THE DIMENSIONS OF OVER-QUALIFICATION A CASE STUDY OF THE NON-GAZETTED OFFICERS IN KERALA STATE

by

GEETHA.N.R.

THESIS SUBMITTED TO THE UNIVERSITY OF CALICUT
FOR THE AWARD OF THE DEGREE OF
Doctor of Philosophy in Economics

Department of Economics, University of Calicut
Dr. John Matthai Centre
Aranattukara
Thrissur – 680 618

MARCH 2004

DECLARATION

I, Geetha.N.R., do hereby declare that this written account titled "THE DIMENSIONS OF OVER – QUALIFICATION – A CASE STUDY OF THE NON – GAZETTED OFFICERS IN KERALA STATE", is a bonafide record of research work done by me under the guidance of Dr. U.T.Damayanthi, Professor of Economics, University of Calicut, Dr. John Matthai Centre, Aranattukara, Thrissur.

I also declare that this has not been submitted by me earlier for the award of any degree, diploma, title or recognition.

GEETHA.N.R.

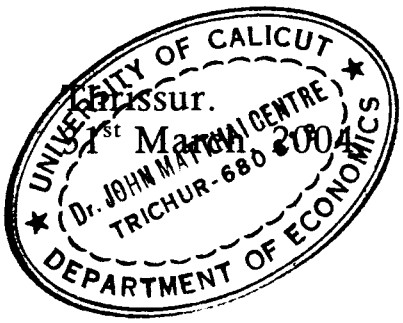
Thrissur,
31st March, 2004.

Dr. U.T.DAMAYANTHI
Professor of Economics

Department of Economics
University of Calicut
Dr. John Matthai Centre
Aranattukara,
Thrissur – 680 618.

CERTIFICATE

Certified that this written account on "THE DIMENSIONS OF OVER–QUALIFICATION – A CASE STUDY OF THE NON–GAZETTED OFFICERS IN KERALA STATE", submitted for the award of the degree of Doctor of Philosophy of the University of Calicut is a bonafide record of research work done by Smt. Geetha.N.R., under my supervision. No part of this has been submitted earlier for any other purpose.



Thrissur.
31st March 2004

Dr. U.T.DAMAYANTHI
(Supervising Teacher)
UNIVERSITY OF CALICUT.

Acknowledgement

It gives me much pleasure to acknowledge my indebtedness to all persons, whose support and guidance has helped me to carry out this work. At the outset, I would like to place on record my sincere gratitude to Dr. U.T. Damayanthi, Professor, Department of Economics, Dr. John Matthai Centre, Aranattukara, but for whose expert guidance, whole hearted support and constant encouragement, this work would never have come to light. Her keen interest in my work and the patient and unfailing help she rendered during the preparation of this dissertation add to my deep self-gratitude for her personal qualities as perseverance, preciseness and patience, which I imbibed during the period of my study. I consider it a great privilege to have been able to work under her supervision and guidance.

I owe a great deal to Dr. P.P. Pillai and Dr.D.P. Nair, former Heads of the Department of Economics, Dr. John Matthai Centre, Aranattukara, for

their inestimable help and candid suggestions during the earlier stages of the study.

I express my deep sense of gratitude to Dr.Lakshmi Devi, Professor and Head of the Department of Economics, Dr.John Mathai Centre, Aranattukara, for her valuable suggestions and timely help I received from her during the period of my research.

I am extremely grateful to Dr.A.C.Kuttikrishnan, Dr.Karim, Dr.Retnaraj and Dr.Joseph of the same Department for devoting their valuable time to help me at various stages of this work.

I am deeply indebted to Dr.P.R.Gopinathan Nair, retired Professor and Head of the Department of Economics, Kerala University, with whom I had enlightening discussions.

May I make use of this occasion to express my deep sense of gratitude to the Non-Gazetted officers in

Thrissur district, for their wholehearted Co-operation extended to me during the period of survey.

I owe a lot to the University grants Commission for awarding me the Teacher fellowship under the Faculty Improvement Programme for pursuing the course. My sincere thanks are due to the Department of Economics, Dr.John Matthai Centre, Aranattukara for providing facilities for full time research. I also thank the staff members of the administrative office who took real interest to get the things done during the course of this study.

I extend my sincere thanks to Mrs. Usha Rani, librarian, Dr.John Matthai Centre, and the librarians of Centre for Development studies, Thiruvananthapuram and Cochin University of Science and Technology for their support, co-operation and timely assistance given to me.

I will be failing in my duty, if I do not mention my colleagues, especially the young co-researchers who have

been helping me at all stages. I am deeply indebted to them especially in the interpretation and verification of the statistical part of the thesis.

At this moment, I sorrowfully remember my most beloved father who is no more with me to share the happiness.

I owe a great deal to my loving mother, brothers, sister and in laws, and very specially to my husband and young son for their varied and valuable help and constant encouragement, which have had profound influence on me in tiding over the hardships faced during my research. This work would not have taken off at all but for their forbearance, fortitude and prayers.

I am grateful to M/s Vysagham Institute, Olarikkara, Thrissur, Ph:0487-2362532 for the neat execution of the typing and binding works.

Above all, I am highly indebted to God Almighty, who I believe is always with me, without whose blessings this work would not have been materialised.

Geetha. N. R

CONTENTS

LIST OF TABLES

LIST OF FIGURES

INTRODUCTION

Geetha. N.R. “The dimensions of over-qualification a case study of the non-gazetted officers in Kerala state ” Thesis. Department of Economics, Dr. John Matthai Centre, University of Calicut, 2004

CHAPTER I

INTRODUCTION

- Importance of the study.
- Objectives of the study.
- Data Source and methodology.

CHAPTER I
INTRODUCTION

" The destiny of India is now being shaped in her class rooms. In a world based on Science and technology, it is education that determines the level of prosperity, welfare and security of the people. If the pace of national development is to be accelerated there should be a bold and imaginative educational policy."[1] Education is a powerful instrument of social, political and economic change. It is a process of lighting lakhs of lamps to enlighten the society. It is the aggregate of all the processes by which a person develops his abilities, attitudes and other forms of behaviour, which may help to attain social competence and optimum individual development.

Education is conventionally considered to play a dual role in society, first as promoter of economic growth and second, as equaliser of income distribution. The conceptualisation of education as a form of capital leads to the understanding that it enhances labour productivity and efficiency. To the extent poverty and unemployment

---

[1] Government of India, (1966) Education and National Development Report of the Education Commission, 1964–66, Ministry of Education, New Delhi.

originate from illiteracy or low educational status, educational advancement would be a means not only to promoting economic growth but also generation of employment and progressive redistribution of income in favour of the economically weaker sections of society.

Economists have all along taken some cognisance of education in the process of economic growth. In fact the relationship of the two for the prosperity of mankind was emphasized long back by Adam Smith (1776) –the philosopher economist, and Marshall, one of the most versatile contributors to the discipline of economics. Marshall observes, "Education confers great indirect benefits even in the ordinary workman. It stimulates his mental activity, it fosters in him a habit of wise inquisitiveness. It makes him more intelligent, more ready, more trust worthy in his ordinary work, it raises the time of his life in working hours, it is an important means towards the production of material wealth"[2].

The above observation makes it clear that economists, right from Smith onwards were aware of the

---

[2] Alfred Marshall, (1930) *Principles of Economics*, London : Macmillan and Co. Ltd., pp.1975–76.

potential of education, in generating income and in its turn economic development. Malthus has expressed his views on education. He believed that "Education could contribute to population control and hence raise or maintain national income by reducing the members in the labour force"[3].

Blaug remarked that "in all economics of which we have knowledge, people with more education earn on an average, higher incomes than people with less education, at least if the people being compared are of the same age"[4].

Human capital is endowed with knowledge and skill, which in turn lead to the development of a country. In the estimation of the economic returns to education, factors such as increased productivity (by enabling the acquirer, to earn a stream of income), creation of highly skilled man power, changes in the attitude towards work and life and many other indirect and intangible contribution of education are considered significant.

---

[3] M.J. Bowman, (1972) "The human investment revolution in Economic thought", B.R. Losin ed., *Education structure and society*, Baltuere: Penguine Books, p.45.

[4] Mark Blaug, (1972) *An Introduction to the Economics of Education*, Batlimore: Penguine Books, p.1.

Education has become a major source of economic growth in winning the abundance that is to be had by developing a modern agriculture and industry. It simply would not be possible to have this abundance, if our people were predominantly illiterate and cultural values is presently also an investment in people to the extent that it improves their capabilities and thereby increases the future earnings of people. A list of the possible indirect and intangible benefits to education would include the following:-

1. Education raises the productivity and incomes of the workers other than those who receive education, whether through diffusion of skills or the reorganisation of works procedures.

2. Education promotes technical change (and thus ultimately productivity and output growth) in various ways ranging from the undertaking of research and development to the spread of knowledge through literacy.

3. Education increases allocative efficiency, by increasing the flexibility and mobility of labour

force, in response to changes in the demand for labour.

4. Education brings about many other gains of social as well as economic character; increase social cohesion, stability, democratic values etc.

It is believed that education is capable not only of creating in human being the countless competencies required for growth, but also of revolutionising and modernising society. Education is a tool in exploiting modern technology and as such, a profitable investment in individuals and in society. Realising the importance of education for rapid economic development, the secondary education commission observed that "the aim of secondary education is to train the youth of the country to be good citizens, who will be competent to play their part effectively in the social reconstruction and economic development of their country"[5].

Though the role of education in socio – economic development has been recognized by earlier

---

[5] Government of India, (1962) Report of the secondary Education Commission, Delhi: Ministry of Education, p.4.

thinkers, it is only during the 1950's that it was identified as an important instrument of national development. Delivering the presidential address to the American Economic Association in 1960's, Theodore Schultz inaugurated the field of "Economics of Education" which Bowman later termed it as "Human Investment Revolution in Economic thought". This shift in economic thinking established education as a prime factor in economic development[6].

In the case of under developed countries importance of human capital particularly investment in education is more obvious as compared to its developed counter parts. In such economies no progress is possible without the improvement in education of human factors. In keeping with this view, Indian Education Commissions Report (Kothari) opens with the word: "The destiny of India is now being shaped in her class rooms. This we believe is no more rhetoric ..... It is education that

---

[6] Mark Blaug, (1972) *An Introduction to the Economics of Education*, Allen Lane, The Penguin Press, London.

determines the level of prosperity, welfare and security of the people[7]".

From the above it is evident that for the sustained growth of an economy investment in education is not enough. Only a good, efficient and relevant system of education can yield positive returns to the individual or to society. Thus development of education both in terms of quantity and quality is crucial. What is, however still debatable is the need of the educational reform, content of the reform and objectives to be achieved through our reformed educational system.

Kerala has to her credit a long and remarkable history of educational development, both in public and private sector. She has marched ahead of other states in the field of education and her achievement is reflected in the high percentage of literacy and the large proportion of children of the various age groups attending educational institutions. According to the 2001 census Kerala stands foremost among the states in India with a literacy rate of 90.92 per cent as against the all India average of 65.38 per

---

[7] Government of India, (1966), Education and National Development, Report of the Education Commission, 1964–66, Ministry of Education New Delhi.

cent. This credit able achievement of Kerala is due to the enlightened policy of the rulers of the state, particularly the Maharajas of Travancore and Cochin.

The process of rapid educational growth on a massive scale began in Kerala, first in Travancore and then in Cochin, and lastly in Malabar. The emphasis given to the strengthening and development of primary education resulted in the higher rates of retentions with in the system, compared to other parts of the country. The wastage of human and material resources caused by dropout is also the lowest in Kerala. Since dropout rates from the first three standards are very low in Kerala, the average level of educational attainment of, even pupils who do not complete elementary education is also found to be significantly higher in the state than in other parts of the country[8].

Due to the pursuit of an open door policy in admissions, there was a tremendous expansion in secondary and university enrolment, which in turn heavily subsidised free education. The intense desire on the part of the new generation for a university degree, the traditional social

---

[8] P.R.Gopinathan Nair, (1981) *Primary Education, Population, growth and Socio Economic change*, Allied publishers, New Delhi: p.180.

prestige attached to a degree etc., has resulted in a serious glut in the market for educated manpower. Employment opportunities in the state have not increased commensurate with the increased supply of educated manpower. Thus the imbalance between the supply of and the demand for the educated resulted in general as well as structural disequilibrium in the labour market leading to unemployment, under employment and misemployment of the educated in the state.

1.1 Importance of the study

Till very recently unemployment of the educated was probably the most critical of all the severe problems Kerala encountered. Though Kerala has achieved much progress with regard to the spread of education, health services, social welfare measures and infrastructural development, the state has not been able to solve the problem of unemployment to any significant extent during the last 30 years[9]. According to 43rd round (July 1987–June 1988) of the National Sample Survey organisation (NSSO) Kerala has the highest unemployment rate of the

[9] Government of Kerala, (1985) Draft Seventh Five year plan (1985-90) and Annual plan, 1985–86, State Planning Board, Thiruvananthapuram: p.1.

educated (of age 15 and above) by sex and rural – urban categories among the Indian states[10]. The Employment Exchange statistics and the results of various surveys on unemployment among the educated have been assuming a grave dimension in recent years. Despite various limitations the Employment Exchange Statistics show that 36.4 lakh persons were in the live register as on December 1991, of which 64 per cent had an educational level of SSLC and above[11].

The problem of unemployment among the educated is merely an extension of the problem of the unemployment of the less educated. Because when a large number of educated persons compete for the limited number of jobs, the less educated are elbowed out by the more educated. This in turn results in devaluation of higher education leading to under employment and misemployment of the educated.

All unemployment is tragic – whether among the educated or the less educated or uneducated. But it is more

---

[10] Sarvekshana, (1992) No.2, National Sample Survey Organisation, Department of Statistics, Ministry of Planning, Government of India.

[11] Government of Kerala, (1992) *Economic Review*, State Planning Board, Thiruvananthapuram: p.11.

tragic among the educated, partly because their individualities have been awakened and hopes and aspirations raised, and partly because a fair amount of scarce resources have been invested in the education[12]. The proper utilization of the educated, especially professionally and technically qualified manpower is important, as this category of manpower involves heavy educational investments, both on the part of the individual and of the society as a whole. The over supply of educated manpower reflects the misdirected and wasteful investment of scarce capital in education.

Apart from the huge waste of the resources due to investment in educational development, the wide spread unemployment of educated persons creates numerous social problems as well. Failure to get suitable employment despite repeated efforts, causes frustrations and discontent to the educated, who form the most real section of the society and hence a constant threat to the security and political stability of the state. The growing surplus of the educated unemployed reflects the defective and inadequate educational and manpower planning since the success of the state planning should be judged partly, but importantly,

[12] J.P. Naik, (1969) "The Problem", Seminars Vol.120, August, p.11.

on the proper absorption and full utilization of educated manpower of the economy.

A number of studies on the problem of educated unemployment have been made from time to time both in India and Kerala. But in our country the problem of unemployment is more of under employment rather than open unemployment. It is a situation in which employed people are contributing to production, less than they are capable. The existence of the unemployed and those inadequately utilised judged by hours of work calls for the creation of more employment, those who are inadequately utilized by income level point to the need for increased investment in human resources, increased capital inputs in technology and structural changes in the economy, and the category utilized inadequately by mismatch of occupation and education raise questions pertaining to allocation of resources to different levels of education and also, to structural changes in the economy[13].

To achieve the objective of proper utilization of human resources, attention to the problem of rapidly

---

[13] Philip M. Hauser, (1974) "The measurement of labour utilisation", *The Malayan Economic Review*, Vol.No.1, April, p.3.

growing number of educated under employed is essential. Unfortunately reliable statistics relating to the nature; extent and characteristics of the educated under employed in the state are limited. In this context, studies throwing light on the various dimensions of the problem of over qualification in Kerala have special significance. A clear understanding of the dimensions is however the first step towards its solution. Hence the importance of the present study.

The problem for the present study is titled as "THE DIMENSIONS OF OVER QUALIFICATION – A CASE STUDY OF THE NON GAZETTED OFFICERS IN KERALA STATE".

1.2 Objectives of the study

In the matter of higher education, Kerala enjoys a predominant position among other Indian states. The aspiration for higher education among the people of Kerala is higher as compared with those of other states in India. A great many unemployed pursue higher education with the objectives of improving their employment prospects. This explains why graduates and many others with still higher

influence their education, consequently their occupation too. Although almost all parents may have imagination about their children's future career, the educated parents can guide the children according to their plans and according to the abilities and interests and thereby inspire them to get more and more qualification which will enable them to get the first position in the queue of the job market, thus making them over qualified.

With a view to finding out these various dimensions the specific objectives of the study are:-

1. To analyse the nature and dimensions of over qualification among the Non-Gazetted officers in State government services.

2. To examine over qualification in terms of the socio economic status of the respondents.

3. To study the intensity of over qualification and the factors determining it.

Since clerical posts are the most numerous and relatively homogeneous in nature, a beginning is made with

these posts. Due to the enormous number of this post both in the private and public sector, the coverage of the study is restricted to the Non gazetted officers in State government service.

1.3 Data Source and methodology

The present study has relied upon both categories of data-primary and secondary. Secondary data has been used to analyse the changing trend and pattern of educational development in Kerala. Main sources of secondary data are the decennial Census Reports, reports of the various rounds of the National Sample Surveys on Employment and Unemployment in Kerala, Employment Exchange data, publications of the State Planning Board, Department of Economics and Statistics etc.

The nature and dimensions of over qualification among the non-gazetted officers have been analysed on the basis of the primary data collected from Thrissur district, by using a questionnaire specifically prepared for the purpose (A copy of the questionnaire is given in Appendix I). To examine the over qualification in terms of the socio – economic status and to test the relation and association

between different variables, the chi-square test is used. Chi-square is defined as the square of the difference between the observed and the expected frequencies in a category divided by the expected frequency, represented by

$$\chi^2 = \Sigma \left\{ \frac{(O-E)^2}{E} \right\}$$

It is a static used to find out the association between two variables. The sample is divided into various categories on the basis of the values of a variable and the number of class under each category is found out. Using these frequencies in the categories based on two variables, it is possible to find out whether the variables are associated or not. Observed frequencies are indicated by F_o and the expected frequency by F_e. The square of the difference between the two is divided by the expected frequency. The observed frequency is collected from the data and the expected frequency is found out using the formula $F_e = \frac{Ct - Rt}{Ct}$. It is possible to compare the value with the value gvien in the table. If the obtained value is less than the table value for the given degrees of freedom at the selected level of significance, we conclude that variables are independent. If the obtained value is more than the table value for the given degrees of freedom at the selected level

of significance, then the two varibales are not independent i.e. they are related. Degrees of freedom in chi square is decided by (C-1)(R-1). The relation between the marital status, the caste syste, the sex, the place of residence, the interim period and the age on the one side and over qualification on the other were analysed separately using the chi square test. The intensity of over qualification is studied by analysing the grade of occupation along with the excess years of education.

The significance of the factors that determine the over qualification of the respondents have been tested by using a multiple regression model. Wherever the variables are self explanatory, simple statistical tools such as averages, ratios, percentages etc are used. Detailed procedures of sample selection are given in chapter IV.

1.3.1 Conceptualisation of the terms

1. Over qualification

By over qualification we mean the qualification of an individual over and above the minimum desired level of qualification for being selected to a particular job for e.g. a graduate or a post graduate is

considered to be over qualified when he competes for the post of a lower division clerk in a government department, the minimum desired level of qualification for which is only a matriculation.

2. Non-gazetted officers:

Government servants who draw salary in the scale of pay of Rs.6500 – 10550* or below are designated as Non-gazetted officers in Kerala State. However the High School Assistants are not included in this category even though they belong to this scale of pay.

1.3.2 Limitation of the study

The present study depends upon both primary and secondary data and it faces different types of data problems. Recent data on certain aspects are not available from secondary sources. The reliable secondary data sometimes is insufficient to establish the problem under consideration.

---

* Scale of pay as per the pay revision of the State Government in 1997.

Primary data also suffers from its usual drawbacks. There is no authoritative secondary information about the non-gazetted officers employed in the various government departments. Hence on the basis of the available information the representative sample area is restricted to Thrissur district.

Another limitation exists in the selection of sample. Side by side with the non-gazetted officers there is a parallel group of employees working in the various private institutions, which is not considered for the present study.

Due to the existence of excessive number of government departments and the number of workers employed in them, it is difficult for the investigator to meet each and every one of them personally. Hence the sample size is limited to five hundred non-gazetted officers in the district.

The respondents were met in their office during the working hours and hence some of them were to be met more than twice for getting the filled in questionnaires.

As the generalisation is made on the basis of the five hundred sample size, the results may sometimes deviate from the real facts.

1.3.3 Plan of the study

The present study is an attempt to analyse the nature and dimensions of over qualification among the non-gazetted officers. The study is divided into seven chapters.

The thesis opens with an introductory chapter, which mainly includes importance of the study, objectives, data source and methodology.

In chapter two, a brief review of the related materials published in the various areas of importance of education on economic development, the magnitude and causes of educated unemployment, the rising demand for higher education etc has been presented. A few major approaches followed in studies on education, labour market behaviour has also been reviewed.

Chapter three traces the development of education in Kerala including the processes and

consequences. Kerala's success in achieving near total literacy, universal enrolment of children at the primary level, rapid decline in the number of drop outs at the secondary level and the availability of educational institutions in the immediate neighbourhood of most households in urban and rural areas are discussed.

It is seen that in Kerala unemployment and enrolment in education have grown simultaneously. But the problem of unemployment is one of under employment rather than open unemployment. It is a situation in which employed people are contributing to production, less than they are capable. In order to probe into this phenomenon in depth, the data collected through a sample survey is analysed in chapter four. The design of the sample in detail is also given in this chapter.

In the fifth chapter an attempt is made to examine the over qualification in terms of the socio economic status of the respondents.

The sixth chapter analyses the intensity of over qualification and the significance of the various factors determining over qualification is examined.

The following chapter concludes with the summary of findings and recommendations.

REVIEW OF LITERATURE

Geetha. N.R. “The dimensions of over-qualification a case study of the non-gazetted officers in Kerala state ” Thesis. Department of Economics, Dr. John Matthai Centre, University of Calicut, 2004

CHAPTER II

REVIEW OF LITERATURE

- Studies in India
- Studies in Kerala
- Economic Approaches to Education
- Education and Income Distribution

CHAPTER II
REVIEW OF LITERATURE

For any worthwhile study in any field of knowledge the researcher needs up-to-date information regarding the particular areas from which he has taken up a problem of research. It provides a link between the present and the past, enables the researcher to adopt, modify and even improve the conceptual framework. It also helps the researcher in minimising the difficulties while conducting a study. Every investigator must know what sources are available in this field of enquiry, which of them he is likely to use and where and how to find them. Hence the search for related material is reckoned as a fruitful phase of any research work, to make it more effective.

"A study of related literature implies locating, reading and evaluating reports of research as well as reports of casual observations and opinions, that are related to the individual's planned research project".[1] It promotes a greater understanding of the problem and its crucial aspects and ensures the avoidance of unnecessary duplication. it

---

[1] J.C. Agarwal, (1966) *Educational Research – An Introduction*, Arya Book Depot, New Delhi: p.87.

also provides valuable clues to the investigator, "who needs to acquire up to date information about what has been thought and done in the particular areas from which he intends to take up a problem of research"[2].

