commerce, Management and Computer Science, the existing staffing pattern is appropriate. Hence no change is necessary.

By reducing the number of teaching staff and changing the staffing pattern, the university will be in a position to bring down the institutional unit cost of different Master’s degrees. At the same time the university will be in a position to utilize the money thus saved to open many other departments in other important subjects, since Goa University does not have the departments like Geography, Education, Psychology etc.
2. For the qualitative improvement of education it is very much necessary on the part of the University to increase the expenditure under different non-salary heads of expenditure.

3. The university should make mandatory for the teachers to undertake research and extension activities. They should also be made to continuously actively engage in academic activities like publication of papers, participation in seminar, conferences etc. In this way, the high institutional unit costs of Master's degrees in different subjects can be compensated to a large extent.

5.3.3 Actions Needed to be taken by the Government of Goa

1. The state government should direct the institutions to make efforts to generate as much revenue as possible at the institutional level.

2. The government should appoint a committee to review the working of different institutions of higher education in general and colleges having Arts, Science and Commerce streams in particular. It should be ensured that the subjects having less or very little demand are not offered in more than one college in a particular taluka/town/city/state. It is necessary to check the disproportionate opening of different subjects in the colleges considering the size of the state and its population. It is necessary to ensure that the same subjects are not offered in many colleges in the same locality. The government of Goa should set up an appropriate machinery to look after this matter.

3. Since the cost of B.Com. degree is less in Commerce colleges than in colleges having Commerce, Science and/or Arts streams, the
Government should encourage opening of Commerce colleges and discourage colleges to have Commerce stream in Arts and Science colleges. In the localities having Commerce colleges at present, the government may direct the colleges having Commerce stream along with Arts and/or Science stream to close down the Commerce stream in a phased manner.

4. Since the children mostly from higher economic status families study professional courses and the courses leading to Master's degrees, it is necessary on the part of the government to take steps to ensure that the children from the economically backward families also get opportunity to study such courses. Such students should be given adequate funds/finance aid/study loan/scholarship to study professional courses and courses leading to Master's degrees.

5. In view of the high expenditure involved during study by the students studying in Science stream, professional courses and students staying in hostels, stipends/scholarships/study loan should be given to such students particularly those from lower economic strata.

5.3.4 Actions Needed to be taken by the State Government and the Goa University Jointly

1. Since the study revealed that the children from higher economic status families spend very high amount during their study, it means that such families can afford to pay more fees to the institutions compared to the poor families. The Government of Goa and Goa University should work in
consultation and review the existing policy regarding the collection of tuition fees from the students. Instead of making all students to pay the same amount of tuition fees irrespective of their economic status, payment of tuition fees should be linked with the economic status of the family. This step will enable the institutions to increase their revenue and hence reduce the financial burden on the state government.

5.4 Suggestions for the Research

1. The same study can be conducted taking all the institutions of higher education offering all types of courses in the state of Goa.

2. Comparative studies on cost analysis of higher education between the state of Goa and other states may be undertaken.