Over the past forty years, much effort has been expanded in quantifying the effect of education on social and economic development. The results clearly justify greater investment in education. Substantial benefits from universal technology were perceived decades in some cases - centuries, before the recent attempt to quantify them. Arguments for expanding education have been based on three main beliefs: that an educated population is more productive than an uneducated one, that literacy is essential for modern societies to function (and increasingly so in this era of rapid global integration) and that schools play an essential part in transmitting national cultures to all children and in furthering national integration.

A few important earlier studies and articles published in the area of importance of education on economic development is being reviewed in this section.

---

[2] S.P. Sukhia, (1966) *Elements of Educational Research*, Allied Publication, Bombay: p.19.

This in itself is useful in lighting up some of the dark or grey areas of the relationship between education and consumption or investment benefits of education.

There exists a number of studies stressing the importance of education in economic development. Harbinson and Mayers (1964)[3], Mingat and Tan (1987)[4] are of opinion that, for the poorest countries, perhaps the safest strategy is to increase primary education coverage for children aged six to fourteen. Such investment has the highest social rate of return, and unless a population is literate, other (physical) investment projects may fail.

Michael P. Todaro (1987)[5], succinctly summarized the contribution of education to Economic growth. He observes that education helps in creating more productive labourer, providing wide spread employment and income earning opportunities, creating a class of educated leaders and promote literacy and basic skills.

---

[3] R.W. Harbinson and Mayers, (1964) *Strategies of Human Resource Development – Education, Manpower and Economic growth*, Mc Graw-Hill Publication, New York: pp 23-48.

[4] A. Mingat and J.P. Tan, (1987) *Measuring the Economic Efficiency of Project Related Training* – Some evidence from World Bank Projects, World Bank E&T Dept, Washington D.C.

[5] Michael P. Todaro, (1987) *Economic Development in the Third World*, Orient Longman, New Delhi.

Kothari and Panchamukhi (1975)[6] make an analysis of the importance given to education and they considered that education plays a role of an input. They feel that education influences economic development through changing their attributes relevant to economic development or it influences economic development in its capacity as a relevant economic input. Their study has attempted to prove that education; especially first level education has salient consequences for the economy.

A recent study by World Bank (1991)[7] indicates that economic outcomes of education had been estimated using a range of techniques, including aggregate production function, enterprise based production function and rate of return analysis. All indicators showed positive returns to education in India.

Panchamuki[8] points out that education alters the attitude to work, consumption preferences and saving

---

[6] V.N. Kothari and P.R. Panchamukhi, (1975) *A Survey of Research in Economics of Education in India*, Indian Council of Social Science Research, New Delhi.

[7] World Bank, (1991) *Primary Education*, A World Bank Policy paper, Washington D.C.

[8] P.R. Panchamukhi, (1988) "Economics of Education", Fifth survey of Educational Research, 1988 - 92, Vol.1, NCERT, New Delhi.

propensities, economic rationality, adaptability, innovativeness, flexibility, attitude towards family size and various social attitudes relevant from the economic point of view.

During the last few years a number of studies have appeared to establish the immensity of the contribution made by education to economic growth of nation - both in the developed as well as developing countries.

Studies in India

Research studies have been undertaken in almost all states in India on Educated unemployed, education and agricultural productivity, the input - output of students and college environment, worker's education and educational finance.

DGE & T (1964)[9] undertook a case study of employment and unemployment of the matriculates, based on a sample of matriculates passed in 1954, who did not

[9] DGE & T, (1964) "Employment of Matriculates: A case study", Directorate General of Employment and Training, New Delhi, Ministry of Labour.

pursue higher education, from schools in Bombay in Maharashtra, Burdwan in West Bengal, Ludhiana in Punjab, and Thrissur in Kerala. The study revealed that the incidence of unemployment is the highest in Thrissur (20 per cent) and that unemployment is higher among females in all regions except Ludhiana.

In a study Panchamukhi (1965)[10] estimated the recurring cost of higher education of the Bombay University. The major source of the data for the study was official publication of the University namely the budgets of the University Council Reports etc. Estimate of per capita expenditure of students of various disciplines under different heads were found out. In the study institutional and administrative expenditure was also estimated.

The objective of a different study by Panchamukhi was to suggest the methods of identifying and measuring the cost and benefit aspects of the social development activities especially carried out by the public

[10] P.R. Panchamukhi, (1965) "Operating cost of higher education in the Bombay University", Centre for advanced study in Public Finance and Industrial Economics, Bombay University, 1965. A second survey of Research Education, Baroda Society for Educational Research Development, 1979.

sector in health and education. It was found that efficiency of expenditures on education was on the decline during 1948-49 to 1960-61. A close relationship was found between human capital generating factors, like education and health on the one hand and output on the other.

Rao (1961)[11] conducted a study of Delhi University graduates and found that 3.3 per cent of those who graduated in 1950 and 7.2 per cent of 1954 turn out were still unemployed. Of these unemployed, one-fourth of the 1950 graduates and two-fifths of the 1954 graduates were found working as clerk.

Brij Pal Singh (1974)[12] studied the relationship between educational progress and economic development in Punjab and came to the conclusion that educational progress has led to economic growth.

The first comprehensive analytical study on unemployment of the educated in India was made by Mark

---

[11] V.K.R.V. Rao, (1961) "University Education and Employment: A case study of Delhi University graduates", Institute of Economic growth, Delhi: (Bombay : Asia Publishing House, 1961) pp.12 – 13.

[12] Brij Pal Singh, (1974) "Educational progress and Economic Development in Punjab", Patiala: Punjab University.

Blaug *etal.* (1969)[13]. Making use of the available information from census, N.S.S, DGE and T and other studies they estimated the extent of educated unemployment and probed into the reasons for unemployment of the educated in India. According to them, supply factors, i.e., over expansion of the educational system are mainly responsible for widespread unemployment of the educated. The causes of graduate unemployment in India run deep into the functioning of Indian labour markets, the hiring practices of the government, the institutions of joint family and the attitudes of the educated Indians towards manual labour.

Sharma (1973)[14] conducted a study on the "Economics of Education with special reference to Education Development of Madhyapradesh". The study examined the development of education in Madhyapradesh during different five-year plan period with an estimate of the proportion of achievement in respect of the expenditure

---

[13] Mark Blaug, Richard Layard and Maureen Wood Hall, (1969) "The causes of graduate Unemployment in India, Allen Lane, The Penguin Press, London.

[14] R.R. Sharma, (1973) *Economics of Education with special reference to educational development of Madhyapradesh,* P.hd thesis, Indore University

and revealed the regional inequalities of education in the state.

The study on the problem of unemployment in the selected urban and rural area of Bengal by Planning Commission (1973)[15] was based on a sample survey of 5782 households. The study showed that sub-urban and peripheral urban areas have a smaller incidence of unemployment than that of metropolitan areas.

K. Puttaswamiah (1977)[16] conducted a study to examine the nature and extent of educated unemployment in India. His study deals not only with the magnitude of the problem of educated unemployment, but also with other aspects of unemployment, such as agricultural and industrial unemployment. According to him, the main solution to the problem of educated unemployment lies in proper manpower planning for the country as a whole. He also suggests, re-orientation and the regulation of the present education system, and more rapid industrialisation,

---

[15] Planning Commission, (1973) "Report of the Committee on Unemployment", New Delhi: Planning Commission.

[16] K. Puttaswamaiah, (1977) *Unemployment in India, policy for manpower*, Oxford & 1BH publishing company, New Delhi.

particularly employment promotion in small scale industries, as the best solution to the problem.

A study on the problem of educated unemployment in India was conducted by J.P. Saxena[17] in 1979. According to him the growing imbalance between development of general and vocational or professional type of education manifested in huge output of matriculates and graduates in Arts, Science and Commerce, far in excess of demand, has created the problem of educated unemployment. The explanation for the growing number of educated unemployed in the country lies partly in the erroneous system of education which is book - centered, neither providing 'academic excellence' nor professional skills or capabilities.

T.N. Dhar (1979)[18] made an attempt to study the problem of graduate unemployment in India and to examine the implications of the social and political framework within which manpower and educational planning is taking place. It is a critical approach to man-

---

[17] J.P.Saxena, (1979) *Educated unemployment in India, problem and suggestions*, commercial publication Bureau, New Delhi.

[18] T.N. Dhar, (1979) *The politics of manpower planning, graduate Unemployment and the planning of Higher Education in India*, Minerva, Calcutta.

power planning whose limitations are seen to arise not so much from the conception of operationalization.

A modest attempt was made by A.K.Bhattacharya (1982)[19] in his study to examine the extent of educated unemployment in India. He suggests that the problem of unemployment among the educated could be solved only by proper manpower planning at all levels in the economy. The education system, especially at secondary and higher secondary levels, should be re-oriented to give it a technical basis for meeting the needs of a developing economy.

Pravin Visaria (1970)[20] had estimated that about 57 per cent of the economically active females in India in 1961 were self-employed or unpaid family workers. The proportion of these two groups is somewhat higher in rural India. In urban India about 53 per cent of the males and 43 per cent of the females in the labour force were employees. The significance of this observation lies in the fact that unless the non-agricultural employment opportunities

---

[19] A.K. Bhattacharya, (1982) *The Problem of Educated unemployment in India,* Meenakshi Prakashan, Meerut.

[20] Pravin Visaria, (1970) "Unemployment in India in Perspective", E.P.W, Special Number, July, p.1252.

expand very rapidly, perhaps with an accompanying rise in the wage rate, few of the self-employed and the unpaid family workers would seek work outside their family farms or enterprises.

Bose *et al.* (1983)[21] conducted a comprehensive study to ascertain the pattern of employment and unemployment of the graduates in West Bengal, based on primary data collected from four sources namely (a) 1928 students, (b) 1345 employed graduates, (c) 480 unemployed graduates and (d) 32 employees. The study revealed that incidence of unemployment is the highest among Arts graduates followed by science and commerce graduates and the least for the professional graduate. The waiting period for the first regular job is found to be more than two years, and it is found to be longer for females than males.

The study made by Panchamuki (1984)[22] was based on information collected from employed and unemployed graduates of Bombay and Karnataka Universities, employers and employment exchanges. The

---

[21] P.K. Bose, B.C. Sanyal and S.P. Mukherjee, (1983) "Graduate Employment and Higher Education in West Bengal", International Institute for Educational Planning, Paris.

[22] P.R. Panchamukhi, (1984) *Graduates and Job Market: A quantitative study in India, Paris*, IIEP(Mimeo)

study showed that incidence of unemployment is more in rural areas than in metropolitan areas; long waiting for jobs or actual unemployment is voluntary in the metropolitan city of Bombay. In the case of general stream of Arts, Science and Commerce graduates and in rural areas, unemployment was mostly involuntary. The study also revealed that overqualified employees constitute a larger percentage of graduates from Arts, Science and Commerce faculties leading to increasing demand for higher education and resulting in 'bumping out' process and shifting the incidence of unemployment to the relatively less privileged families. The study shows a positive association between rates of unemployment and levels of family income.

International Institute of Educational Planning (1984)[23] conducted a comparative study of low caste and high caste graduates in terms of their academic performance, employment prospects and incidence of unemployment in Marathwada based on a sample of 1054 graduates consisting of 494 graduates from weaker sections and 560 graduates from high castes who passed out the Marathwada University in the years 1977, 1978 and 1979.

[23] International Institute for Educational Planning, (1984) Post graduate Employment Experience of weaker castes, Marathwada Region, India, Paris: IIEP (Mimeo)

The study showed that the proportion of unemployment is the highest in the case of low caste graduates and postgraduates in the faculty of Arts, followed by Science and Commerce. In the faculties of Law and Education, proportion of unemployment is larger among the low castes than among the high castes. On the contrary in the field of medicine, proportion of unemployment is more among the high castes and less among the low caste medical graduates.

The study on the problem of unemployment in the selected urban and rural areas of Bengal[24] was based on a sample survey of 5782 households. The study showed that sub – urban and peripheral urban areas have a smaller incidence of unemployment than that of metropolitan areas.

J.L. Azad (1991)[25] made a comprehensive analytical study on unemployment of the graduates in India, based on both primary and secondary data. Using random sampling technique, a sample of three thousand graduates were selected from the disciplines of Arts, Science, Commerce and Law, one thousand graduates each

---

[24] Planning Commission, (1973) Report of the Committee on Unemployment.

[25] J.L.Azad, (1991) *Graduate Unemployment in India*, Association of Indian Universities, AIU House, 16, Kotla Marg.

from the University of Gujarat, U.P and Maharashtra. The study found that incidence of unemployment is the highest among the Arts Graduates and minimum among graduates in Education. Again, the rate of unemployment among the highly educated is relatively lower than the less educated persons and this rate is higher among the persons with low-grade achievement in the examinations and vice versa.

D.P. Nayar (1977)[26] discussed the various causes of educated unemployment in India and suggested remedies including manpower planning at National, State and Local level, change in the present policy of drift in the expansion of education system and greater emphasis on quality in general education.

Edgar O. Edwards and Michael P. Todaro (1973)[27] made an attempt to analyse educational demand and supply in the context of growing unemployment in less developed countries. Various reasons for the rapid increase in private demand for higher education and the burning

---

[26] D.P.Nayar, (1977) "Challenge of Unemployment to Educational system", *Education Quarterly*, Vol.XXII, No.4, pp.2486-2491.

[27] Edgar.O.Edwards and Michael.P.Todaro, (1973) "Educational demand and supply in the context of growing unemployment in less developed countries", *World Development*, Vol.1, Nos. 3 & 4, pp. 107-117.

problem of educated unemployment have been discussed in detail and some policy considerations for governments to solve the problem have been suggested.

Studies in Kerala

Even though several studies have been made on the various effects of education on economic development in India, studies made in Kerala on this particular problem are very limited. A study worth mentioning is that conducted by the Centre for Development Studies (1975)[28] based on a sample survey of the educated unemployed (matriculates and above) registered with Employment Exchanges in two districts of Kerala - Thiruvananthapuram and Calicut. The study examined the socio-economic characteristics, educational attainment and duration of unemployment of the educated unemployed registrants and it revealed that waiting period is inversely related to levels of education and family income.

---

[28] Centre for Development studies, Thiruvananthapuram, (1975) "Poverty, Unemployment and Development Policy: A case study of selected issues with reference to Kerala", United Nations, New York.

A study was conducted by Manpower Division of the Bureau of Economics and Statistics[29] during 1978-79, on the characteristics of the unemployed post - graduates in the disciplines of Arts, Science and Commerce in all the then eleven districts of the state registered with employment exchanges. Various factors responsible for the growing unemployment among the postgraduates and suggestions to solve the problem are also discussed.

P.R. Gopinathan Nair (1981)[30] has examined the role that education in Kerala has played in bringing about changes in employment, work participation rates and occupational mobility. The nature and extent of the problem of educated unemployment is also examined in brief. The author states that the low-income groups of the society are relatively less educated and the average waiting period for them in the state's employment market is extremely long.

---

[29] Government of Kerala, Manpower Division, Bureau of Economics and Statistics, Trivandrum, (1978-79) "A study on the characteristics of Unemployed Post-graduates in Kerala", *Manpower studies*, Vol. III, pp.81-96.

[30] P.R.Gopinathan Nair, (1981) *Primary Education, Population growth and Socio-Economic change*, Allied Publishers, Private limited, New Delhi: pp. 123-162.

P.R.G. Nair, and Joseph Thomas (1983)[31] have examined the paradox of the market for the educated. The authors have attempted to explain the dynamics of the behaviour of the labour market for the educated within the frame work of the 'Job competition Model' based on the hypothesis that the growing magnitude of unemployment among the educated is itself the major factor that leads to a rising demand for higher education.

B.A. Prakash (1988)[32] has examined the characteristics, magnitude and causes of educated unemployment in the state. The study was based on a sample survey of the job seekers in the live register of the Divisional Employment Exchange in Thiruvananthapuram. His study was confined to the category of educated unemployed persons having general education from matriculation to graduate level, as this category constitutes the largest share of educated unemployed. He has also made certain suggestion to solve the problem of educated

---

[31] P.R.Gopinathan Nair and Joseph Thomas, (1983) "Paradox of the Market for the Educated", Paper No.2.1 Society for the study of Regional disparities, Fourth Annual Conference on "Education and Regional Development", L.N. Mishra, Institute of Economic Development and change, Patna.

[32] B.A.Prakash, (1988) "Educated Unemployment in Kerala: some observation based on a field study", working paper No.224, Centre for Development studies, Thiruvananthapuram

unemployment in the state. In his another study in 1989[33], he exposed the fact that the excess supply of young labour force, the low growth for labour demand arising out of the declining economic growth of state economy, and the restrictive labour practices distorting the smooth operation of the labour market, are the major causes of unemployment. He also stated that Kerala's problem is mainly youth unemployment, as young people in the age group 15 and 34 constitute nearly 88 per cent of the unemployed.

A comprehensive study on the educated unemployed in Kerala was made by Chandan Mukherjee and T.M.Thomas Isaac (1991)[34] based on a sample survey of 4000 educated registrants of the various employment exchanges of the Kerala state. The major observations of the study are: (1) Education that raises the job expectations and the reserve status of jobs result in withdrawal of the educated from many of the traditional manual occupation. It could give rise to a paradox of labour scarcity in selective

---

[33] B.A.Prakash, (1989) *Unemployment in Kerala: An analysis of Economic process*, C.D.S working paper No. 231.

[34] Chandan Mukherjee and T.M.Thomas Isaac, (1991) *Study of educated unemployed in Kerala,* Report of Sample Survey of Registrants of Employment Exchange, Centre for Development Studies, Thiruvananthapuram.

sectors despite severe macro unemployment (2) The limited job opportunities for the preferred status tend to prolong the waiting period of educated job seekers and thereby increase their stock. (3) As a survival strategy many among the educated unemployed are forced to seek employment in the informal sectors, which are low paying and do not guarantee any security of tenure, but are nearer to their perceived reserve job status. (4) Strong gender differences in job expectations, waiting period and employment persists among educated unemployed. (5) Given socio-economic level and gender, higher educational qualification raises the probability of getting employment, even if non-commensurate to the qualification. It would help the unemployed to overcome socio-economic and gender handicaps.

The survey conducted by the Department of Economic and Statistics (DES) in 1980 shed light on some of the economic phenomenon witnessed in Kerala in recent times[35]. It estimated that nearly 14 lakh persons were unemployed in 1980 constituting 18 per cent of the labour force. In 1987 D.E.S conducted another survey[36], which

[35] D.E.S, (1980) "Survey on Housing and Employment".
[36] D.E.S, (1987) Report on unemployment in Kerala.

considered two categories of unemployed – open unemployed and under employed. It considered person belonging to all age groups of the population as unemployed. It estimated unemployed at 27.81 lakh constituting 25.8 per cent of the labour force.

The study of Mridul Eapen examined some aspects of the unemployment problem in Kerala[37]. P.R.G. Nair had analysed the expansion of education and the connected unemployment problem, in his study[38].

Usha Kundu (1990)[39] had analysed the employment position of educated women. She stated that with the passage of years the percentage of female work participation is on the decline and that the problem of unemployment of educated women is acute.

The above mentioned studies are unanimous in their view that growth of the higher education system in the

---

[37] Mridul Eapen, (1974) "Some Aspect of the unemployment in Kerala", C.D.S working paper No. 79.

[38] P.R.Gopinathan Nair, (1983) "Educational Reforms in India-Universalization of Primary education in Kerala", C.D.S working paper No. 181.

[39] Dr.Usha Kundu, (1990) "Employment position of educated women", Yojana, Jan 26th .

country in general has not at all been in conformity with its manpower requirements and that our planners have seldom attempted to bring the two processes into balance.

Recent years have witnessed shifts of emphasis in development research from economic growth to income distribution and from investment in human capital to education as a 'great equaliser.' Lately the productivity augmenting as well as the income equalising roles of education themselves are being called into question. Hence an attempt is also made to review critically a few selected approaches to the economic dimensions of education and the role of the educational system in the labour market and in income distribution.

2.1 Economic Approaches to Education

2.1.1 The classical theory

The classical theory is based on three fundamental assumptions (1) Existence of free economy, where the factors of production work automatically (2) labourers are homogeneous in nature whereby they are substitutable and (3) wages given to the labourers are flexible in nature. According to the classical economists,

employment is the general rule and unemployment, an exception. Unemployment is a temporary aberration and the demand and supply forces will bring back the labour market to a state of equilibrium. Therefore, unemployment cannot exist in the long run. Wage rates are the equilibrating mechanism between demand for and supply of labour.

2.1.2 The Neo-Classical Theory

The neo-classical economists attached the classical assumption of homogeneity of labour units by saying that labour units vary in skill, knowledge, ability, willingness, health etc., and thereby in their potential and realised productivity. Wage, which is equal to the value of the marginal physical productivity of the labours also differs from person to person according to the quality they possess. Based on the two assumptions i.e., competitive equilibrium and marginal productivity (heterogeneity of the labour) the neo-classicals have defined the relationship of education with employment through labour market. The most popular model, which is adopted by the neo-classicals,

to explain education, employment and earning differentials is called the Human capital theory[40].

2.1.3 The Human Capital Theory

The Human Capital Theory is based on three distinct assumptions, namely (1) existence of competitive market economy (2) Wages of labourers are flexible in nature, and (3) the technique of production used in the production process is flexible so that the demand for labour can be substituted by capital. Similarly the less skilled labour can be substituted by highly skilled labour. Human capital theorists argued that individuals differ in terms of types and levels of skill they possess. According to them differential skills are directly related to the differential levels of education attained by the individuals and the levels of education attained by an individual depend on, among other things, the amounts he invested in education which in turn determines the level of productivity. The employer pays higher wages to the high productive employees who are highly educated than the less productive employees or the less educated. They further argued that

---

[40] T.W.Schultz, (1961) "Investment in Human Capital", *American Economic Review*, Vol.5, pp.1-17.

individual's choice of investment in various levels and types of education determines his chances of employment in the labour market. The intervening variable between education and job is the skills developed through educational system. Hence unemployment can be traced to the lack of skill possessed by an individual due to lack of education required for the labour market, i.e. the less educated an individual is, the less is his chances of getting better employment and earning.

The major point of departure of this approach from the conventional neo-classical assumptions is the recognition of the heterogeneity of labour units. One of the important reasons attributed to the heterogeneity of labour units is difference in types and levels of skills, which result from differences in educational achievements which, in turn, are assumed to be functionally related to educational expenditures incurred. Education develops skills and raises efficiency and thereby augments productivity – so goes the argument. Increase in the level of education, therefore, is considered to raise incomes – both individual and national.

2.1.4 The Filter Theory

The filter theory[41] was developed by Arrow in 1973 as an alternative to the human capital theory, de-emphasising the skill development role of education. He argued that education does not impart the skill and knowledge, but it helps the employers to identify the potential ability of workers. What employers look for are persons with ability potential rather than actual. An educational diploma or a Degree possessed by an individual serves as a proxy signal for potential ability and productivity. Hence education through its signalling or screening process avoids the possibility of misallocation of talented individuals and thereby distortions in the labour market. Educational credentials constitute one of the least costly and easiest devices for identifying potential abilities. This theory is similar to the theory of "Screening Device"[42].

As to the employees, they too are interested to go for higher levels of education with the expectation that their talents will be identified through higher levels of

---

[41] M.J.Arrow, (1973) "Higher Education as Filter", *Journal of Public Economics*, Vol. 2, pp.193-216.

[42] M.Spence, (1973) "Job Market Signalling", *Quarterly Journal of Economics*, Vol. 87, pp.355-374.

education and they will be given wages commensurate with their potential abilities. Therefore there will be continuing demand for education from the domain of individuals. Thus demand for higher levels of education will continue to accelerate even though education does nothing in augmenting the productivity of individuals, because the employers use the educational achievements of the employees as filtering method, while selecting them for employment.

The basic difference between the screening approach and the human capital approach relates to assumptions about labour productivity. The human capital approach emphasises the productivity adding role of education while in the screening approach education helps only productivity identification. Layard.R and Psacharopoulos,G. (1974). The important theoretical contribution of the screening hypothesis lies, perhaps, in its ability to accommodate multiple equilibrium wage levels within its analytical framework.

2.1.5 Bumping Model and Job Ladder Model

Focusing on the influence of unemployment in the labour market process, Fields in 1974, developed a model called Bumping Model[43] and Bhagawati and Srinivasan developed the Job Ladder Model[44] in 1977. According to these models, during periods of excess supply in the labour market, employers follow a policy of preferential hiring practice based on educational qualifications. Accordingly people with higher levels of education are employed first. When the number of higher educated individuals exceeds the number of jobs corresponding to their qualifications, they spill over to the next best jobs, bumping out the less educated. Eventually those who are on the lowest rung of the ladder of education and jobs will be bumped out of the labour market. This process distorts the existing education – employment relations leading to chronic under employment of the educated and unemployment of the less educated in the long run.

---

[43] G.S. Fields., (1974), "Private demand for education in relation to labour market conditions in less developed coundties." *The Economic Journal,* Vol. 84, pp.906 – 200.

[44] J.N. Bhagawati and T.N. Srinivasan (1977), "Education in a Job – Ladder Model and Fairness – in – Hiring Rule," *Journal of Public Economics,* Vol. 7, pp. 1 – 22.

2.1.6 Job Competition Model

The idea of job competition is best developed in the works of Thurow (1972)[45], which hypothesise that supply factors do not play a very significant role in determining jobs and earnings of an individual. Thurow believed that earnings are associated with nature and type of jobs than with the qualification of the individuals who fill the jobs. According to this model persons with differential levels of education may earn the same, provided they are in the same job. Further, labour skills do not exist in their final form in the labour market. On the contrary most job skills are acquired informally through on the job training after a worker finds entry into a job. The role of education is not to confer skills, but only to provide the background characteristics; it is but a proxy variable to certify to the 'trainability' of the prospective employees, which is what the employers look for in the labour market. Since the aim of employers is to reduce the training costs of their employees, persons who could be trained easily and at low cost will be hired first. The basic assumption is that the

---

[45] L.C. Thurow (1972) "Education and Economic inequality", *Public Interest,* Summer, reprinted in Baxter; L.C. Thurow (1974) "Measuring Economic Benefits of Education, in Gorwon", M.S. (ed) Higher Education and Labour Market, Mc G raw Hill, New York.

better educated pick up skills rather quickly and therefore, their training cost will be less. In this sense, education is important for the purpose of job entry.

A distinguishing feature of this model is its proposition that productivity, and therefore wages, is attribute of jobs and not of individuals. People are paid according to the jobs they hold; competition, therefore, is for jobs than for wages as such.

2.1.7 Wages competition model

In the neo classical framework the labour market functions in accordance with the wage competition model. An increase in the educational level of low income workers has, according to this conceptualisation, the effect of (1) raising productivity and earnings of workers (2) reducing the total supply of low-skilled workers and increasing their wages; and (3) increasing the supply of high skill workers and lowering their wages. A fall in wage rate may also be due to rise in unemployment. The rate of decline of wage rate may also be due to rise in unemployment, the rate of decline of wage per unit of time being proportional to the

degree of unemployment[46]. Thus under wage competition, market will be cleared; if it does not, it is an indication that distortions exist in the market which would arise from; (1) downward stickiness of earnings[47]. (2) existence of policies which make capital cheap, labour dear and income distribution highly skewed ILO (1970)[48]. (3) prevalence of a traditional educational system which generates a mismatch between job expectations and job opportunities and (4) existence of a defective salary structure.

Once the distortions are identified, the remedy lies in correcting them. The Country Reports of the ILO, have put forward a two-pronged strategy[49]. Where the root causes of unemployment are traceable to a mismatch between a given conventional educational system and a wage and salary structure, solution to the problem would be

---

[46] M. Blaug, et.al, (1969) op.cit., pp. 6 – 7; also see, K.J. Arrow and W.M. Capron, (1959), "Dynamic shortage and prices rises : the Engineer – Scientist case", *Quarterly Journal of Economics,* Vol. 73, No. 2, pp. 292 – 308.

[47] M. Blaug (1973) "Education and the Employment problem in developing countries", International Labour Office, Geneva: p. 62.

[48] ILO (1970) Towards Full Employment: A programme for Colombia, Geneva: For a summary of the diagnosis, see M. Blaug (1973) Op. cit., pp. 5 – 6.

[49] ILO, Ceylon Report (1971), Matching Employment opportunities and expectations: A programme for Action of Ceylon, Geneva: pp. 4, 20, 25 and 175.

in a combined attack on the content of formal education and the structure of monetary incentives. The latter proposal broadly involves such a reduction in the wage-differentials as to make acquisition of additional qualification less attractive.

Another form of distortion that accentuates the mismatch pertains to the pricing of education. In most of the LDC's education is heavily subsidized. The neo-classical remedy for such distortion has been to raise private costs of education, which would directly reduce private rates of return and at the next move, reduce private demand for education. In order to make such suggestions politically palatable, they may be wrapped up in attractive scholarship programmes for the talented poor or loan schemes for all[50].

Does the postulated neo-classical relationship between education and probability of employment hold good at the macro level? In other words, does an increase in the average level of schooling produce either higher levels of employment, or alternatively lower levels of unemployment? In the wage competition model, as the

[50] M,Blaug, (1973) *op.cit.*p.43.

number of the educated increase more rapidly than the increase in high-level jobs, the value of higher education in terms of full employment will decline. Despite such fall, the theory contends that increased investment in education increases the growth rate of the economy and hence the overall number of jobs available[51]. However, it may lead also to (1) an increase in unemployment among the educated while the overall unemployment rate declines subject, of course, to the pattern of investment in education[52] and (2) migration from rural to urban areas, translating rural under employment to urban open unemployment[53].

The neo-classical diagnosis and prescription for the ills of an economy, even the very approach, has come under severe criticism. Carnoy has found it "questionable

---

[51] Braverman (1979) This conclusion 'rested on the assumption that unemployment was a consequence of the functional inadequacy of the unemployed in an economy that required higher educational attainments', *Labour and Monopoly Capital*: The degradation of work in the twentieth century, Social Scientist Press, reprinted, Thiruvananthapuram: 1979, p.440.

[52] M.Carnoy, (1977a) 'Education and Economic Development: the First generation', *Economic Development and cultural change*, Vol.25, Supplement, pp.428-448.

[53] M.Carnoy, (1977b) Education and Employment: A critical appraisal, UNESCO – IIEP, Paris: p.31.

whether many of the proposed solutions, such as providing a better fit, between curriculum and job opportunities can do any more than reduce unemployment and educated unemployment marginally even in the long run; second, and more important, the whole concept are eliminating distortions in the economy and the labour market as a basis for solving unemployment avoids the much more profound issue of why these so-called distortions exist"[54]

2.1.8 Sticky Wage, Labour Queue and Education System

How does the labour market behave during periods in which there is queue for jobs? The job competition model predicts that persons with greater 'trainability' would be selected. But, what about those left at the tail-end of the queue? The model is not explicit on this point. Fields argues that 'if there should be a surplus of educated workers relative to skilled jobs, the bumping model would lead us to expect that if it is profitable (in an expected value sense) some surplus educated persons would move to the front of the queue for the unskilled jobs and be hired first at the unskilled wage rate, 'bumping a less

---

[54] M. Carnoy, Ibid

educated person from a job'[55]. With reference to Indian experience Blaug observed as follows: 'educated unemployment in a country like India has led to a steady decline in the real earnings associated with educational qualifications. That is to say, there has been widespread and continuous upgrading of minimum hiring standards in Indian labour markets ..... jobs that used to be filled by matriculates ..... now typically call for graduate qualifications and sometimes for even two or three degrees. In that sense, unemployment among the Indians has in fact led to a reduction in their relative earnings over a twenty five year period'[56].

---

[55] G.S.Fields, (1974) 'Private Demand for Education in relation to, Labour Market Conditions in Less developed countries', *The Economic Journal.* Vol.84. pp.906-925. The bumpting model is based on the assumption that workers are income maximisers and enter that labour force which offers the highest expected income. Also see, G.S.Fields, (1975a) 'Rural – Urban Migration, Urban unemployment and underemployment, and Job – Search Activity in LDC's, *Journal of Development Economics.* pp. 165-187.

[56] M.Blaug, (1973) *op.cit,* p.62.

2.2 Education and Income Distribution

A brief review of the theories regarding the education earnings distribution nexus is being made in the following sections.

2.2.1 Human Capital Theory and Earnings Distribution

The human capital theory focuses attention on investment decisionsS of individuals to augment productive capacities. Productive capacity of individuals is determined by 'investment' in human capital. Thus this theory emphasises the supply side of the labour market. It is the changes in the distribution of human capital, which would lead to changes in earnings distribution. Such changes could result also from policy interventions. Alternatively, unequal distribution of income has been explained in terms of unequal distribution of human capital characteristics. Langoni argued that unequal distribution of income in Brazil during the 1960's was due to the unequal distribution of schooling investments. The higher returns to higher levels of schooling resulted from the technological changes in production, which used skill, and capital-intensive imported technology. The higher returns to higher levels of

schooling was 'natural' consequence in the form of a quasi-rent, which, Langoni argued, would disappear with the expansion of higher levels of schooling[57].

The human capital view of earnings distribution is considered too simplistic and not adequately substantiated by empirical evidence[58].

The education - earnings relationship at the level of individual does not seem to be linear either since several other variables, (e.g. ability and parental background) also intervene. Several studies have shown that inclusion of

---

[57] C.Langoni, (1973) referred to in M.Carnoy, in collaboration with J.Lobo, Toledo.A, and Velloso.J., (1979) can Educational Policy Equalise Income Distribution in Latin America, ILO, Geneva: pp.21-25.

[58] B.Wootton, (1955) *The Social Foundations of Wage Policy*, George Allen and Unwin, London, p.51. He for instance, holds that it the argument of persons like cannan are perfectly alright '..... the destruction of financial barriers to higher education ..... should reduce the "excess advantageousness" of professional skills very nearly, if not quite, to nil. But from any such result as this we are still, clearly, a very long way off: and ..... to anticipate any such outcome is to reckon without the formidable social pressures that are at work to prevent it'.

measured ability reduces the coefficient of schooling in the determination of earnings[59].

Parental background broadly refers to the educational, occupational and income status of parents. Years of schooling and scholastic achievement levels have been found to be more significantly and directly correlated with parental background[60]. It has a significant influence on individual earnings as well[61]. However, the relation observed is not direct. Since two other important variables, occupation and age (experience), also intervene[62], the

---

[59] O.D. Duncan, (1968) 'Ability and achievement' *Euqenics* Q.15, Mar. pp.1-11.

[60] P. Richards and M. Leonor, (1981) A distinction may be made between the types of influence of parental background. Where the years of schooling is the Criterion considered, the economic capacity of the family to support its offspring, and when ability is also considered, the parental education and exposure to books and other media t home, are considered. p.11.

[61] S. Bowel, argues that much of the apparent economic return to schooling is in fact a return to socio-economic background and that most of the impact of years of schooling on earnings appears to be a direct transmission of economic status from one generation to the next. S. Bowel, (1972) 'schooling and Inequality from generation to Generation', *Journal of Political Economy*, May/June, pp.219-251.

[62] B.R. Chiswick, and J.Mincer, (1972) 'Time – Series changes in Personal Income Inequality in the United States from 1939, with Projections to 1985' *Journal of Political Economy*, May/June, pp. 34-s66.

education earnings nexus may be only indirect. It operates at two stages. First, the linkage is between parental background and education, and the second, between education and earnings with parental background facilitating access to placements[63].

Nevertheless, the existence of the human capital productivity, earnings nexus cannot be denied in toto. The paradox, which remains, is the observed fact that increasing schooling does not result in reduced inequalities in earnings distribution among socio-economic categories and individuals. It may be that the forces that operate at the societal level in the determination of income distribution are much more complex than those operating at the individual/household level on decision making on schooling. Since income changes are influenced by several exogenous and institutional factors too, the influence of investment in human characteristics may not be particularly significant. Such other forces identified by researchers include: cyclical unemployment (in the U.S), income policy (in Brazil) and wage and salary policy (in Chile)

---

[63] G.Psacharopoulos, (1981) Education, Employment and Inequality in LDC's *World Development*, Vol.9, pp.37-54.

Thus a large number of studies have been made on the various effects of education on economic development in India. Studies made in Kerala on this particular problem are very limited. However there are a few studies, which are unanimous in their view that growth of the higher education system in the country in general has not at all been in conformity with its manpower requirements and that our planners have seldom attempted to bring the two processes into balance. The researchers have viewed the educational system from the point of view of open unemployment.

The problem faced by the educated is not only the lack of employment opportunities in general, but also its lack in accordance with their qualification, due to which they are forced to accept a post, the desired qualification for which is much below than their actual qualification. This characteristic has more proximity to educated under employment than open unemployment. No such studies to examine the reasons for the over qualification, its various dimensions and its determinants, have been made in Kerala so far. Hence with a view to bridging this gap in research relating to education and employment / unemployment

variables, an intensive study is attempted here to investigate into these aspects of over qualification.

EDUCATIONAL DEVELOPMENT IN KERALA

Geetha. N.R. “The dimensions of over-qualification a case study of the non-gazetted officers in Kerala state ” Thesis. Department of Economics, Dr. John Matthai Centre, University of Calicut, 2004

CHAPTER III

EDUCATIONAL DEVELOPMENT IN KERALA

- Growth of School Education
- Growth of Higher Education
- Women Education
- Expenditure on Education
- Brain - Drain

CHAPTER III
EDUCATIONAL DEVELOPMENT IN KERALA

Kerala is cited as a successful case in education and human resource development in the third world context by social philosophers and economists like Amartya Sen and John Kenneth Galbraith. Extensive growth of education has been a major contributing factor to the socio-economic development of Kerala.

Any assessment of education in Kerala has to first take into account its outstanding success in achieving near total literacy, universal enrolment of children at the primary level, rapid decline in the number of dropouts at the secondary level, and the availability of educational institutions in the immediate neighbourhood of most households in urban and rural areas[1]. These achievements have received acclaim in India and abroad, so much so that parallels have been drawn with the developed countries and with countries like Chine.

Acquisition of knowledge has from time immemorial formed a major attribute of mankind. The

---

[1] Report of Kerala Education Commission – 1966.

restless search by a handful into the secrets of the unknown has unlocked the doors of the vast treasure house of knowledge we now possess. The early use of fire and later the mastering of it, domestication of animals, cultivation of crops and irrigation, smelting of ores and the making of instruments, knowledge of the heavenly bodies and their movements, invention of scripts, understanding of geometry and the principles of construction, the use of wheels, ship's stern post radar and marine-compass, paper and the art of printing, gun-powder, Indian numerals and the methods of calculation; these and many other achievements form the steps on humanity's long ladder of development. In all of them, the men with knowledge played a key role, their power often surpassing that of the princes. Each generation drew of the past inheritance, enriched it and passed it on through education to the succeeding generation.

Educational development is seen to have been dealt with as the result of exogenous variables or chance factors such as benevolence of enlightened rulers, philanthropy of missionaries far sightedness of social

reformers etc.[2] The educational expansion on a massive scale and at a rapid rate began in Travancore from the second half of the nineteenth century and it was the natural consequence of a large number of facilitating objective conditions which came in to existence at the time. The emergence of these conditions was due to a variety of structural changes which led to the rise of a middle class and to increased demand for educated persons on the one hand, and to the supply of resources for sustaining a growth process, on the other. The emerging class found the then existing social reality as anachronism, which called for radical restructuring. The social reform movement, which ensued emphasised the importance of education as an agent for social restructuring and progress. The educational expansion which followed was not able, however to wipe out the social inequalities of spread uniformly among all sections of society for want of adequate supportive economic transformation of society.

Kerala had reached the leading position in education among the regions of India even as early as the

---

[2] V.Nagam Aiya, (1906) *The Travancore State Manuel*, Vol. II, Part I, Superintendent, Government Press; Thiruvananthapuram: Chapter 9, pp. 443 – 497.

beginning of the nineteenth century[3]. Even though literacy rate in the Malabar region remained lower than in Travancore and Cochin, it was the highest among the rural districts of the Madras Presidency to which it then belonged[4]. During the first half of the twentieth century the literacy rate in Travancore and Cochin increased at rapid rate[5].

In seeking historical explanation for development of education in Kerala during later half of the nineteenth century, the advent of British and the imposition of colonial power over it led to significant changes in land and juridical and social relations.

Among the various reforms introduced by the British, those affecting education are considered to have been the most far reaching. The educational efforts of the Protestant Missionaries, brought from England by Col. Munro, then the resident of both Travancore and Cochin,

---

[3] V.Nagam Aiya, (1906) *Op.cit,* P. 469; C.Achutha Menon, (1911) *The Cochin State Manuel,* Superintendent, Government Press, Ernakulam: P. 296.

[4] C.A.Innes, (1908) *Madras District Gazetters , Malabar and Anjengo,* Superintendent, Government Press, Madras: pp. 295 – 303.

[5] P.R.G.Nair, (1981) *Primary Education, Population Growth and Socio-Economic Change,* Allied Publishers, Pvt.Ltd. New Delhi: pp. 24 – 25.

are well documented[6]. The contribution of the Missionaries to cause of education in the State are significant not in terms of the numbers that they turned out[7], but in terms of the awareness, that their efforts instilled in the minds of the 'depressed communities' about their social rights and in the minds of the higher ups in society about the dangers to their social power inherent in giving a free hand to the Missionaries in the field of education who, in the process, tampered with the age-old customs and traditions of the Hindu society[8].

The educational efforts of the Missionaries had also the indirect effect of convincing the government of the need to 'enlightenment' of the community for making changes in the iniquitous social structure which was then in existence. The government had to think along lines of

---

[6] T.K.Velu Pillai, (1940) *Op.Cit*, p. 699; C.Achutha Menon, (1911) *Op.Cit*, pp. 290 – 291.

[7] P.K.M.Tharakan, (1984) "Socio-Economic Factors in Educational Development-The Case of Nineteenth Century Travancore", *Economic and Political Weekly,* Vol. XIX, No. 45, November 10, pp. 1913 – 1928.

[8] Regarding the apprehensions of the caste Hindus, a CMS Syrian observed that: 'strong fears exist among all class of peoples, that the enlightenment of slaves will be followed by their liberation, and the consequent ruin of the interests of agriculture. We are therefore being regarded as enemies to be best interest of the country'. Quoted in R. Jeffry, (1976) *The Decline of Nayar Dominance: Society and Politics in Travancore, 1847 – 1908*, Vikas, New Delhi: p. 34.

socio-economic change and educational expansion due to a constellation of factors as the modernisation of administration, commercialisation of the economy, communal rivalry etc. As a result the earlier system of hereditary rights to government offices had to be discontinued for administrative efficiency. In the new system introduce, appointments were decided on the basis of educational qualification[9], in the place of the earlier system based on caste and privilege. Thus the emulation of western educational standards must have been responsible to a great extent for the growing demand for educational places.

Tenurial relations, agricultural practices, trade and industry too underwent significant changes. Land for the first time became a commodity, saleable and mortgagable under the Pandaravaka Pattom Proclamation of 1865, which conferred ownership right to Sircar tenants.

---

[9] In 1866 Dewan Madhava Rao declared that 'apart from the intrinsic worth of education, it would be the chief passport to honour and preferment, and so far as the Sirkar was concerned, all important posts under it would be filled by educated men, and, educated men alone, as soon as they became available', Quoted in R.Jeffry, (1976) *Op.Cit*, p. 76.

Development occurred in the case of local trade too. In order to facilitate the movement of goods, new public roads were constructed and waterways cleared under a newly formed department of public works. Such changes in the structure, organisation and functioning of the economy had implications on the educational process. Firstly they directly increased the demand for personnel to perform the tasks of an expanding and diversifying economy and to man the administrative machinery of the government in the discharge of newly arising responsibilities and functions. They acted both on the demand for and the supply of educational facilities. The accumulation of savings in the hands of large sections of the population and also of the government facilitated investment in the educational infrastructure.

The introduction of a new juridical structure and administrative standards and the spread of western liberal thinking and education, created new attitudes and aspirations in the population of questioning of customs, traditions and belief systems. The sources of the struggles for educational and employment opportunities and the socio-religious movements of the early twentieth century might be mainly traced to this 'renaissance' of the late

nineteenth century. Though such changes affected all communities, it was the Christian community, which was affected the most. In the course of a few decades, the Christians were the vanguard of economic change; and it is they who pioneered the process of educational development of Travancore.

The liberal grants–in–aid from the government was one of the factors, which enabled rapid educational progress of the Christian community. In 1908, about 64 percent of all the educational institutions in Travancore were under Christian management. With their sound footing in the educational sector, Christians were then able to put up a united front under the banner of the Travancore and Cochin Christian Association to press forcefully their claims for government employment.

Though Christians were considered as the vanguard of the modern educational process in Travancore, they were not the only ones in the field. The Malayali Sabha, a social organisation of the Nair community started during the 1880s with the objectives of spreading western

education, promoting women's education and reforming marriage laws, had about twenty-five schools[10].

The educational strategy of the government during the second half of the nineteenth century was two pronged: first, to start schools of its own; and second, to encourage private agencies to start schools, through a liberal grants-in-aid scheme[11]. In English education the initiative from the government began as early as 1836 when the Raja's Free School was started. The school was raised to the position of a high school in the early 1860s and subsequently into a college in 1869. The government also started a few District Schools. Till about 1882, indigenous private agencies had not turned, by and large, their attention to English education. A change in their attitude came about with the implementation of the Hunter Commission Report and the liberalisation of the grants-in-aid scheme of the Travancore government. By 1901, there

---

[10] R.Jeffry, (1976) *Op.Cit*, p. 159.

[11] Government of Travancore, (1948) *Report of the University Education Commission,* Superintendent, Government Press, Thiruvananthapuram: p. 14. Between 1881 and 1893 the number of aided schools increased from 437 to 1375 and students from 21574 to 51314. V.Nagam Aiyah (1906) *Op.Cit*, pp. 437, 456 and 490.

were in Travancore six colleges (three of them private) and one hundred and six English schools[12].

Back ward community students were not admitted in the government schools till 1890s, despite Royal Proclamations that 'all classes, without distinction of caste or creed, may have access to public institutions'[13]: the responsibility for their education had lain solely in the hands of the European Missionaries. However in the year 1894 – 95, for the first time in the history of Travancore, funds were provided by the government for grants to schools for back ward classes. Besides, the government itself came forward to open schools intended exclusively for them. During the 1890s government schools also began admitting students from such communities[14].

Towards the close of the nineteenth century, a significant change in the attitude of the government towards the education of the back ward communities came about: schools meant exclusively for such communities were

---

[12] *Report of the Administration of Travancore for the year 1900 – 01*, Appendix, statistical returns, Chapter VII.

[13] File C, 1231 of 1870, English Records, Secretariat, Thiruvananthapuram.

[14] T.K. Velu Pillai, (1940) *Op.Cit*, pp. 716 and 736.

started; caste barriers to their entry into general schools were removed one by one; and incentives in various forms (fee-concessions, free-tuition, lump-sum grants, books, cloths and mid-day meals) were progressively introduced. Such liberalisation and encouragement undoubtedly yielded positive results. Literacy rates among depressed communities increased steadily. The interest shown by the government was the natural consequence of a set of socio-economic and politico-religious processes already on, during the period.

Towards the end of the nineteenth century and the first two decades of the twentieth century, there emerged in the Hindu Society of Travancore, several caste organisations formed avowedly for fighting for social reforms and civil liberties[15]. Among them, the more important were the Sree Narayan Dharma Paripalana Yogam (SNDP) spearheaded by the Ezhavas, the Nair Sabha (and later the Nair Service Society, (NSS) of the Nairs), the Sadhu Jana Paripalana Sabha (SJPS) of the Pulayas and the Yogakshema Sabha of the Namputhiris. Though independent of one another, all of them had, in

[15] F. Howtart, and G. Lemercinier, (1978) 'Socio-religious movements in Kerala: A reaction to the Capitalist Mode of Production', Part II, *Social Scientist,* Vol. VI, Number 12, July, pp. 21 – 43.

common, the objective of reform and development. Educational development occupied a special role of importance in their programmes of action. Thus in the matter of recruitment to public service, the government was forced to issue in 1921, stringent instructions to the appointing authorities to offer equal opportunities to all communities[16]. In 1926 appointment of non-Hindus in the revenue department began, by 1935 the problem of communal representation was resolved by adoption by the government of a policy of communal rotation for appointment to public service. In order to implement these policies a Public Service Commissioner was appointed to advise government on matters relating to public service.

[16] Order R.Dis No. 893/Genl. dt. TVM, 25th June 1935, reproduced in government of Travancore (1937) *The Travancore Service Recruitment Manuel,* Superintendent, government press, Thiruvananthapuram: p. 2.

Though the educational attainments of all the communities made substantial progress during the post – independence period, inter caste/community differences in educational attainment have persisted[17]. (Table 3.1)

The increase in general population as well as continuing expansion of the basis of elementary and secondary levels of education have increased the demand for various types and levels of courses leading to higher education. It is also expected that the growing realisation among the Indians about the social and economic value of higher education and the increasing manpower requirements for national development would spur the demand for higher education. In an economic sense, education is important not only as an unfolding of individual's personality, but also as learning of basic skills. In this way education is seen as a part of human capital formation, which is essential for economic development.

---

[17] J.R. Nair, (1982) *A Statistical Portrait of Kerala University,* Lily publishers, Thiruvananthapuram: pp.87 – 100; J.A. Thomas, (1984) 'Educational Progress of Backward Communities', *Prabudha Janata* (Mal) 6th Annual, pp. 23 – 27.

Table : 3.1 Percentage distribution of persons according to levels of education among various communities/Castes, Kerala 1968.

Caste/ Community	Literates	Literate but below primary	Primary but below matric	Matric but below graduat-ion	Graduat-ion and above
1	2	3	4	5	6
Brahmins	85.0	21.2	37.2	22.2	4.4
Nairs	78.3	30.4	37.6	9.2	1.1
Ezhavas	67.2	32.7	30.2	4.0	0.3
S.Catholics	78.3	34.2	36.0	7.5	0.6
Muslims	55.3	33.1	20.3	1.7	0.2
Scheduled Castes	47.1	28.5	17.0	1.5	0.1

Source : Govt. of Kerala, Bureau of Economics & Statistics, Report on the sample survey on Socio – Economic conditions of Castes/Communities in Kerala 1968, Superintendent, Govt Press, Thiruvananthapuram.

In under – developed economies people invest a portion of their income in education with the expectation of earning something in future through employment. This implies that education is closely related to the economy especially in a less developed country. The demand for and supply of education is highly influenced by the growth of the economy. The nature and extent of demand for higher education is directly related to the nature and extent of employment opportunity, which again depends on the nature and extent of the growth of the economy. The relationship between education and employment is established through labour market, which has a mediating role influencing educational choices and employment prospects.

Kerala leads the rest of India in educational advancement. The state ranks first in India in literacy. In 2001 it has attained the highest effective literacy rate of 90.92 percent. The female literacy rate is 87.86 percent in Kerala as compared to 54.16 percent at the National level. The literacy rate for scheduled castes in 79.66% and the female literacy among scheduled castes is 74.31%. The literacy level of scheduled tribe in Kerala is 51.09%. Thus Kerala has successfully tackled one of the first generation

problems, which the national planners are still baffling with it. Table 3.2 gives a measure of educational progress of Kerala and India in terms of the growth of literacy.

Kerala is the only state in the union where Total Literacy campaign (TLC) has been successfully completed and it has the first district to make all adult literate. At present Kerala has been declared as total literate state.

The concept of human capital dates back to Adam Smith and early classical economists[18]. The report of the Education Commission[19], "In a world based on science and Technology, education determines, the level of prosperity, welfare and security of the people. Their quality and number will determine success in the great enterprise of national reconstruction whose principal objective is to raise the standard of living of our people"[20].

---

[18] Mark Blaug, (1972) *An Introduction to the Economics of Education,* Penguin Books, Batlimore, pp.22 – 24.
[19] Report of the Education Commission, 1966.
[20] Education commission Report, (1966).

Table : 3.2 Growth of Literacy – India and Kerala (1901 – 2001)

India				Kerala		
Rate of Literacy						
Year	Total	Male	Female	Total	Male	Female
1901	5.35	9.83	0.60	11.15	19.15	3.15
1911	5.92	10.56	1.05	13.31	22.25	4.43
1921	7.16	12.21	1.81	19.20	27.88	10.26
1931	9.50	15.59	2.93	21.34	30.89	11.00
1941	16.10	24.90	7.30	--	--	--
1951	16.67	24.95	7.93	40.47	49.79	31.41
1961	24.02	34.44	12.95	56.85	54.97	38.90
1971	29.45	39.45	18.68	60.42	66.52	54.31
1981	36.06	46.62	24.73	70.42	87.74	75.65
1991	52.21	64.13	39.29	89.81	93.62	86.17
2001	65.38	75.82	54.16	90.92	94.20	87.86

Source: Census of India and Kerala various Decadal volumes.

The World Development Report (1991) also emphasised the importance of "investing in man"[21] in a nation's development strategy. All these warrant the

[21] World Development Report, (1991).

formulation of a proper education policy. The goal of proper education policy should be to arrive at a balance between the demand for and supply of education to secure the most beneficial form of educational development.

3.1 Growth of school education

Kerala has to her credit a long and remarkable history of education development both in public and private sector. She has marched ahead of other states in the field of education and her achievement is reflected in the high percentage of literacy and the large proportion of children of the various age groups, attending educational institutions[22]. Outstanding progress has been achieved in Kerala in the matter of enrolment of students at the primary as well as at the secondary stages of school education since the formation of Kerala state as is evident from Table 3.3.

---

[22] Government of Kerala, Fifth Five year plan, (1974 - 79), A dimensional Approach, The state Planning Board, Thiruvananthapuram: p.60.

Table 3.3 Growth of Enrolment in different stages of School Education: Kerala, 1956-57 to 1991-92.

(in thousands)

Year	Primary Schools		Secondary School		Total	
	No	Index of growth	No	Index of growth	No	Index of growth
1956-57	24.9	100.0	2.2	100.0	27.1	100.0
1961-62	30.4	122.1	4.2	190.9	34.6	127.7
1966-67	36.9	148.2	6.4	290.9	43.3	159.8
1971-72	42.3	169.9	7.5	340.9	49.8	183.8
1976-77	43.5	174.7	10.0	454.5	53.5	197.4
1981-82	43.3	173.9	13.2	600.0	59.5	208.5
1986-87	43.8	175.9	13.4	609.1	57.2	211.1
1991-92	43.5	174.7	15.6	709.1	59.1	218.1
1996-97	39.3	157.8	16.1	731.8	55.4	204.4
2000-01	36.4	146.2	16.3	740.9	52.7	194.5

Source 1. Government of kerala, (1975), *Statistical Hand Book of Kerala*, Bureau of economics and Statistics, Thiruvananthapuram.

2. Government of Kerala, (1983, 1989, 1992 and 2000). Economic review, State Planning Board, Thiruvananthapuram.

It may be seen from table 3.3 that the enrolment in primary schools rose rapidly from 24.9 lakhs in 1956-57 to 43.5 lakhs in 1991-92 indicating a rise of enrolment by about 75 per cent within a period of about three and a half decades. At the same time enrolment in secondary school went up from 2.2 lakhs in 1956-57 to 15.6 lakhs in 1991-92 registering a seven-fold increase over the same period. The total enrolment in schools during this period increased by 118 per cent i.e., from 27.1 lakhs to 59.1 lakhs. The higher rate of enrolment in secondary schools can be attributed to low dropout rates at the lower primary and upper primary stages and also to the growing private demand for higher education for which S.S.L.C is the minimum prescribed qualification. It also reflects the increasing intensity in the desire of the modern youth to enter into the organised employment sector, which required S.S.L.C as the minimum qualification. But since 1996–97 the enrolment in primary school is seen to decrease may be due to the closing of the uneconomic schools. At the same time the tremendous rate of increase in enrolment in secondary stage indicates the rapid expansion of education facilities provided in the state, especially at the secondary stage, as is reflected from the growing number of high schools in recent years. (See Table 3.4).

Table 3.4 Growth in the Number of Secondary schools and enrolment: Kerala, 1956-57 to 1991-92.

(in thousand)

Year	Secondary School		Enrolment		CGR	
	No	Index of growth	No	Index of growth	No. of School	Enrol-ment
1956-57	0.8	100.0	216.7	100.0	--	--
1961-62	0.9	112.5	416.4	192.2	4.0	14.0
1966-67	1.3	162.5	640.0	295.3	6.6	9.0
1971-72	1.4	175.0	750.2	346.2	1.8	3.2
1976-77	1.7	212.5	1003.7	463.2	3.6	6.0
1981-82	2.1	262.5	1317.5	608.0	4.3	5.6
1986-87	2.4	300.0	1340.8	618.7	2.7	0.4
1991-92	2.5	312.5	1557.5	718.7	0.8	4.2

CGR - Annual average compound growth rate.

Source 1. Government of Kerala, (1975), *Statistical Hand Book of Kerala*, Bureau of Economics and Statistics, Thiruvananthapuram.

2. Government of Kerala, (1983 and 1992). *Economic review*, State Planning Board, Thiruvananthapuram.

3. Government of Kerala, (1998); *Fact Book on Manpower Kerala*, Department of Economics and Statistics, Thiruvananthapurm.

There were only 763 secondary schools in the state in 1956-57, with an enrolment of 217 thousand students. The number of high schools mounted to 2.5 thousand in 1991-92 registering three-fold increase, while enrolment went up to 1557.5 thousand recording seven-fold increase during the same period[23]. (Table 3.4). It is observed that when the number of secondary schools increased at an annual compound growth rate of 6.6 per cent during 1961-62 to 1966-67 as against four per cent during 1956-57 to 1961-62, the enrolment at this stage declined at an annual compound growth rate of nine per cent as against 14 per cent during 1956-57 to 1961-62. It is significant to note that; the rate of enrolment was much higher during 1971-72 to 1976-77 (6 per cent) than that in the number of schools (3.6 per cent). But the rate of enrolment was seen to be much lower during 1981-82 to 1986-87 (0.4 per cent) than that in the number of schools (2.7 per cent). This may be due to the policy followed by the government during the sixth five year plan (1978-83) to give more emphasis on qualitative improvement, vocationalisation and to restrain expansion with the

[23] In view of the necessity for providing schooling facilities in the educationally backward areas, government accorded sanction for opening 226 schools in 1992. Among them High Schools alone accounted for 112. See government of Kerala, (1992) *Economic Review, op.cit.,* p.116.

objective of making secondary education employment oriented and directly useful for the students[24].

3.2 Growth of Higher Education

The rapid growth in secondary Education had its serious repercussion on higher education. Since secondary education is not diversified and also not vocational based, the products of secondary schools have been facing grave difficulties in finding suitable employment in the labour market. The growing unemployment among secondary school leavers induced parents to send their boys to colleges just to keep them busy and the rising age of marriage brought many girls to colleges in an attempt to utilise pleasantly the period of waiting to be married[25]. Admission to a college is thus a drift for some and a way of improving prospects of employment for many students, resulting in greater pressure of numbers in colleges. As pointed out by University Education Commission (1966), the colleges and Universities are considered by many as 'Waiting Rooms' till jobs are obtained.

---

[24] Planning Commission's Draft Five Year plan 1978-83, A summary, State Planning Board, Thiruvananthapuram: p.63.

[25] J.P.Naik, (1965) *Educational Planning in India*, Allied Publishers, Bombary: pp.18-19.

There has been an unplanned and rapid expansion of higher education during the first four plans[26]. At the formation of Kerala State there were only 32 Arts and Science colleges in the state with enrolment of 26,402 students. The increase in intake of students in Arts and Science colleges has been fairly high (more than six fold during the past three and a half decades). The colleges increased at an annual average compound growth rate of 8.0 per cent during 1956-57 to 1961-62, but declined to 2.1 per cent during 1971-72 to 1976-77. However, after 1976, we find that the rate of growth of enrolment was much higher than that in the number of colleges, a phenomenon largely due to the introduction of the shift system after 1977. It is significant to note that the number of Arts and Science colleges rose rapidly from 32 in 1956-57 to 173 in 1991-92, recording five-fold increase. Of the total 173 colleges, 53 were started in the third plan period alone. The enrolment reached the level of 2.7 lakhs in 1981-82 and declined to 1.6 lakhs in 1991-92. The growth of colleges and enrolment during 1956-57 to 1991-92 is depicted in Table 3.5.

---

[26] Planning Commission's Draft Five Year Plan 1978-83, A summary, State Planning Board, Thiruvananthapuram: p. 63.

Table 3.5 Growth in the number of Arts and Science colleges and Enrolment: Kerala, 1956-57 to 1991 to 92.

Year	College		Enrolment		CGR	
	No	Index	No	Index	No of College	Enrolment
1956-57	32	100.0	26402	100.0	--	--
1961-62	47	146.9	41739	158.1	8.0	9.6
1966-67	100	112.5	112485	426.0	16.3	21.9
1971-72	117	365.6	159216	603.0	3.2	7.2
1976-77	130	406.3	179132	667.1	2.1	2.8
1981-82	172	537.5	259207	1019.6	5.8	8.4
1986-87	172	537.5	139480	528.3	0.0	3.1
1991-92	173	540.0	162334	614.9	0.1	2.7

Source
1. Government of Kerala, (1964, 1965 and 1979), Statistical Hand Book of Kerala, Bureau of Economics and Statistics, Thiruvananthapuram.
2. J.Rajasekharan Nair (1982), A statistical Portrait of Kerala University, Lily Publishers, Lily Dale Mettukada.
3. Government of Kerala, (1980 and 1988), Statistics for Planning, Bureau of Economics and Statistics, Thiruvananthapuram.
4. Government of Kerala, (1983,1989 and 1992), Economic review, Op.Cit.

Unlike at the secondary stage of school education, in higher education, the rates of increase in the number of colleges and enrolment are seen to be closely related. The enrolment of students increased at an annual average compound growth rate of 21.9 per cent during 1956-57 to 1966-67 and declined to 2.8 per cent during the seventies (1971-72 to 1976-77) partly due to the regulation of enrolment and partly due to the adoption of a new pattern of higher secondary education[27].

The introduction of liberal 'open door policy' in higher education resulted in the expansion of educational output at all levels in the general education stream (See Table 3.6).

---

[27] Planning Commission's *Draft Five-Year Plan 1978 – 83.A Summary*, Op.cit. p. 64.

Table 3.6 Structure of Collegiate enrolment, Kerala, 1960-61 to 1991-92.

(in thousand)

Year	Pre-Degree		Degree (General)		Post Graduate (General)		Degree (Professional & Technical)		Total	
	No	Index	No	Index	No	Index	No	Index	No	Index
1960 – 61	16.2 (37.0)	100.0	20.3 (46.3)	100.0	1.0 (2.3)	100.0	6.3 (14.4)	100.0	43.8 (100.0)	100.0
1970 – 71	60.5 (49.7)	373.5	49.3 (40.5)	242.9	4.1 (3.4)	410.0	7.8 (6.4)	128.8	121.7 (100.0)	227.9
1975 – 76	101.5 (57.2)	626.5	58.8 (33.2)	289.7	4.6 (2.6)	460.0	12.5 (7.0)	198.4	177.4 (100.0)	405.1
1980 – 81	146.6 (57.0)	904.9	87.5 (34.0)	431.0	6.0 (2.3)	600.0	17.0 (6.6)	217.4	257.2 (100.0)	537.2
1985 – 86	197.3 (63.1)	1217.9	106.5 (34.0)	524.6	9.0 (2.9)	900.0	16.3* (5.2)	258.7	312.8 (100.0)	714.2
1990 – 91*	191.4* (63.3)	1181.5	78.9* (27.3)	388.7	18.3 (6.3)	1830	17.0** (5.9)	269.8	288.6* (100.0)	658.9
1991 – 92**	112.3* (69.2)	693.2	44.9** (27.7)	221.2	5.1** (3.1)	510	NA	--	162.3** (100.0)	370.5

Figures in brackets indicate percentage to total

*Includes private registration

**Excludes private registration

Note: Professional and technical degree includes Law, teacher training, engineering, Medicine (Allopathy, Ayurvedic and Homeopathy), Agriculture Horticulture and Veterinary.

Source: 1) Government of Kerala, Statistics for planning, Op. Cit

2) Government of Kerala, (1989 and 1992) Economic Review, Op.Cit.

It is observed that about 70 per cent of the total enrolment for general education in1991-92 came under the pre degree course which is more than half of the total enrolment in higher education; while the corresponding percentages for degree and post graduate courses amount to 28 per cent and 3 per cent respectively during the same period. Enrolment in pre degree course showed an upward trend indicating rapid expansion in pre degree enrolment. Enrolment in degree courses went up to 78.9 thousands in 1990-91 from 20.3 thousand in 1960-61 registering a three fold increase, while at the post graduate courses, enrolment mounted to 18.3 thousand in 1990-91 from one thousand in 1960-61 recording eighteen fold increase indicating rising demand for higher levels of education for upgradation of credentials which have become indispensable for success in job competition. It is significant to note that during the three decades 1960- 61 to 1990-91 enrolment in the higher education in the general education stream, including the pre-degree stage, registered an eight-fold increase, but by about three-fold in the professional and technical education stream which indicates that the education structure in the state is tilted heavily towards the general education stream which involves less outlay compared to professional and technical education.

In Kerala, the general education group constitutes nearly three-fourth of the share in total enrolment in higher education (see Table 3.7). There has been enormous growth in the number of graduates since 1970. Analysis of enrolment in regular system of higher education reveals that number of students attracted to science subjects is more than the number going for studies in Arts (see Table 3.7). This phenomenon may be due to intense desire of students for professional and technical studies for whom the probability of success in the job competition in the organised sector is comparatively higher. The enrolment of students under general education increased from 9508 in 1956-57 to 48553 in 1990-91 recording eight fold increase, within a period of three and half decades. The majority of students in the professional categories were enrolled in the faculties of Engineering and Medicine. The enrolment in the faculty of Agricultural Science was the lowest in 1991. (Table 3.7)

Table 3.7 Percentage Distribution of Faculty-wise Enrolment : Kerala, 1956-57 to 1990-91

Faculty	1956 – 57		1962 – 63		1970 – 71		1975 – 96		1980 – 81		1985 – 86		1990 – 91	
	No	Index	No	Index	No	Index	No	Index	No	Index	No	Index	No	Index
General Education														
1.Arts	4061 (32.6)	100	5582 (17.3)	137.5	25042 (40.9)	616.6	27567 (36.3)	678.8	14000* (27.2)	344.7	12588** (28.7)	310.0	21064 (32.2)	518.7
2.Science	43.95 (35.2)	100	16324 (50.6)	371.4	24512 (40.1)	557.7	29926 (39.4)	680.9	9962 (19.4)	226.7	11687** (26.6)	265.9	21280 (32.5)	484.2
3.Commerce	10.52 (8.4)	100	2175 (6.7)	206.7	3847 (6.3)	365.7	6459 (8.5)	614.0	11547 (22.4)	1097.6	3341** (7.6)	317.6	6209 (9.5)	590.2
Sub Total (1 to 3)	9508 (76.2)	100	24081 (74.6)	253.3	53401 (87.3)	561.3	63952 (84.3)	672.6	35509 (69.0)	373.5	27616 (62.9)	290.5	48553 (74.1)	510.7
Professional and technical education														
4.Education	1372 (11.0)	100	2185 (6.7)	159.3	1772 (2.9)	129.2	1958 (2.6)	142.7	2626 (5.1)	191.4	2861 (6.5)	208.5	Na	--
5.Engineering and Tech-nology	388 (3.1)	100	3198 (10.0)	824.2	1877 (3.1)	483.8	3756 (4.9)	968.0	5686 (11.1)	1465.5	83431 (9.0)	2150.3	10318 (15.7)	2659.3
6.Medicine	424 (3.4)	100	1544 (4.8)	364.2	2347 (3.8)	553.5	3609 (4.8)	851.2	3722 (7.2)	877.8	4422 (10.1)	1042.9	5122 (7.8)	1208.0
7.Agriculture	126 (1.0)	100	219 (0.7)	173.8	203 (0.3)	161.1	119 (0.4)	253.2	111 (0.2)	88.1	224 (0.5)	177.8	548 (0.8)	434.9
8.Veterinary	122 (1.0)	100	259 (0.8)	212.3	235 (0.4)	192.6	182 (0.2)	149.2	319 (0.6)	261.5	446 (1.0)	365.6	972 (1.5)	796.7
9.Law	540 (4.3)	100	488 (1.5)	90.0	1325 (2.2)	245.4	2130 (2.9)	394.4	3474 (6.8)	643.3	Na --	--	Na --	--
Sub Total (4 to 9)	2972 (23.8)	100	7891 (24.5)	265.5	7759 (12.7)	261.1	11954 (15.7)	402.2	15938 (31.0)	536.3	16296 (37.1)	548.3	16960 (25.9)	570.7
Grand Total (1 to 9)	12480 (100.0)	100	32274 (100.0)	258.6	61160 (100.0)	490.1	75906 (100.0)	608.2	51447 (100.0)	412.2	43912 (100.0)	351.9	65513 (100.0)	524.9

*Excluding number of students appeared for examination in Calicut University.

**Sanctioned intake.

Source: 1. J.Rajasekharan Nair, (1983), Op. Cit.
2. Government of Kerala, (1983 and 1988), Statistics for Planning, Op. Cit.
3. Government of Kerala, (1992), Economic Review, Op. Cit.

Factors like quest for social advancement, social status attached to university degree and lack of employment opportunities have pushed up enormously the demand for higher education. In states like Kerala, the dramatic demographic transition due to steady decline in the infant mortality rate has led phenomenal increase in the school - going population which also enhanced the demand for higher education to a major extent. But it is a fact that this high level demand for education cannot be satisfied by the main stream of educational system. This problem is more pronounced in the higher education sector of Kerala. This led to the emergence of a set of unrecognised educational institutions called parallel colleges.

The educational facilities provided in the state for private registration in pre-degree, degree and post graduate levels in Arts, Science and Commerce subjects to cater to those students who could not get admission to the regular courses in colleges has resulted in tremendous growth in the supply of Arts and Commerce students in the labour market. The number of private registrants in the state mounted to 50.9 thousand in 1991 from 29.7 thousand in 1986 registering nearly two-fold increase within a period of five years. Of the total private registrants in 1991, Arts

students constitute the highest proportion (55.7 per cent) followed by commerce students (38.4 per cent) and science students (5.9 per cent) (see Table 3.8).

Table 3.8 Distribution of Private Registrants by faculty of Education, Kerala, 1986 - 1991.

Year	Arts	Science	Commerce	Total
1986	15110 (50.8)	1016 (3.4)	13620 (45.8)	29746 (100.0)
1987	13986 (48.9)	1016 (3.6)	13570 (47.5)	28571 (100.0)
1988	18931 (54.2)	1468 (4.6)	17055 (41.1)	37454 (100.0)
1990	18931 (53.7)	2456 (5.2)	19411 (41.1)	47258 (100.0)
1991	28357 (55.7)	2379 (5.9)	19565 (38.4)	50901 (100.0)

Source: Government of Kerala (1989 and 1992), Economic Review, Op. Cit.

A glance at the estimated number of graduates in Arts, Science and Commerce at the All India level also show a similar picture. (See Table 3.9)

Table 3.9 Distribution of Graduates in Arts, Science and Commerce.

(All India)

Faculty	Graduate		
	1981	1991	2000[N]
Arts	1016036 (49.76)	1534348 (46.70)	4348037 (60.02)
Science	489415 (23.97)	756896 (23.03)	1402068 (19.35)
Commerce	536217 (26.27)	994532 (30.27)	1494810 (20.63)
Total	447359 (100.00)	3285776 (100.00)	7244915 (100.00)

Note : Figures in brackets are percentages in relation to total.

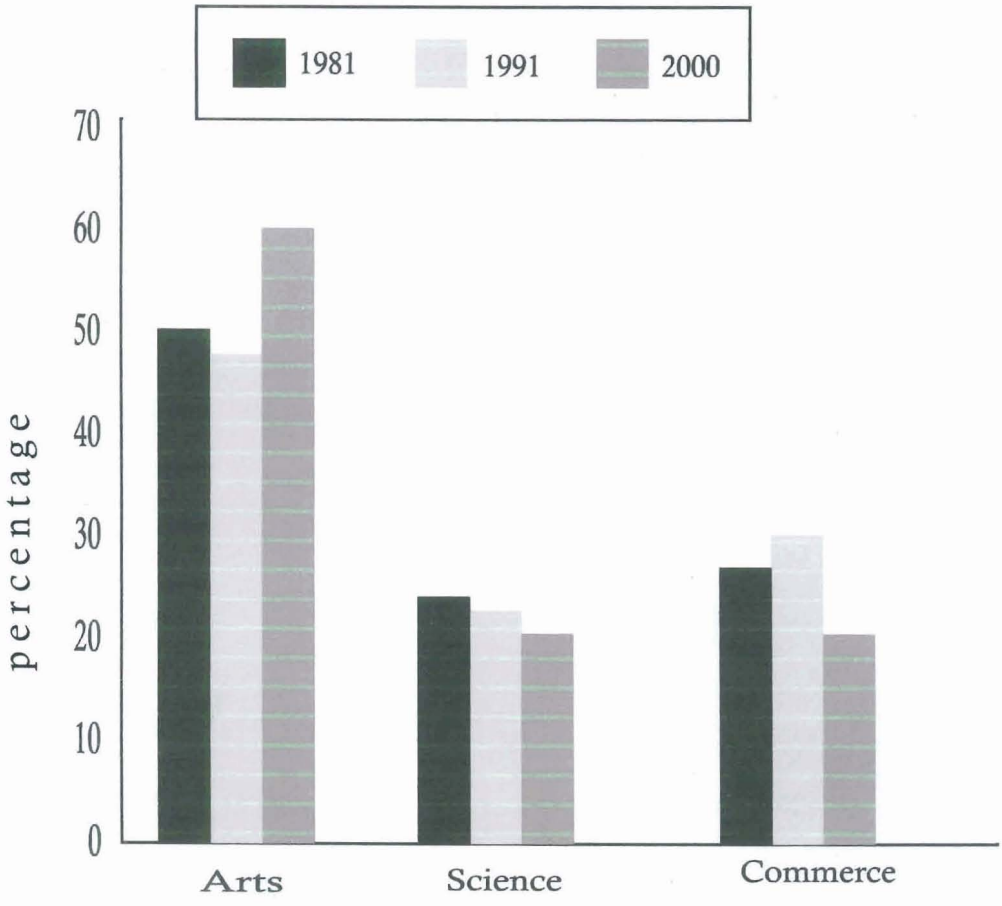
[N]As on September 30

Source : Ministry of Human Resource Development : (i) *Education in India* (ii) Selected *Educational Statistics.*

From Table 3.9 it can be seen that the growth in the number of graduates in Science is much lower than that in Arts and Commerce. This may be due to the fact that private registration is possible only in few of the Science

subjects, because practicals form a part of the curriculum of most of the Science subjects. This is represented with the help of figure 3.1.

Figure.3.1 Enrolment of Graduates in Arts, Science and Commerce.



The same feature can be viewed in the case of the estimated number of postgraduates in Arts, Science and Commerce at the All India Level (see Table 3.10).

Table 3.10 Distribution of Postgraduates in Arts, Science and Commerce.

(All India)

Faculty	Postgraduate		
	1981	1991	2000[N]
Arts	160673 (63.17)	202831 (57.26)	416706 (64.37)
Science	52809 (20.76)	71891 (20.30)	126773 (19.58)
Commerce	40879 (16.07)	79494 (22.44)	103859 (16.05)
Total	254361 (100.00)	354216 (100.00)	647338 (100.00)

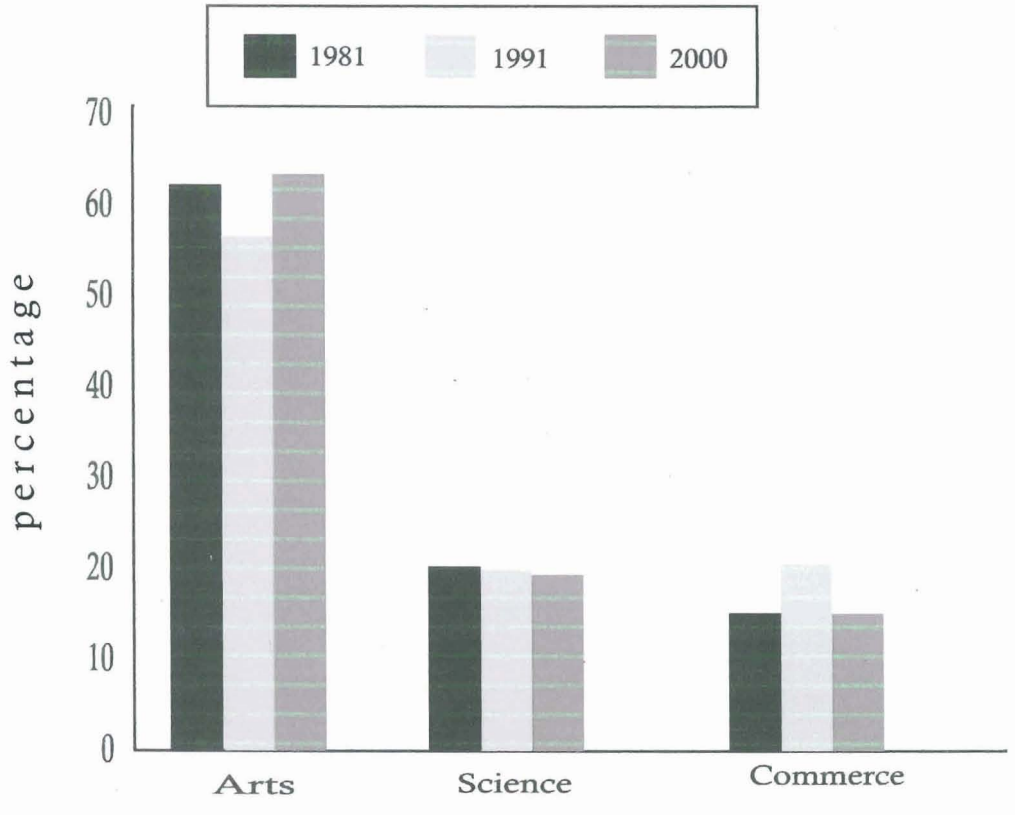
Note : Figures in brackets are percentages in relation to total.

[N]As on September 30

Source : Ministary of Human Resource Development : (i) *Education in India* (ii) Selected *Educational Statistics.*

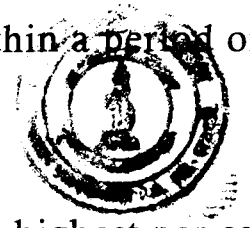
From Table 3.9 and 3.10 it can be seen that the stock of both Graduates and Postgraduates is increasing at an enormous rate even at the All India level - the rate being highest in Arts followed by commerce and least in Science. The number of Postgraduates in Arts Science and Commerce at the All India level is given in figure 3.2. But in the case of Kerala (as in Table 3.7) the enrolment in science subjects is much greater than in Arts and Commerce through out the years.

Figure. 3.2 Enrolment of Postgraduates in Arts, Science and Commerce.



3.3 Women Education

Kerala is regarded as the most progressive state in the matter of women's education. According to 2001 census the female literacy rate is 87.86 per cent[28] in the state as against 54.16 per cent at the national level. The enrolment of girl student in schools stood at 28.96 lakhs in 1992, which constituted to 49 per cent of the total school enrolment[29]. The number of girl students in high school went up to 7.7 lakhs in 1992 from 4.7 lakhs in 1977[30], registering nearly a two-fold increase within a period of one and a half decades.



Kerala continues to record the highest per cent of women enrolment among all the states in India in all stages of higher education, in the general education stream. Rapid progress of girls education at the university level is a remarkable feature of educational development in the state. The enrolment of women in Arts and Science College in the state mounted to 177.4 thousand in 1999-2000 from 77.8 thousand in 1975 - 76 (see Table 3.11). The table also

---

[28] Census of India, 2001 Series – 33, Paper – 1 of 2001, p.24.

[29] Government of Kerala, (1992) *Economic Review, Op.cit*, p.92.

[30] Government of Kerala, (1977) Statistical Hand Book of Kerala, Bureau of Economics and Statistics, Thiruvananthapuram: p. 171.

reveals that females constitute higher proportion than males at all levels of education in the general education stream indicating the increase in the number of girls for higher education. The rapid growth in the supply of women graduates in the labour market in the absence of adequate employment opportunities suitable for women in the state aggravates the problem of educated female unemployment in the state.

The gender issue has figured prominently in discussion on employment and unemployment. It is suggested that modern growth process marginalizes female workers. It makes them more dependent on male heads. It is further suggested that this development has adverse implications for women's development and consequently for total development, since women's development holds the key to total development via the effects on literacy, health and nutrition. There are even evidences to show that incomes of the women are spent on household and children much more than the incomes of the males. However, the images of women have undergone significant changes from the past to the present. Now she is considered more as a productive source rather than being merely as agent of giving birth to children and discharging

Table 3.11 Enrolment of students by level of education and sex in Arts and Science Colleges, Kerala, 1975-76 to 1999-2000.

(in thousand)

Year	Pre – Degree			Degree			Post Graduate			Total		
	Male	Female	Percent age of female to total	Male	Female	Percent age of female to total	Male	Female	Percent age of female to total	Male	Female	Percent age of female to total
1975 - 76	NA	NA	--	NA	NA	--	NA	NA	--	88.4	77.8	46.7
1985 - 86	NA	NA	--	NA	NA	--	NA	NA	--	153.1	159.7	51.1
1988 - 89	49.7	52.9	51.6	18.4	23.2	55.8	1.9	2.8	59.6	70.1	78.9	53.0
1989 - 90	51.0	54.0	51.4	19.1	22.5	54.1	2.1	3.1	59.6	72.3	79.5	52.4
1990 - 91	50.7	55.6	52.3	20.8	23.9	53.5	2.0	3.0	60.0	73.5	82.5	52.9
1991 - 92	54.7	57.6	51.3	20.0	25.0	55.7	2.0	3.0	58.8	76.7	85.7	52.8
1999-00	56.9	73.8	56.4	51.9	93.0	64.21	4.0	10.6	72.7	112.8	177.4	61.1

Source: 1) Government of Kerala, (1984), *Report of the High level countries on Education and Employment, Vol.*11, Report on Higher Education, State Planning Board, Thiruvananthapuram, p.4.

2) Government of Kerala, (1988), Fact book on Manpower Kerala, Department of Economics and Statistics, Thiruvananthapuram, p.100.

3) Government of Kerala, (1989-90, 1991-92, 1999-2000), *Economic Review, Op. Cit.*

domestic duties. Today she has more economic freedom than ever before and her economic freedom stems from the fact that she is gainfully employed. This fetches her own income and way of living, so that she does not become dependent on her male counterpart.

The women employment scenario in Kerala is also markedly different from the rest of the country. In traditional Kerala society, by and large, only women in the lower strata went for employment, and that too, mostly in agriculture. Women of well to do families seldom went for employment, and indeed no meaningful employment was available to them. It was only with the spread of education and modernisation of society that new job came up, largely due to the needs of government and industry consequent on their expansion. Even though new jobs came up, the usual tendency was for men to seize them, because the job market was originally monopolised by men. However in Kerala the advantages enjoyed by women in several respects, particularly in education, enabled them to successfully compete with men in the employment market. Even so, sizeable entry of women in modern employment was a post independence phenomenon.

3.4 Expenditure on Education

Kerala is the only state in India that spends more than 6 per cent of its domestic production (SDP) on education, a norm recommended by the Education Commission (1966). Nearly 10 per cent of the State Domestic Products is being spent on education by government and private agencies put together[31]. The state spent 6.52 per cent of its domestic products on education in 1988-89 while the corresponding proportion for the nation was 3.65 per cent (see Table 3.12). The total expenditure on education as per revised estimate mounted to Rs. 793.27 crores in 1991-92[32] from Rs.141.2 crores in 1976-77[33], recording seven fold increase within a period of one and half decades. Of the total expenditure on education in 1991-92, Rs.396.71 crores were spent on primary education (50 per cent) and Rs.230.56 crores for secondary education (29 per cent), Rs.115.60 crores for university education (14.6 per cent) and Rs.43.96 crores for technical education

---

[31] Government of Kerala, (1992) *Resources Commission*, Indian Reports, p.42.

[32] Government of Kerala, (1992) *Economic Review*, op.cit., p.95.

[33] Government of Kerala, (1977) statistical hand Book of Kerala, op.cit., p.178-179.

(11.1 per cent)[34]. The percapita government expenditure on education increased by more than nine times from Rs.28.25 crores in 1970-71 to Rs.268.6 crores during 1990-91, while the corresponding all India figure are Rs.14.5 crores and Rs.190.4 crores respectively[35]. During the period 1971-1991, per pupil expenditure at the primary level increased by thirty two times (from Rs.28.25 crores to Rs.912.40 crores) the corresponding increase at the secondary stage was eight times (from Rs.176.23 crores to Rs.1480.86 crores). The expenditure on university education increased from Rs.54.50 crores in 1985-86 to Rs.115.60 crores during 1991-92 while expenditure on Technical education rose to Rs.43.96 crores in 1991-92 from Rs.20.55 crores in 1985-86. The proposed outlay for university and higher education in the state for the eighth five-year plan is Rs.34crores while the corresponding figure for technical education is Rs.94 crores[36].

---

[34] Government of Kerala, (1992) Economic Review, Op.cit., p.95.

[35] Government of Kerala, (1992) *Economic Review*, Op. cit, p.95.

[36] Government of Kerala, (1991), Draft Eighth five year plan 1992-97, Vol. II, state Planning Board, Thiruvananthapuram.

Table 3.12 State wise Distribution of Expenditure of Education as a proportion of net state Domestic product (SDP), 1980-81 to 1988-89.

Sl. No.	State/Year	Per Cent				
		1980-81	1985-86	1986-87	1987-88	1988-89
1.	Kerala	5.8	6.80	6.87	6.54	6.52
2.	Bihar	3.79	4.35	3.48	3.41	4.59
3.	Orissa	3.33	3.47	4.23	4.51	4.42
4.	Rajasthan	3.59	4.25	4.53	5.23	4.41
5.	Karnataka	2.92	3.57	3.52	4.17	4.05
6.	Tamil Nadu	3.34	4.01	3.98	3.81	4.04
7.	Andhra Pradesh	3.12	4.01	3.97	4.17	3.96
8.	West Bengal	2.79	3.43	4.01	3.76	3.91
9.	Madhya Pradesh	2.79	3.45	3.70	3.75	3.83
10.	Gujarat	2.69	4.04	3.48	4.10	3.69
11.	Uttar Pradesh	2.49	3.21	3.23	3.21	3.67
12.	Maharashtra	2.51	3.01	3.42	3.33	3.41
13.	Haryana	2.41	2.73	2.94	3.51	3.28
14.	Punjab	3.05	2.83	2.75	3.13	3.26
All States		2.89	3.29	3.47	3.56	3.65

Source : M.A. Oommen, (1993), Essay on *Kerala Economy*, Oxford & IBH Publishing Company Private Limited.

Although costs at all levels of education have been rising rapidly, there has not been corresponding increase in the revenue receipts from education, since education is free in the state upto and including the pre-degree stage and the tuition fee levied at the collegiate level is very low. While the revenue expenditure on education in 1989-90 was Rs.623.6 crores, the receipts from the same sector was only Rs.18.01 crores which formed only 2.9 per cent of the expenditure on education. The amount collected by way of tuition fee as proportion of total expenditure on salaries has been declining annually and it stood at less than 10 per cent in 1986-87[37], while in advanced countries about 25 per cent of the total cost of education is met from fees collected from the students. The existing rates of fees fixed by the universities of Kerala are much lower than the rates fixed by most of the other universities[38]. The financial burden of the government has increased considerably as the government has taken up the entire responsibility of meeting the educational expenditure in the private sector including salary of the teachers and maintenance of the building. The most important problem

---

[37] Government of Kerala, (1989) Eighth Five Year Plan 1990 – 95, Report of the Task Force on Higher Education, op. cit. p.21.

[38] Ibid. P.21.

that has arisen in the field of education is the sharp increase in salaries, which accounts for over 95 per cent of the expenditure[39].

The preceding analysis indicates that expansion in secondary education in the state has been explosive in the past few decades. Various factors accounted for the continuously growing demand for higher education. For instance rapid increase in the enrolment at the level of secondary education and liberal assistance to the students of backward communities have increased the push effect on enrolment in higher education[40]. Moreover the traditional social status attached to a university degree has also pushed up enormously the demand for higher education. But at the same time employment opportunities failed to expand adequately to absorb fully the stream of annual out put of educated manpower and paved the way for growing

---

[39] Government of Kerala, (1992), Resources Commission Interview Report, p. 42 – 43.

[40] The Increase in demand for higher education was mainly the result of push factor like the increase in the number of school final pass outs, which increased from 59 thousand in 1962 to 248 thousand in March 1992. For a discussion on push and pull factors on higher education, see P.R.P anchamukhi, (1997) Op.cit., pp 34-36.

educational inflation in the state M. Blaug[41]. The basic reason why there is such a lure for a degree is that for a vast number of jobs in organised public sector a degree is prescribed as a minimum qualification. Since for those looking for employment, the best course seems to be to try to get into government service, the pressure for admission into colleges continues unabated, even while the number of jobless degree holders keeps swelling[42].

The students and families view education as a passport for entry into the modern, urban, industrialised economy with its disproportionately high paying employment opportunities resulting in increasing demand for higher education[43]. The most important of all the factors, which have led to such expansion of higher and secondary education is the close link that has come to be established over the years between education and a good

---

[41] For a brief discussion on the phenomenon of education inflation, see M.Blaug *et al* (1969) op.cit., p.55.

[42] L.K.Jha, (1982) "Education and Employment", social Welfare, p.4.

[43] Edgar, O, Edwards and Michael, P.Todaro, (1973) "Educational supply in the context of growing unemployment in less developed countries", *World Development Report*, Vol.1, Nos.3 and 4, p.109.

job in the organised sector[44]. Secondary schools and colleges are also often started to meet the ambition of the local communities or to serve as the power base for politician. A large number of institutions of secondary and higher education in the state are run by private effort[45]. About 78 per cent of the colleges in Kerala are run by private management[46].

Expenditure on Education is expected to bring sizeable returns after a time lag. Besides like other investment it should also increase the productive capacity of the economy. But as far as Kerala is concerned this is not true. In Kerala huge investment in education instead of accelerating economic development have retarded growth. It is evident from the massive unemployment and under employment prevailing in the state, the magnitude of which is very high when compared to other states in India. Thus a large part of the expenditure spent on education goes virtually a waste.

---

[44] J.P.Naik, (1975) *Equality, quality and quantity,* Allied publishers, Bombay: p.22.

[45] For discussion on the role of private institution in education, see A.R.Kamat, (1965) "Private Institution of Education" *The Economic and Political Weekly,* pp. 1691-96.

[46] Government of Kerala, (1982) *Economic Review* op.cit., p.116.

A greater number of graduates and post graduates who have first and second classes are appointed as mere clerks in the government offices of Kerala, who require only matriculation. So it seems that expenditure spent by the government for five years in the case of a graduate and seven years in the case of post - graduate is an apparent wastage of funds both from the point of view of the individual and the government. The graduates and post-graduates are unfit for useful employment in fields other than their disciplines of specialization. Had they not been employed they would have no difficulty in making themselves useful members of the labour force as agriculturists or artisans. In this way also higher education in Kerala appears to have a positive disservice to the state's economy.

3.5 Brain - Drain

The wastage of educational expenditure in Kerala can be looked into from the point of view of Brain drain - the international migration of highly skilled and professionally qualified manpower, particularly from developing to developed countries. Large numbers of highly qualified and high cost persons are going to other

countries especially to Gulf and African Countries. They serve those economies and promote their economic development. It should be remembered that the government spend a huge amount for providing a post - graduate, a medical graduate or an Engineering graduate. But it so happens that after receiving their education they go to foreign countries and their intellectual and physical capabilities are utilized for promoting the economic development of such economies instead of their own economy. This regular majority of the persons working in Gulf countries are Keralites. The main reason for this is that foreign government offers attractive salaries. The salaries offered by them are several times higher than what they will get for the same job in their own country. The number of Indian students going abroad by field of study and sex is given in Table 3.13.

From the table it can be seen that the students in the field of commerce, business etc., were the largest who went abroad during the year 1996-97, when compared to the students in the field of Engineering, Medicine, Agriculture, Fine Arts etc. At the same time while there is a declining trend for going abroad on the part of the

Table 3.13 Number of Indian students going abroad by field of study and sex.

Field of study	Sex	1991 – 92	1992 – 93	1993 – 94	1994 – 95	1995 – 96	1996 – 97
Engineering and Architect	Male	2390	2460	709	792	703	1473
	Index	100	102.93	29.66	33.14	29.41	61.63
	Female	158	217	68	68	42	103
	Index	100	137.34	43.03	43.03	26.58	65.18
Science	Male	1384	1447	575	340	387	631
	Index	100	104.6	41.6	24.6	28.0	45.6
	Female	231	238	104	63	62	109
	Index	100	103.03	45.02	24.3	26.83	47.2
Technology and Industry	Male	121	115	43	141	98	381
	Index	100	95.04	35.54	116.52	80.99	314.84
	Female	17	17	3	43	13	36
	Index	100	100	17.65	252.94	76.47	211.76
Commerce, Business Administration, Business Management	Male	946	795	341	646	957	1777
	Index	100	84.03	36.05	65.3	101.2	187.8
	Female	122	107	45	55	12	179
	Index	100	87.70	36.9	45.08	98.36	146.7
Arts	Male	204	191	130	111	177	235
	Index	100	93.62	63.7	54.51	86.76	115.2
	Female	94	91	79	33	48	89
	Index	100	96.81	84.04	35.11	51.06	94.7
Agriculture and Forestry	Male	94	66	12	16	15	80
	Index	100	70.21	12.8	17.02	15.95	85.11
	Female	17	9	1	3	3	12
	Index	100	52.94	5.88	17.64	17.65	70.6
Medicine, Pharmacy and Veterinary Science	Male	350	449	85	327	370	907
	Index	100	128.3	24.3	93.43	105.7	259.14
	Female	94	106	30	50	37	116
	Index	100	112.8	31.91	53.19	39.36	123.40

Contd. p.115

Law	Male	26	21	9	18	23	43
	Index	100	80.77	34.6	69.23	88.46	165.4
	Female	5	5	2	6	8	3
	Index	100	500	40	120	160	60
Bank/Banking Institutions	Male	14	4	9	2	25	38
	Index	100	28.60	64.3	14.3	178.6	271.4
	Female	3	--	4	--	3	3
	Index	100	--	133.3	--	100	100
Fine Arts	Male	30	69	--	42	39	69
	Index	100	23.00	--	140.0	130.0	126.6
	Female	14	33	--	24	15	34
	Index	100	235	--	171.43	107.14	21.43
Others	Male	905	880	371	548	684	792
	Index	100	97.24	40.9	60.55	75.58	87.51
	Female	130	130	61	133	144	119
	Index	100	100	46.9	102.3	110.76	91.53
Total	Male	6466	6499	2284	2983	3478	6426
	Index	100	100.5	35.33	46.14	53.81	99.4
	Female	887	953	397	478	477	803
	Index	100	107.4	44.76	53.89	53.78	90.53

Source: Ministry of Human Resource Development

engineering students when compared to 1991-92, the trend was on an increase in the case of students belonging to other fields of study. The female population going abroad was comparatively lesser than the males.

For finding out the relationship between education of a higher level and economic development, it is necessary to examine the qualitative and quantitative changes effected in the labour force. For that it is necessary to examine the type of higher education with reference to its quality and expenditure incurred in the process of imparting education. Needless to mention that those who come out after the successful completion of university education possess, highly specialised skill. Those persons with highly specialised skill are trained to impart high quality service in particular fields. It is obvious that these persons are trained only for particular, specialised fields. It implies that in order to obtain suitable returns those who come out successfully after completing high cost university education should be given jobs, which require the utilization of their skills.

The expenditure on higher education can be said to have resulted in wastage in the event of the following :-

1. The qualified personnel refusing to take up jobs requiring less specialisation.

2. Qualified persons taking up jobs requiring no specialisation.

3. The inability of the government to offer particular employment.

4. Qualified persons finding out jobs in other countries, which did not contribute anything towards their education.

A basic condition for the optimum returns from higher education is a pre-supposition of proper demand planning of education, implying a proper plan about the projected intake of workers during particular time period that is, if expenditure on education has to conform to the requirements of any state, it has to be on the basis of a planning of demand for education. The absence of a proper

demand plan resulted in unemployment or shortage of suitable workers for jobs.

On a preliminary investigation of available data on Kerala economy, it may be possible to find out that large amount of unemployment exists in Kerala and it appears that unemployment data of the employment exchange gives a true indication of demand for education in Kerala. But the actual situation is basically different, since finding out proper or exact dimension of under utilisation of human resources in Kerala, implies the examination of the type of employment, the persons of different levels of education that Kerala would obtain. On a casual observation it can be seen that large number of graduates and post graduates remain unemployed in Kerala, and beside still a large number of graduates and post graduates have taken up jobs which do not require their skill, even though it is difficult to find out a complete picture of or the absolute number of cases of post graduates taking up jobs demanding qualification of lower degree.

In Kerala, expenditure on education is allocated without any economic consideration. Available statistical planning techniques have been ignored for planning the

sectoral requirements of the economy. General education seems to have given undue priority both from the demand and supply side. If investment in education is to activate the desired result, it should be properly planned both in respect of its proportion to other factors of production and in accordance with the projected labour absorption capacity of the economy. There is a wide gap between the supply of and demand for educated manpower in Kerala, supply exceeds demand, which is responsible for large-scale unemployment and under utilization of highly skilled personnel. If these high cost technical personnel were better utilized, it would have improved the productive capacity of the economy.

There are two principles, which should govern the expansion of higher education in Kerala. First we should admit only those students who are properly motivated and have the necessary aptitude and ability to benefit from the courses at the degree and post - graduate levels. In the absence of selectivity in admissions there will be large-scale failures, and wastage cannot be curbed. And in this sense we will continue to maintain one of the most expensive educational systems.

Secondly educational system should not be allowed to expand beyond the capacity of the economy to provide gainful employment to educated manpower. In this context the role of manpower planning becomes very important. So with a view to avoiding the problem of educated unemployment and underemployment, it is necessary to establish a closer link between the economy's need for graduates and expansion of higher education. This would obviously avoid the wastage of the scarce resources on higher educational development and will reduce the pressure of unemployment and underemployment of graduate, not to speak of frustration among the youth.

There are two aspects of educational investment – private and social. Private returns aspect considers relationship between cost incurred by private individuals in obtaining education and the benefits they as individuals in obtaining education and the benefits they as individuals derive from their education. Social aspects consider the relation between cost and benefit accruing to society.

Private returns calculus relies on the comparison of cost to the individuals of an increment of education with returns or extra earnings gained by individuals. The costs

are measured by outlays on fees, books and other items incurred by individuals as well as indirect cost of income foregone. The returns are measured by extra income, which will result from having obtained that extra education, that is, earning which are additional to what otherwise accrues to the individuals.

Social returns calculations are an attempt to measure the net benefit to the society from investment in education. Private and social returns diverge because of direct taxation. The benefit or return stream is generally higher in the social calculation, because it is gross of tax and the cost side is also higher because the state usually finances some or all the resources used. In general, extra social cost are greater than extra social returns and so the social rate of returns is lower than the private. This is largely because the extra returns occur in the future and are thus heavily discounted, compared to extra cost, which are incurred near to or in the initial period of the calculation.

Even without any such calculations like cost benefit analysis, we can say that expenditure on education does not yield sufficient and adequate returns. Existence of large-scale unemployment and underemployment offers

sufficient evidence for this. But there are some indirect benefits of education, such as low birth rates, high life expectancy, improvement in physical quality of life etc., which bring the little state of Kerala among the galaxy of even advanced countries. This in a large measure is due to education of Kerala, which cannot be ignored.

Thus all the above-mentioned factors, which exerted push-pull effects, caused unprecedented expansion in higher education. Education being a state subject, the targets given in the Planning Commission Reports, can hardly be taken to reflect the intentions of the state policy makers who operate under several socio-political influences. On the basis of the above discussion it is concluded that the enrolment expansion in the state can be predominantly attributed to pressures of social demand, and not to educational planning, and the proposed study on the various dimensions of over qualification will probe into the various reasons for such a pressure of social demand for education and the determinants pertaining to it, is being discussed in the succeeding chapters.

NATURE AND DIMENSIONS OF OVER QUALIFICATION

Geetha. N.R. “The dimensions of over-qualification a case study of the non-gazetted officers in Kerala state ” Thesis. Department of Economics, Dr. John Matthai Centre, University of Calicut, 2004

CHAPTER IV

NATURE AND DIMENSIONS OF OVER QUALIFICATION

- Profile of Thrissur district.
- Educated Unemployment in Thrissur District
- Employment by Education and Occupation
- Profile of Job Seekers in Thrissur District
- Design of the sample
- Nature and dimensions of over qualification

CHAPTER IV
NATURE AND DIMENSIONS OF OVER QUALIFICATION

The discussion in the present chapter includes three sections. The first section deals with the profile of Thrissur district. Sample design and profile of study area are discussed in the second section. The last section describes the nature and dimensions of over qualification among the respondents of the survey.

4.1 Profile of Thrissur district

Thrissur district, popularly known as the cultural capital of Kerala came into existence on 1st July 1949. It is one of the fourteen districts of Kerala and has the sixth rank in terms of the literacy rate. The name is derived from the name of "Thrishivaperur", which means the seat of Lord Shiva. The district is having a number of Hindu Temples, churches and Mosques, some of which are very famous all over the country. The people in the district live in perfect religious harmony.

4.1.1 Location

Geographically the district lies between latitude $10^0 10'$ x $10^0 46'$ and east longitude $76^0 57'$ x $76^0 54'$ in the central part of Kerala and is surrounded by Arabian Sea on the West, Coimbatore district of Tamil Nadu and Palakkad district in the East, Malappuram and Palakkad districts in the North and Ernakulam and Idukki districts in the South.

4.1.2 Administrative set up

For administrative convenience the district is divided into five taluks, viz: Thalapily, Thrissur, Chavakkad, Kodungallur and Mukundapuram. The headquarters of these taluks are at Wadakanchery, Thrissur, Chavakkad, Kodungallur and Irinjalakuda respectively. These taluks are further divided into 255 revenue villages spreading over 98 panchayats. There are 17 N.E.S. blocks and 5 municipalities viz. Chavakkad, Irinjalakkuda, Chalakudy, Kunnamkulam and Kodungallur, one Corporation namely Thrissur and one township namely Guruvayoor. Taluk wise distribution of Blocks and Panchayats are given in Table 4.1.

Table 4.1 Taluk wise distribution of Blocks and Panchayats.

Sl. No	Taluk	Block	No. of Panchayats	
1	Thalapilly	Chowannur	7	22
		Pazhayannur	6	
		Wadakkanchery	9	
2	Thrissur	Anthikkad	4	24
		Cherpu	6	
		Ollukkara	7	
		Puzhakkal	7	
3	Chavakkad	Chavakkad	7	16
		Mullassery	4	
		Thalikulam	5	
4	Kodungallur	Kodungallur	3	8
		Mathilakam	5	
5	Mukundapuram	Chalakudy	6	28
		Irinjalakuda	5	
		Kodakara	7	
		Mala	5	
		Vellangallur	5	
	Total No of Panchayats		98	

Source: Credit plan, Canara Bank, 1997.

4.1.3 Topography

The district has a geographical area of 3032 sq. km, which forms 7.8 percent of the total area of the state (38863 sq. km.). Topographically the district has three distinct regions i.e. the highland, the midland and the lowland. All these three regions are found in Thrissur and Mukundapuram Taluks. Thalapilly Taluk lies in the highland and midland and Kodungallur and Chavakkad lies in the lowland regions.

The main crops in the highland are tea, coffee and rubber. In midland, coconut, arecanut, cashewnut etc. are grown. A number of streams make the lowland area fertile. The backwaters find their outlets to the sea at Kodungallur and Chavakkad[1].

4.1.4 Climate and rainfall

The climate in the district is tropic with uniform temperature through out the year. It receives South West monsoon in June to September and North East monsoon in October to November. The rest six months from December

[1] District Industries Centre, Thrissur, Action plan (1993-1998)

to May are considered to be dry months. The average normal rainfall is about 31.77 mm. The soil of the district is broadly divided into four types namely Sandy, Alluvial, Laterite and Forest soil.

4.1.5 Population

According to 2001 census, Thrissur district is having a population of 3,18,38,619 of which 2.35.71.484 (74.03 per cent) are in rural area and 82,67,135 (26.0 per cent) in urban area. The rate of growth recorded during the decade 1991–2001 was 21.34 percent as against the state growth rate of 9.4 percent. The density of population as per 2001 census is 981 persons per sq. km. as against 903 persons per sq. km. in 1991. This is much above the state average of 819 persons per sq. km in 2001. The sex ratio in the district was 1085 in 1991 and has increased to 1092 as per 2001 census. This is much above the state average of 1058 in 2001.

4.1.6 Economic structure of the District

Agriculture is the main economic activity of the District. Nearly 40% of the total workers are having full

time employment in this sector. The main agricultural products are: Rice, Coconut, Arecanut and Cashew. The most important crop is paddy. One of the striking features of the agricultural operations of the district is the "Kole" cultivation, extending over a total area of 30,000 acres. In the allied activities front, dairy is the main activity. Poultry, goat rearing and fisheries are other important activities. The district has a long tradition in the fishing industry. In 1998–99, primary sector contribution (at current prices) to the Net State Domestic Product was Rs.110801 lakhs constituting 21.16 percent of the total income. It was 96618 lakhs in 1997–98, which constituted 21.40 per cent of the total income, whereas the contribution by this sector to the net state domestic product in 1999-2000 is 132996 lakhs constituting 21.52 percent of the total income.

Thrissur district is an industrially backward district in the state. Yet the performances of the industrial sector in the district as a whole, over the last three decades have been encouraging[2]. Numbers of registered factories in the district were 2364 in 1998 and 2566 in 1999 providing

[2] Economic Review 2000, State Planning Board, Thiruvananthapuram.

employment for 41330 and 43382 persons respectively during the same periods. There are 52 large and medium scale industries of which the main products are cotton yarn, cotton fabrics, sewing and embroidery thread, automobile tyres, tubes, coconut oil, cattle feed etc. Many ancillary units employing large number of workers are being supported by these industries. Number of registered small-scale units in the district is 23,001 as on 31-03-2000 having investment of Rs.45186.12 lakhs and providing employment for 96321 persons and producing goods and services having a value of Rs.129104.2 lakhs. Also there are a number of cottage industries such as coir industry, mat weaving, bamboo works etc. The contribution of the secondary sector towards the state income of Rs.617776 lakhs is Rs.153558 lakhs, which is 24.86 percent of the total income. The contribution by this sector during 1997–98 was 26.82 percent.

Service sector contribution to the district income has been increasing. In 2000 nearly 47.8 percent of the district income came from this sector. In 1997–98 it was 52.3 per cent as against 48.53 per cent towards the state income during this period. Railway lines, road transport and water transport play an important role in the economic

development of the district. In the field of communication, the district, possesses a good network of post offices, telegraph offices and Telephone Exchange. For power potential there are two Hydroelectric projects – Sholayar and Peringalkuthu.

The contribution of the various sectors to the district net domestic product (N.D.P) during three year till the year 2000 can be obtained from Table 4.2.

A close analysis of the distribution of the sectoral share of net state domestic product reveals that the tertiary sector has been contributing the highest share than the primary and the secondary sectors all throughout the years. The primary sector showed a small decline in 1998-99, but later increased to a small extent in the year 2000. The industrial sector is showing a declining trend all through the years.

Table 4.2 Distribution of sectoral share of Net State Domestic Product at Factor cost

Sector		1997–98	1998–99	1999–2000*
Primary	Current Price	96618 (21.40)	110801 (21.16)	132996 (21.52)
	Constant Price	57905 (20.65)	60179 (20.38)	N.A
Secondary	Current Price	121122 (26.83)	136374 (26.05)	153558 (24.85)
	Constant Price	70220 (25.05)	72528 (24.56)	N.A
Tertiary	Current Price	233733 (51.77)	276403 (52.79)	331222 (53.61)
	Constant Price	152164 (54.28)	162519 (55.04)	N.A

* Quick estimate

Source: Economic Review 2000, State Planning Board Thiruvananthapuram.

Note: Figures in brackets give the percentage sectoral contribution.

A district wise distribution of Net State Domestic Product at factor cost (Table 4.3) shows that among the districts in Kerala, Ernakulam has the highest district income followed by Thiruvananthapuram and Thrissur in 1999–2000. The per capita income of the district at current prices is Rs. 21362 in 2000, which, was only Rs. 15216 in 1997.

4.1.7 Educational progress in the district

Thrissur district occupies an important place among the districts in Kerala in respect of literacy and educational standard (Table 4.4). According to 2001 census nearly 92.56 per cent are literates, (95.47 per cent males and 89.94 per cent females) when compared to 90.18 per cent as per the 1991 census, and has the sixth position among the districts of Kerala. In respect of total literacy the literacy rate of districts vis-à-vis the state average as per the 2001 Census is depicted in figure 4.1. The data relating to the female literacy rate for the year 2001, at the same time show that in respect of female literacy, Thrissur has the fifth position among the districts of Kerala. This is shown in figure 4.2.

Table 4.3 District–wise distribution of Net State Domestic Product at factor cost.

(Rs. in crore)

Sl. No.	District	At current price		Growth rate (%)	
				At 1993-94 price	At current price
		1998 –99	1999 – 2000	1998 –99	1999 – 2000
1.	Thiruvananthapuram	5567.94	6583.70	5.30	18.24
2.	Kollam	4520.33	4739.26	5.10	4.84
3.	Pathanamthitta	2106.40	2312.26	5.19	9.77
4.	Alappuzha	3535.56	4931.21	5.31	39.47
5.	Kottayam	3644.58	4218.96	5.35	15.76
6.	Idukki	2154.20	2738.76	4.86	27.14
7.	Ernakulam	6487.23	7400.98	5.31	14.09
8.	Thrissur	5535.78	6177.76	5.33	11.60
9.	Palakkad	3733.59	4637.61	5.26	24.21
10.	Malappuram	4129.56	4872.01	5.27	18.00
11.	Kozhikode	4872.68	5237.76	5.31	7.49
12.	Wayanad	1218.46	2194.09	4.83	80.07
13.	Kannur	4201.73	4439.28	5.01	5.65
14.	Kasargod	2144.63	2073.11	4.87	-3.33

Source: Economic Review 2000, State Planning Board, Thiruvananthapuram.

Note: Income at constant prices for 1999, 2000 not calculated as the deflators have not been available.

Table 4.4 Literacy rates by sex for state and districts.

Sl. No.	State/District	Literacy rate*					
		Persons		Males		Females	
		1991	2001	1991	2001	1991	2001
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Kerala	**89.81**	**90.92**	**93.62**	**94.20**	**86.17**	**87.86**
1	Kasargode	82.51	85.17	88.97	90.84	76.29	79.80
2	Kannur	91.48	92.80	95.54	96.38	87.65	89.57
3	Wayanad	82.73	85.52	87.59	90.28	77.69	80.80
4	Kozhikode	91.10	82.45	95.58	96.30	86.79	88.86
5	Malappuram	87.94	88.61	92.08	91.46	84.09	85.96
6	Palakkad	81.27	84.31	87.24	89.73	75.72	79.31
7	Thrissur	90.18	92.56	93.77	95.47	86.94	89.94
8	Ernakulam	82.30	93.42	95.40	95.95	89.22	90.96
9	Idukki	86.97	88.58	90.89	92.11	82.97	85.04
10	Kottayam	95.72	95.90	97.46	97.41	94.00	94.45
11	Alappuzha	93.87	93.66	96.76	96.42	91.12	91.14
12	Pathanamthitta	94.86	95.09	96.56	96.62	93.29	93.71
13	Kollam	90.47	91.49	94.09	94.63	87.00	88.60
14	Thiruvananthapuram	89.22	89.36	92.84	92.68	85.76	86.26

Source: Census of India 2001, series 33, paper 1 of 2001, p.24, Kerala.

Figure 4.1 Literacy Rate of Districts vis-à-vis the state average 2001.

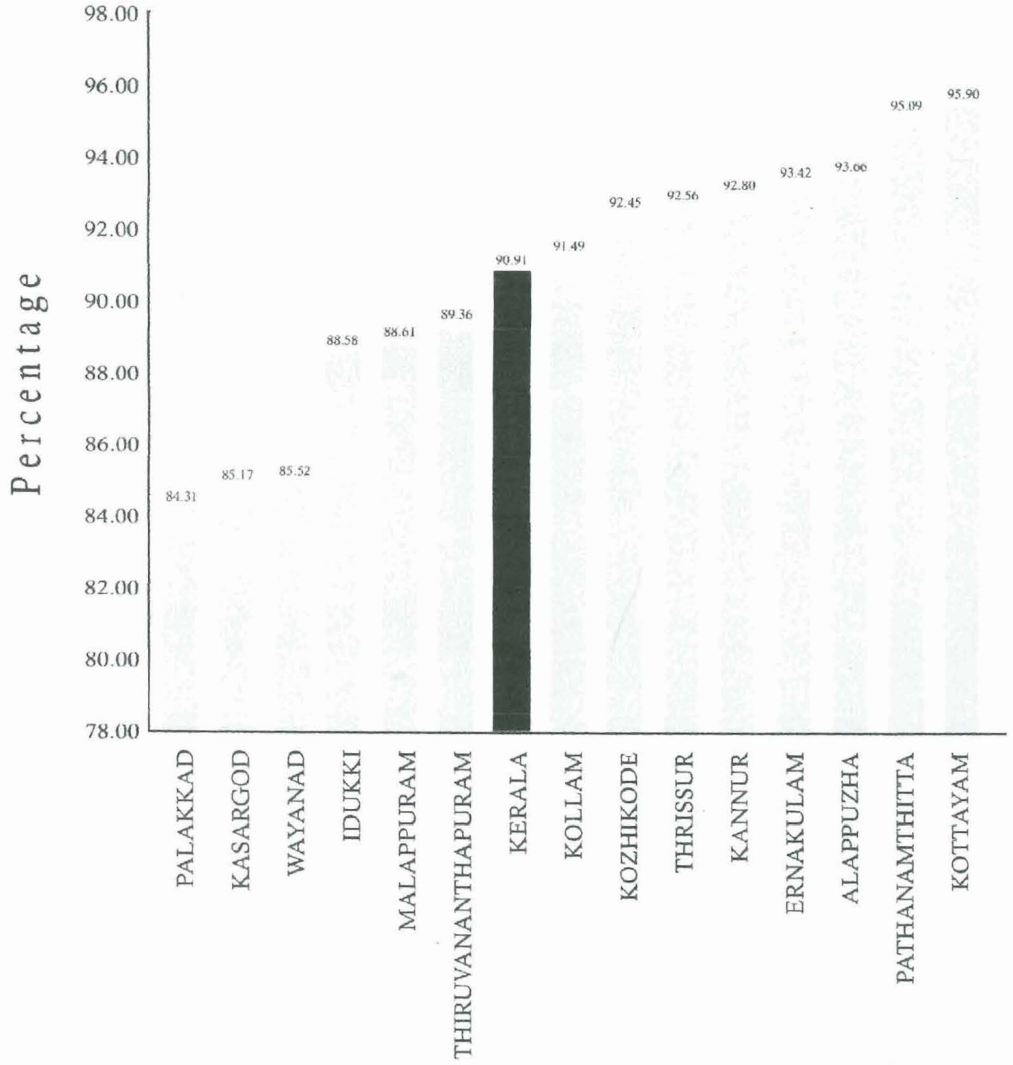
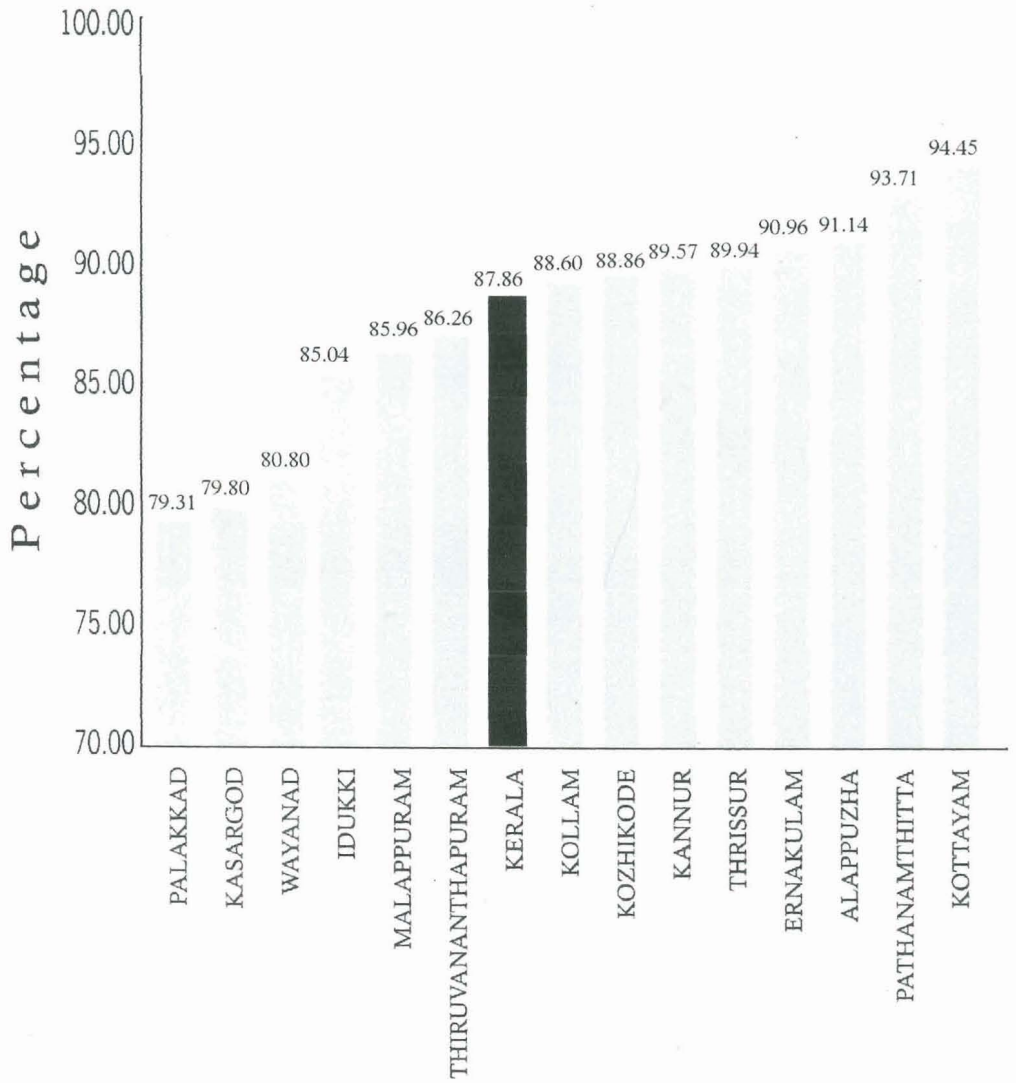


Figure 4.2 Female Literacy Rate of Districts vis-à-vis the state average 2001.



The rate of growth of literacy has been increasing at faster rate since 1960 and always above the state average. (Table 4.5). Thrissur district has a long history of education. There were well known centres of learning and culture in the district. In early days each 'KAVA' or 'DESAM' had its own 'Patasala' or Elementary school provided by 'ASANS'.

The growth of primary and upper primary education in the district has been remarkable since its formation. The number of primary schools increased from 601 in 1993–94 to 746 in 2000–01. Nearly 76.68 percent primary schools are in the private sector showing the predominance of that sector. As per the policy of the government to close down uneconomic schools, the number of upper primary schools decreased from 280 in 1993–94 to 226 in 2000–01. Here too the private sector dominated the government sector. While a notable feature of the development of secondary education is the increased share of government sector, the total number of High schools decreased from 330 in 1993–94 to 246 in 2000–01 in the government sector.

Table 4.5 Growth of literacy in Thrissur district 1961-2001.

(Literacy in Percentage)

Year	District			State		
	Male	Female	Total	Male	Female	Total
1961	54.94	41.96	48.16	54.97	39.90	46.85
1971	66.35	57.23	61.61	66.63	54.31	60.42
1981	75.98	68.99	72.32	74.03	64.46	69.17
1991	93.77	86.94	90.18	93.62	86.17	89.81
2001	95.47	89.94	92.56	94.20	87.86	90.92

Source : Census of India 2001, series 33 paper I of 2001, Kerala

The position of Higher Education in the district is commentable. Though the existing facilities provided by the Arts and Science colleges and other Technical Institutions are insufficient to the needs, they are better when compared to other districts. The district has the third position with respect to the number of Arts and Science colleges. This can be made clear from the following table

which depicts the district wise distribution of Arts and Science colleges during 2000–01 (Table 4.6).

Table 4.6 District wise distribution of Arts and Science colleges 2000–01.

Sl.No	District	Govern-ment	Private	Total
1	Thiruvananthapuram	8	12	20
2	Kollam	1	12	13
3	Pathanamthitta	---	9	9
4	Alappuzha	---	12	12
5	Ernakulam	4	21	25
6	Kottayam	1	20	21
7	Idukki	2	6	8
8	Thrissur	3	17	20
9	Malappuram	3	9	12
10	Palakkad	3	7	10
11	Kozhikode	6	8	14
12	Wayanad	2	4	6
13	Kannur	2	9	11
14	Kasargode	3	2	5
	Total	38	148	186

Source: Directorate of collegiate Education, Thiruvananthapuram.

According to the 2000–01 data, Thrissur district has 20 Arts and Science colleges of which 3 are in the government sector and 17 in the private sector. Also +2 course now exists in 85 centres of the district. Turning to the Technical Education field we can find a Medical, an Engineering, a Law college, the Kerala Agricultural University at Mannuthy and Calicut University centre at Aranattukara. (All in the Government sector) According to the 2000–01 data, the total strength of students in Arts and Science colleges of the district is 32,600 which was 28,048 during 1990–91, recording a growth rate of 16.23 percentage.

4.2 Educated Unemployment in Thrissur District

Despite the tremendous progress achieved by the district in the matter of improving the quality of life of its population as a consequence of the development of education, health services and physical infrastructure, the growth of the commodity producing sectors, especially agriculture and industry has been stagnating. There has been no perceptible improvement in generation of employment especially in the productive sectors. Heavy investment in human capital in the absence of significant

improvement in generation of employment in productive sectors led to the worsening of the problem of mounting unemployment, particularly educated unemployment in the district. (Table 4.7)

Table 4.7 Percentage distribution of unemployment by educational level and sex

Educational level	Kerala			Thrissur		
	M	F	Total	M	F	Total
Matriculates	59.6	65.3	63.2	58.4	63.7	62.0
Higher Secondary with diploma	28.7	23.5	25.4	29.6	24.9	26.4
Graduates and above	11.7	11.2	11.4	12.0	11.4	11.6

Source: Computed from the 1991 census data.

To study the pattern of educated unemployment in Thrissur district a percentage distribution of unemployed by level of education and sex for the year 1991 is presented in Table 4.7. The table reveals that majority of the unemployed is among the matriculates (62.0 per cent), when compared to those who have passed the higher secondary and other diploma courses (26.4 per cent). However the unemployed among the graduates and those

with higher qualifications has been the least in Thrissur district (11.6 per cent). This can be assigned to the reason that higher the qualification, greater is the chance for them for being considered to any of the post in the various departments. The matriculates are being elbowed out by the higher qualified, which in turn inspire them for acquiring higher qualifications, ultimately leading to the problem of over qualification.

Almost the same pattern can be seen among the males and females. While the female matriculates (63.7 per cent) out number the males (58.4 per cent), a little more male graduates (12.0 per cent) remain unemployed when compared to the female graduates (11.4 per cent). The same is true in the case of the unemployed among those who have passed the higher secondary and other diploma courses (Table 4.7). This can be due to the fact that as educational level increases females become more competent to get into the job than the females with low educational qualifications.

4.2.1 Unemployment level by education and place of residence in Thrissur district

With respect to the place of residence the urban residents are more unemployed than the rural residents especially among the more educated (Table 4.8).

Table 4.8 Percentage distribution of unemployment level by education, sex and place of residence.

Educational level	Kerala						Thrissur					
	M		F		Total		M		F		Total	
	R	U	R	U	R	U	R	U	R	U	R	U
Matriculates	60.9	56.8	67.4	61.4	64.9	59.7	59.8	55.5	65.8	59.7	63.8	58.4
Higher Secondary with diploma	28.7	28.9	23.3	23.7	25.3	25.6	29.5	29.7	24.3	29.7	26.1	27.2
Graduates and above	10.4	14.3	9.3	14.9	10.0	14.7	10.7	14.8	9.9	14.3	10.2	14.4

Source: Computed from 1991 Census data.

Of the unemployed matriculates we can see that 58.4 per cent belong to the urban residents, whereas 63.8 per cent of them belong to the rural residents. But as the level of education increases the percentage level of unemployed is found to be more among the urban residents than among the rural residents, i.e. while 26.1 per cent of the unemployed among higher secondary and other diploma holders belong to rural areas, 27.2 per cent of them belong to the urban areas. Similarly while 10.2 percent of the unemployed among the graduates and above category belong to the rural residents, as high as 14.4 per cent of the same category belong to the urban residents (Table 4.8). This shows that as the level of education increases, majority of the unemployed belong to the urban residents when compared to the rural residents. This may be due to the fact that comparatively more of the urban residents go for attaining higher qualification, ultimately leading to high level of unemployment among them, for want of adequate employment opportunities.

4.3 Employment by Education and Occupation

It is observed that the highest proportions of graduates and postgraduates, as well as matriculates are

employed in clerical and other administrative jobs (Table.4.9).

Table 4.9 Percentage distribution of workers by occupational category, educational level and sex in Thrissur district – 1991.

Educational Level	Industrial category											
	Primary			Secondary			Tertiary			Others		
	1			2			3			4		
	T	M	F	T	M	F	T	M	F	T	M	F
Matriculation	11.78	12.89	5.91	6.01	5.26	9.9	2.47	2.12	4.36	79.74	79.73	79.8
Higher Secondary and Diploma	5.88	8.63	1.49	1.40	1.67	1.0	1.15	1.30	0.91	69.02	51.72	96.5
Graduates and above	3.15	4.15	1.07	0.27	0.39	--	0.54	0.71	0.16	96.04	94.73	98.76

Source: Computed from 1991 Census data.

The proportion of workers in the primary, secondary and tertiary sectors are seen to be the highest among the matriculates (20.6 per cent) followed by those who have passed the higher secondary and other diploma courses (8.43 per cent). At the same time 96.04 per cent of the graduates and above are employed in the other services category, the percentage of them belonging to the first three categories being only 3.96 percentage. This can be due to

the fact that the more qualified the individuals are, the more they will be competent to get through the selection procedures and find a place in the front of the queue for a particular post which requires much lower level of educational qualification. This again can be the reason for the relatively low level of unemployment among the graduates and above category, in the district (Table 4.7). The larger increase in the employment rates of 'graduates and above' in clerical jobs, when compared to that of matriculates indicates the phenomenon of 'Diploma Disease' or the 'Paper Qualification Syndrome'[3].

4.4 Profile of job seekers in Thrissur district

The profile and magnitude of unemployment especially educated unemployment in the district can be examined on the basis of the Employment Exchange Data. A clear picture of the unemployment however will not be available. The data furnished below is taken from the Thrissur District Employment Exchange. The data discloses the occupational analysis of the employment

---

[3] For a brief discussion on 'Paper Qualification Syndrome', see P.R.Gopinathan Nair and Joseph Thomas, (1986), in B.G.Jandyala Tilak, (ed.) p. 47.

seekers on the live register during the quarter ended on 31.03.2002 (Table 4.10).

The latest data available from the Thrissur District Employment Exchange classifies the employment seekers into ten categories – a few consisting of both the educated and others. From the table we can see that of the total employment seekers, 84.0 per cent are educated but is unemployed for want of employment opportunities. The higher rate of literacy and educational standard of the people in the district make the problem of unemployment still worse. Of the total workers not classified by occupation, 81.42 per cent are educated. This is an indication of the fact that majority of the educated look for a job opportunity which is/or not in accordance with their qualification. The maximum numbers of job seekers classified by occupation belong to the clerical and related workers category. (7.02 per cent) which shows that people look for an employment opportunity alone, irrespective of their qualification. (See Table 4.10). Also the chance for over-qualification in this category is very high when compared to other categories of occupation. The posts in this category generally require only matriculates. But fortunately or unfortunately those who have qualification

Table 4.10: Occupational classification of the employment seekers on the live register of Thrissur District Employment Exchange during the quarter ended 31.03.2002.

Sl. No	Category	Educated	Others	Total
1.	Professionals/Technical and other workers excluding primary and middle school teachers	3873	182	4055
2.	Primary and Middle school teachers	733	---	733
3.	Administrative, Executive and Managerial workers.	346	---	346
4.	Clerical and related workers excluding unskilled office workers like peons	9674	---	9674
5.	Sales workers	52	---	52
6.	Service workers excluding watchers, gateman and sweepers	69	32	101
7.	Farmers, Fisherman, Hunters, Loggers etc excluding agricultural and plantation labourers	412	22	434
8.	Production and related workers, transport equipment operators and labourers	7391	517	7908
9.	Other unskilled workers	---	107	107
10.	Workers not classified by occupation	93071	21234	114305
Total		115621 (84.0)	22094 (16.0)	137715 (100.0)

Source : District Employment Exchange Data, 2001, Thrissur.

much above the minimum required, crowd such posts.

In the light of such information regarding the employment profile of Thrissur district a suitable sample design has been drawn from among the Non-Gazetted officers, which require only a pass in matriculation, but ultimately is overcrowded by graduates or postgraduates. The profile of the study area and the design of the sample have been discussed in the succeeding section.

4.5 Design of the sample:

Since no authoritative secondary information is available about the total number of Non-Gazetted officers working in the state, the detailed budget estimate of the government of Kerala for 2000–01 was made use of, and the various government departments were located. Later the heads of the district headquarters of each department in Thrissur district were approached and the approximate number of Non-Gazetted officers were collected. On personal rapport with the heads of each department it was understood that almost all districts had more or less the same number of employees in each department. To collect

the actual number of Non-Gazetted officers employed in these departments in all the fourteen districts was impracticable. Hence Thrissur district was taken as the representative district and the present study is restricted to the Non-Gazetted officers in Thrissur district, which is located at the central part of Kerala.

The Non-Gazetted officers are appointed in the various departments all over the state through a common written examination and an interview conducted by the Public Service Commission, irrespective of the districts to which they belong. Accordingly the candidates appointed in the various departments in one district can also happen to be the natives of other districts. More over Thrissur district holds the fourth position in comparison to the size of population of the districts of Kerala as per the 2001 census, (Figure relating the size of population district wise given in appendix) and hence the rationale for limiting the sample size to Thrissur district.

As per the budget estimate there are altogether ninety-five departments including both the major and minor departments. For the purpose of survey these departments are classified into eight categories and on the basis of the

total strength in each category a proportionate sample is taken from each category which added up to 500 as shown below. (Table 4.11)

Table 4.11: Category wise distribution of government departments.

Sl. No	Categories of government department	No. of employees
1	Administration department	40
2	Department of Agriculture	34
3	Health Services.	46
4	Department of Education.	39
5	Revenue Department.	197
6	Department of Industries.	21
7	Social Welfare Department.	101
8	Others	22
Total		500

Source: Computed by the Researcher.

4.5.1 The field Survey

The present study involves data collection from the primary as well as secondary sources. The information for analysing the various objectives is gathered by framing

systematic and pre-tested modified version of the questionnaire. Thus the present study involved a questionnaire survey of third and fourth grade servants of the various government departments in Thrissur district. The study is related to the dimensions of over qualification. Since some of the items in the questionnaire are difficult to be answered by those who are very senior and those who have only ten or less years for retirement, employees having not more than fifteen years of total service are considered for the survey.

As part of the pilot study the questionnaire (a copy of the questionnaire is given in appendix) was first administered to 20 respondents (10 each of third and fourth grade servants) of various government departments. The objective was to examine the appropriateness of the questions to their context, to ascertain the adequacy of the item involving various dimensions of over qualification and also to ensure comprehensible, properly worded and answerable text within a reasonable time period. In this connection they were asked to share their suggestions and difficulties if any, faced in answering the questions. Regarding time consumption, it was revealed by the pilot study that the questions were comprehensible and the entire

questionnaire took 10 to 15 minutes to complete. Accordingly the questions which were repeated, inappropriate and difficult to understand or which had poor spread of responses were revised and reformed to meet the requirements.

Finally the sample survey was conducted among 500 Non-Gazetted officers, consisting of 434 third grade servants and 66 fourth grade servants during October 2001 to January 2002, in Thrissur district - the cultural capital of Kerala, which has comparatively large number of government institutions and employees from all over the state.

The distribution of sample respondents by grade and taluk was made on the basis of the number of government institutions and the employees working in the respective taluks. Thus of the total respondents, 178 (35.6 per cent) are from Thrissur taluk, followed by 124 (24.8 per cent) from Mukundapuram taluk, 87 (17.4 per cent) and 75 (15.0 per cent) respondents from Thalapilly and Chavakkad Taluks respectively, and 36 (7.2 per cent) from Kodungallur taluk. Details of grade wise and taluk wise distribution of respondents is as shown in Table 4.12.

Table 4.12 Distribution of sample respondents by grade and Taluk.

Taluk	3rd grade	4th grade	Total
Thrissur	166 (38.2)	12 (18.2)	178 (35.6)
Thalapilly	68 (15.7)	19 (28.8)	87 (17.4)
Chavakkad	67 (15.4)	8 (12.1)	75 (15.0)
Mukundapuram	100 (23.0)	24 (36.4)	124 (24.8)
Kodungallur	33 (7.6)	3 (4.5)	36 (7.2)
Total	434 (100.0)	66 (100.0)	500 (100.0)

Source: Computed by the Researcher.

Note: The figures in parentheses denote the percentage to the respective totals.

4.6 Nature and dimensions of over qualification

The nature and dimensions of over qualification can be looked at from different angles. An individual who is well educated but remains unemployed can neither be considered as qualified nor over qualified in any respect. But when the same is considered in relation to the

availability of a job, or income, or in relation to the scope for a higher grade or promotion, the concerned individual can be considered as qualified or over qualified as the case may be. Thus he/she can be considered as over qualified when he/she has qualification over and above the minimum prescribed level of education, when applying for a post. Over qualification can be analysed in terms of general education as well as technical education. There can be another dimension when analysed in terms of age, sex etc. However an attempt is made to examine the nature and dimensions of over qualification in this section.

4.6.1 General education and over qualification

A minimum level of education is prescribed for each and every job opportunity - both in government and private services. But since the employment opportunities in the state are lesser than the supply of educated manpower, the aspiration for higher education among the people of Kerala is higher when compared to those of other states in India. A great many unemployed pursue higher education with the objective of improving their employment prospects, since in the labour market, persons with higher/and better credentials would be preferred to those

Table 4.13 Distribution of respondents by grade and general education.

Particulars	Grade		
General Education	3rd grade	4th grade	Total
Below S.S.L.C	7 (1.6)	22 (33.3)	29 (5.8)
S.S.L.C	106 (24.4)	22 (33.3)	128 (25.6)
Predegree	48 (11.1)	4 (6.1)	52 (10.4)
Graduate	152 (35.0)	10 (15.2)	162 (32.4)
Post-graduate	42 (9.7)	1 (1.5)	43 (8.6)
Professional	9 (2.1)	---	9 (1.8)
Graduation with additional qualification	47 (10.8)	4 (6.1)	51 (10.2)
Post-graduation with additional qualification	23 (5.3)	3 (4.5)	26 (5.2)
Total	434 (100.0)	66 (100.0)	500 (100.0)

Source: Computed by the Researcher.

Note: The figures in parentheses denote the percentage to the respective total.

with lower and lesser quality credentials. The distribution of the sample respondents by grade and general education

(Table 4.13) indicates that more than 50 per cent of the sample has more than the required minimum level of qualification.

The minimum qualification prescribed for the third grade category is a pass in S.S.L.C, but more than 70 percent of the respondents in the third grade category have qualification over and above graduation which is a clear indication of over qualification.

The nature of over qualification is a bit different in the case of the fourth grade category. The minimum required qualification for the fourth grade servants being a pass in the seventh standard, a little more than 6 percent of them had a post graduate degree and above.

4.6.2 Technical education and over qualification:

The extent of over qualification is also analysed in terms of the technical education that the sample respondents possessed. Failing in their effort to get suitable employment even after attaining a graduation or a postgraduate degree, a few of them (30.8 per cent) get themselves ready to undergo additional courses like

computer training, typewriting and other technical courses on the expectation that it will help them to get places ahead in the queue of job seekers, but yet were able to attain the third or fourth grade posts in the various government departments. (Table 4.14)

Table 4.14 Distribution of the respondents by grade and technical education.

Particulars	Grade		
Technical Education	3rd grade	4th grade	Total
Computer	25 (5.8)	2 (3.0)	27 (5.4)
Type writing	44 (10.1)	6 (9.1)	50 (10.0)
Chain survey	13 (3.0)	---	13 (2.6)
Engineering Diploma	29 (6.7)	1 (1.5)	30 (6.0)
ITC and ITI	19 (4.4)	1 (1.5)	20 (4.0)
Others	14 (3.2)	---	14 (2.8)
Nil	290 (66.8)	56 (84.8)	346 69.2)
Total	434 (100.0)	66 (100.0)	500 (100.0)

Source: Computed by the researcher.

Note: The figures in Parentheses denote the percentage to the respective total.

The technical qualification attained by the respondents in the process of attaining a job, too, can be considered as equivalent to over qualification, in the sense that type writing for e.g. is not an essential requirement for the ordinary clerical post (which comes under the third grade) or for the post of a peon (coming under the fourth grade). But at the same time a pass in S S L C along with a pass in type writing is an essential rather minimum qualification required for the post of clerk – cum – typist, which also comes under the third grade category. For e.g. 66.8 percent of the third grade employees, though were over qualified in terms of general education, did not have any additional technical qualification. 10.1 percent belonged to the clerk – cum – typist category, due to which they cannot be treated as over qualified. However 23.1 percent of them can be treated as over qualified in terms of technical education. They are actually qualified to get into a higher technical post, but for want of vacancies and opportunities, accepted the clerical post, which is much below their eligibility.

4.6.3 Respondent's age and over qualification

The dimension of over qualification is different when it is judged with respect to the age of the respondents. The higher the age, but lesser the period of total service, there is chance for the respondents to be over qualified. As it gets very late for them to get a job, instead of idling away the interim period, they make use of it by acquiring higher qualification. Since the sample consists of employees having not more than fifteen years of total service and since 77.5 per cent of the third grade servants (Table 4.15) spread among the two age groups 30–40 and 40–50, it is presumed that the respondents were too late - at least for ten to fifteen years for entering the job market, during which they would have acquired additional qualification. The fourth grade servants too exhibit a similar phenomenon, in the sense that 24.2 percent and 34.8 percent of the fourth grade employees belong to the age group 30–40 and 40–50 respectively, which amounts to 59 per cent of the total fourth grade employees. (see Table 4.15)

Table 4.15: Distribution of the respondents by grade and age.

Age group	Grade		
	3rd grade	4th grade	Total
Below 20	1 (0.2)	---	1 (0.2)
20 – 30	54 (12.4)	16 (24.2)	70 (14.0)
30 – 40	173 (39.9)	16 (24.2)	189 (37.8)
40 – 50	163 (37.6)	23 (34.8)	186 (37.2)
50 and above	43 (9.9)	11 (16.7)	54 (10.8)
Total	434 (100.0)	66 (100.0)	500 (100.0)

Source: Computed by the researcher.

Note: Figures in parentheses denote percentage to the respective total.

Thus on examining the nature and dimensions of over qualification of the sample in terms of the levels of education, the degree of over qualification is much higher in the case of the fourth grade category. Also it is seen that the delay in getting a particular job (higher interim period) inspires the job aspirants to attain higher qualification. An attempt to examine the over qualification with respect to

the socio economic status of the sample is made in the succeeding chapter.

SOCIO - ECONOMIC STATUS AND OVER QUALIFICATION

Geetha. N.R. “The dimensions of over-qualification a case study of the non-gazetted officers in Kerala state ” Thesis. Department of Economics, Dr. John Matthai Centre, University of Calicut, 2004

CHAPTER V

SOCIO – ECONOMIC STATUS AND OVER QUALIFICATION

CHAPTER V
SOCIO ECONOMIC STATUS AND OVER QUALIFICATION

The heterogeneous character of Indian economy and the uneven rates of development have had varying degrees of impact on the different segments of the labour force (both educated and uneducated). Therefore the different segments need to be estimated separately, taking into account such important characteristics as, religion, age, marriage and educational attainments. If any evaluation of the role of educated employees is to be meaningful, it has to take into account the socio economic structure of the sample engaged in different occupations.

The level of socio economic conditions of any group in any society indicates their level of status. In the following section an attempt is made to know the influence of socio economic factors on the attainment of over qualification among the non-gazetted officers in the state.

5.1 Caste and over qualification

In a structured society, socio economic status of a community is a crucial determinant of its educational

progress. Measures such as universalisation of education and/or discriminatory subsidization of education in favour of the backward sections would not undo their socio-economic disabilities and ensure them educational opportunities on an equal footing with those of their betters. But the trend reveals that by enabling lower income/social groups to educate their children for better access to higher paid jobs, the process of educational expansion and subsidisation have got started and has generated an increasing awareness of and ability for socio economic mobility, and in turn resulted in getting over qualified over time. (Table 5.1)

It is seen that the number of over-qualified is much greater than the minimum qualified in all the caste categories of both the third grade and fourth grade respondents. But the percentage to the respective totals is much high in the case of the general category (43.8 per cent) followed by the OBC category (47.4 per cent). While 7.3 percentage of the scheduled caste respondents are over-qualified, only 1.5 per cent of the scheduled tribe respondents belong to the over-qualified group (Table 5.1).

This is a clear indication of the fact that the universalisation of education and/or discriminatory subsidization of education in favour of the backward sections have had a positive effect on them in being over-qualified for the various posts in the state government service. But the percentage of over-qualified in the scheduled caste and scheduled tribe category is much lower when compared to the percentage of over-qualified in the other backward communities category and the general category. This may because the scheduled caste and scheduled tribe category have reservation benefits at the time of appointment to a particular post.

The computed χ^2 value for testing the association between caste and over-qualification is 8.97which is significant at 3 per cent degree of freedom and 5 per cent level of significance.

Table 5.1 Distribution of sample respondents by grade and caste.

Caste Category	Grade III			Grade IV		
	O.Q	M.Q	Total	O.Q	M.Q	Total
SC	24 (7.3)	12 (11.7)	36 (8.3)	8 (18.6)	5 (21.7)	13 (19.7)
ST	5 (1.5)	4 (3.9)	9 (2.12)	--	--	--
OBC	157 (47.4)	49 (47.6)	206 (47.5)	23 (53.5)	10 (43.5)	33 (50.0)
General	145 (43.8)	38 (36.9)	183 (42.2)	12 (27.9)	8 (34.8)	20 (30.3)
Total	331 (100.0)	103 (100.0)	434 (100.0)	43 (100.0)	23 (100.0)	66 (100.0)

Source: Computed by the Researcher

(M.Q denotes – minimum qualified, O.Q - over qualified)

Note: Figures in Parentheses show respective percentages

At the same time it is disappointing to note that inspite of the various policy measures for the upliftment of the backward classes and the job reservation benefit provided to them, a good number of them are still not able to get jobs in accordance with their qualification.

5.2 Rural – Urban disparity

Urban areas are expected to have better educational facilities than the rural areas and hence the number of over qualified is expected to be larger among the urban residents than the rural residents. Kerala holds a pre-eminent position among all the states in India in terms of the levels and growth rates of literacy. But while at the All India level, urban literacy increased faster than rural literacy, in Kerala it was the other way about. Also from as early as 1981 there was at least one district in Kerala, where the rural literacy rate was higher than the urban. This picture is reflected in the case of the over-qualification of the respondents too (Table 5.2).

It is seen that of the total over-qualified, 77.9 per cent of the third grade servants belonged to the rural residents, whereas only 22.1 per cent of the over-qualified

belonged to the urban residents. The same is the case in the case of the fourth grade servants. While 83.7 per cent of the over-qualified in the fourth grade category belonged to the rural residents, only as low as 16.3 per cent belonged to the urban residents.

Table 5.2 Distribution of Sample respondents by grade and place of residence.

Place of residence	Grade III			Grade IV		
	O.Q	M.Q	Total	O.Q	M.Q	Total
Rural	258 (77.9)	87 (84.5)	345 (79.5)	36 (83.7)	21 (91.3)	57 (86.4)
Urban	73 (22.1)	16 (15.5)	89 (20.5)	7 (16.3)	2 (8.7)	9 (13.6)
Total	331 (100.0)	103 (100.0)	434 (100.0)	43 (100.0)	23 (100.0)	66 (100.0)

Source: Computed by the researcher.

M.Q – Minimum qualified, O.Q Over qualified.

Note: Figures in Parentheses denote percentage to the respective totals.

The number of over qualified rural residents among the fourth grade respondents (83.7 per cent) is comparatively greater than that of the third grade over qualified rural residents (77.9 per cent). However the over qualified urban residents in the third grade category (22.1 per cent) is greater than in the fourth grade category (16.3 per cent). This is clear indication that place of residence is not a barrier for the sample for attaining over qualification. Whether it is the rural or urban residents, individuals go on acquiring higher qualification in order to make themselves assured of attaining a government post which is finally limited to the post of a third grade or fourth grade servant.

The association between the place of residence and over-qualification is tested with the chi-square analysis. The calculated value of chi-square is 0.7548, which is lower than the table value 3.87 at 1 per cent degree of freedom and 5 per cent level of significance. Since the calculated value is lower than the table value, we accept the hypothesis that there is no relationship between the place of residence and over-qualification. It can be concluded that people of both, the rural and urban area become over-qualified in order to make themselves suit for a particular job.

5.3 Sex – Wise composition and over qualification

The rapid growth of and the high levels of female literacy is a unique feature of Kerala. While the literacy among the males increased at a more rapid rate than that among females in the country as a whole; in Kerala the reverse is the case – female literacy increased faster than male literacy. Table 5.3 gives different picture as to the over qualification of the males over the females.

Table 5.3 Distribution of sample respondents by grade and sex

Sex	Grade III			Grade IV		
	O.Q	M.Q	Total	O.Q	M.Q	Total
Female	133 (40.2)	40 (38.8)	173 (39.9)	20 (46.5)	11 (47.8)	31 (47.0)
Male	198 (59.8)	63 (61.2)	261 (60.1)	23 (53.5)	12 (52.2)	35 (53.0)
Total	331 (100.0)	103 (100.0)	434 (100.0)	43 (100.0)	23 (100.0)	66 (100.0)

Source: Computed by the researcher.

Note: Figure in Parentheses denote percentage to the respective totals.

While the over all female literacy rate increased faster than the male literacy, over qualification in respect of the females (40.2 per cent) in the third grade category is much less than the over-qualification in respect of the males which is as high as 59.8 per cent (Table 5.3). Even in the fourth grade category, the percentage of over-qualified males (53.5 per cent) is much above the over-qualified females of the same category (46.5 per cent). However the percentage of over-qualified females in the fourth grade category (46.5 per cent) is much above the over-qualified females in the third grade category (40.2 per cent). This may be not because the rate of female aspiration for higher posts is comparatively lower than that of the males, rather they prefer or are compelled to remain as responsible house – wives, and be contented with the job they attain. It also indicates that the educated underemployment in males predominate that of females.

However the calculated value of chi-square is only 0.6563 which is much below the table value 3.84 at 1 per cent degree of freedom and 5 per cent level of significance. Hence it leads us to the fact that there is not much association between the sex and over-qualification.

5.4 Age wise composition and over qualification

In order to view over qualification in terms of the age composition of the sample respondents, the total sample is divided into five different age groups. The maximum number of the third grade respondents belonged to the age group 30–40 (39.9 per cent). From Table 5.4 we can see that of the over-qualified third grade servants, 42.3 per cent belonged to the age group 30–40. Since the respondents are those who have fifteen or less years of service, it can be presumed that they have entered very late into service, and meanwhile they were able to be over-qualified for the post. In the case of the fourth grade servants the number of over-qualified is comparatively more (37.2 per cent) in the age group 20–30. This may be due to the fact that the chance for getting through into a lower post is comparatively greater than to a higher post and hence the respondents of the fourth grade category entered into service at an early age.

The association between the age of respondents and over-qualification is analysed by testing the hypothesis that there is no relationship between the age group of the respondents and over-qualification. Since the calculated

value of the chi-square 13.86 is grater than the table value 13.27 at 4 per cent degree of freedom and 1 per cent level of significance, we reject the hypothesis that there is no relationship between the age of the respondents and their over-qualification. It is seen that as they grow older there is chance for them for being over-qualified.

While majority of the third grade servants belonged to the age group 30–40, the number of over qualified (46.6 per cent) is the maximum in the age group 40–50. Since the sample consists of those who have fifteen or less years of service, the figures point to the fact that the problem of educated underemployment has been felt from as early as the 1960's and the problem has been aggravating all through the years and perhaps is now again on the threat of unemployment.

Table 5.4. Distribution of sample respondents by grade and age.

Age	Grade III			Grade IV		
	O.Q	M.Q	Total	O.Q	M.Q	Total
Below 20	1 (0.3)	--	1 (0.2)	--	--	--
20 - 30	49 (14.8)	5 (4.9)	54 (12.4)	16 (37.3)	--	16 (24.2)
30 - 40	140 (42.3)	33 (32.0)	173 (39.9)	15 (34.8)	1 (4.3)	16 (24.2)
40 - 50	115 (34.7)	48 (46.6)	163 (37.6)	9 (20.9)	14 (60.9)	23 (34.8)
50 and above	26 (7.9)	17 (16.5)	43 (9.9)	3 (7.0)	8 (34.8)	11 (16.7)
Total	331 (100.0)	103 (100.0)	434 (100.0)	43 (100.0)	23 (100.0)	66 (100.0)

Source: Computed by the researcher.

Note: Figures in Parentheses denote percentage to the respective totals.

5.5 Over–qualification and the duration of interim period

The gravity of over – qualification can be understood by examining the duration of the interim period that the respondents have passed through in the course of joining the particular post. For the sake of analysis interim period is regarded as the period in between the year of pass in matriculation or a pass in seventh standard and the year of joining the third grade or the fourth grade post – respectively as the case may be, during which the respondent can attain higher qualification. Higher the duration of the interim period, greater is the chance for him/her for being over qualified. Instead of idling away the interim period they attain additional qualifications on the expectation that they may be able to come to the forefront of the long queue in the job market. The following table gives an idea of the duration of the interim period of the sample under consideration.

Table 5.5. Distribution of sample respondents by grade and duration of interim period.

Duration of the interim period (in years)	3rd Grade			4th Grade		
	O.Q	M.Q	Total	O.Q	M.Q	Total
Below 5 years	12 (3.6)	6 (5.8)	18 (4.1)	1 (2.3)	---	1 (1.5)
5 – 10	242 (73.1)	61 (59.2)	303 (69.8)	26 (60.5)	7 (30.4)	33 (50.0)
10 - 15	76 (23.0)	34 (33.0)	110 (25.3)	14 (32.6)	14 (60.96)	28 (42.4)
15 and above	1 (3.0)	2 (1.9)	3 (7.0)	2 (4.7)	2 (8.6)	4 (6.0)
Total	331 (100.0)	103 (100.0)	434 (100.0)	43 (100.0)	23 (100.0)	66 (100.0)

Source: Computed by the researcher.

Note: Figures in Parentheses denote percentage to the respective totals.

The duration of the interim period for the 3rd grade servants ranged from five to ten years for 69.8 per

cent of the sample, which is a clear indication of the fact that they were not able to get employment soon after their matriculation, which is the minimum qualification prescribed for the 3rd grade post. The duration of the interim period for 73.1 per cent of the over-qualified ranged form 5–10 years which shows that at least a few, instead of wasting time in search of a job, continued their studies, but finally succeeded in securing this post alone, making themselves overqualified. However 23.0 per cent (Table 5.5) of the over-qualified had the interim period ranging from 10–15 years which shows that they had to remain unemployed still further even after having attained a higher qualification.

In the case of the fourth grade servants the duration of the interim period of 50 percent of the sample ranges from five to ten years. Here too the duration of the interim period for 60.5 per cent of the over-qualified fourth grade respondents ranges form 5–10 years. This again shows that after having waited for a very long time after their education, since they did not succeed in getting any other higher posts they are compelled to accept this post, which is not in tune with their qualification.

The computed χ^2 value for testing the association between the duration of interim period and over-qualification is 11.47 as against the table value of 11.34 at 3 per cent degree of freedom and 1 per cent level of significance. Hence we can assume that there is relation between the duration of interim period and over-qualification.

5.6 Marital status and over qualification

At the outset the sample consisted more of married employees, than the other categories, viz – the unmarried, the widow, the widower and the separated. An attempt was made to analyse the level of over qualification in accordance with the marital status of the respondents (Table 5.6). It is interesting to note that of the total overqualified 84.3 per cent belonged to the married category whereas only 14.2 per cent of the unmarried respondents were over-qualified. It is a clear indication that marriage has not been a barrier for the respondents in attaining over qualification. In the case of the fourth grade category 69.8 per cent of the over qualified servants belonged to the married category which is also much above

the over-qualified respondents in other categories. (Table 5.6)

Table 5.6. Distribution of sample respondents by grade and marital status.

Marital Status	Grade III			Grade IV		
	O.Q	M.Q	Total	O.Q	M.Q	Total
Unmarried	47 (14.2)	11 (10.7)	58 (13.4)	12 (27.9)	1 (4.3)	13 (19.7)
Married	279 (84.3)	87 (84.5)	366 (84.3)	30 (69.8)	19 (82.6)	49 74.2)
Widow	3 (0.9)	3 (2.9)	6 (1.4)	1 (2.3)	2 (8.8)	3 (4.6)
Others	2 (0.6)	2 (1.9)	4 (0.9)	---	1 (4.3)	1 1.5)
Total	331 (100.0)	103 (100.0)	434 (100.0)	43 (100.0)	23 (100.0)	66 (100.0)

Source: Computed by the researcher.

Note: Figures in Parentheses denote percentage to the respective totals

The association between the marital system and the work system is tested with the chi-square analysis. The calculated value of χ^2 is 6.48, which is lower than the table value 7.81 at three per cent degree of freedom and 5 per cent level of significance. Since the calculated value is lower than the table value, we accept the hypothesis that there is no relationship between the marital status and over-qualification.

5.7 Influence of Spouse's education

As long as there is no age restriction for being registered to a particular course, one can attain additional qualification even after marriage or securing a job – may be after getting married he/she may be inspired by his/her spouse's qualification.

The data in Table 5.7 indicate that of the total married, 6.8 per cent were inspired by their spouse's educational qualification to attain additional qualification even after getting a job. The rest 93.2 per cent were not at all influenced by their spouse's education. The rate of influence was greater in the case of fourth grade servants (9.4 per cent) than in the third grade servants.

Table 5.7 Distribution of sample respondents by grade and influence of Spouse's educational qualification.

Perceptions	Grade III		Grade IV		Total	
	No	Per-centage	No	Per-centage	No	Per-centage
Inspired	24	6.4	5	9.4	29	6.8
Not inspired	352	93.6	48	90.6	400	93.2
Total	376	100.0	53	12.4	429	100.0

Source : Field Survey

5.8 Service benefits and over qualification

Qualified persons get through a particular job either exclusively on the basis of merit or by way of other benefits they can enjoy, provided they are eligible for the same viz relaxation of age, benefit due to dying in harness, handicapped etc. It can be presumed that the level of over qualification is comparatively less in the case of such beneficiaries.

Over qualification in terms of the various service benefits enjoyed by the sample under consideration point out that, in spite of the awareness of the benefits they are eligible to enjoy, they acquired higher qualification in order to be considered for higher posts. But unfortunately they got appointed in the clerical cadre alone – thus becoming overqualified for the post.

Of the total sample, 29.0 percent were in one way or the other beneficiaries of these service relaxations, of which 42.3 per cent had qualification over and above the required level.

5.9 Job satisfaction

Job satisfaction is an important factor influencing the socio – economic status. Higher the status higher will be the efficiency to work. For this one should be satisfied with the job he attains, in all respects - in respect of the income he can earn, the nature of the work, the time element, the scope for further promotion etc. which can be attained if the job is in tune with the individual's qualification. A job in accordance with the qualification increases efficiency – both mentally and

Table 5.8 Distribution of respondent's perception about Job satisfaction.

Perceptions	3rd Grade		4th Grade		Total	
	No	Per-centage	No	Per-centage	No	Per-centage
According to qualification	18	6.3	2	5.7	20	6.3
Monetary benefit	113	39.6	19	54.3	132	41.3
Job security	66	23.2	8	22.9	74	23.1
Proximity to the residence	20	7.0	---	---	20	6.2
Unavailability of other job opportunities	41	14.0	4	11.4	45	14.1
Nature of work	14	4.9	---	---	14	4.4
Others	13	4.5	2	5.7	15	4.6
Total	285	100.0	35	100.0	320	100.0

Source: Field survey

Note: The total includes only those who are satisfied with the job.

physically. A sense of self-responsibility can be imbibed in the minds of the employees. 64.0 percent of the total sample is satisfied with the job they have attained for the reasons shown below.

Of those who were satisfied with the present post only 6.3 percent (Table 5.8) were employed according to their qualification. As large as 41.3 per cent of the employees, are seemed to be satisfied exclusively due to the financial benefits. A government job is more secure than a job in a private firm (23.1 per cent), unavailability of other job opportunities (14.1 per cent), proximity to their residence (6.0 per cent) are a few other reasons for job satisfaction. Some of them (4.6 per cent) were satisfied with the present post for other reasons like work relaxation, social acceptability, absence of rigidity in promotion etc.

5.10 Job – dissatisfaction

Credentials are insisted on as an essential pre – condition for recruitment to non – gazetted ranks as well, and preference is often given to those with higher grades/levels of education. Qualifications are not taken into account in the determination of emoluments and

promotion. Emoluments are determined for occupations and not for credentials. Since the minimum qualification for the third grads is a pass in matriculation and for the fourth grade is a pass in the seventh standard, the emoluments fixed for these posts will be comparatively lower than what a graduate or postgraduate expect. Hence of the total sample at least 36 per cent of them are not satisfied with their job due to one or more reasons. (Table 5.9)

In the table while 20.6 per cent are dissatisfied, since the job is not in accordance with their qualification, 67.2 per cent are dissatisfied due to the low salary they are paid in that particular post. So it is a fact that people go for higher education in order to get through a higher post, such that they are paid better.

Other reasons for dissatisfaction are lack of promotion scope (2.2 percent), the tough rules and procedures of work (3.9 percent), the monotonous nature of the work and a few other factors, as chance for transfer of job away from the home town, political influence and harassment etc.

Table 5.9 Distribution of respondent's perception about job dissatisfaction.

Perceptions	3rd Grade		4th Grade		Total	
	No	Per-centage	No	Per-centage	No	Per-centage
Not according to qualification	29	19.5	8	25.8	37	20.6
Low salary	100	67.1	21	67.7	121	67.2
Lack of promotion scope	4	2.7	---	---	4	2.2
Tough rules of procedures	6	4.0	1	3.2	7	3.9
Others	10	6.7	---	---	10	5.5
Total	149	100.0	31	100.0	180	100.0

Source: Computed by the researcher.

Note: The total includes only those who are dissatisfied with the job.

5.11 Occupational mobility

Occupational mobility refers to the movement of individuals from one occupation to another in expectation of higher prospects. Lack of opportunities restricts the frequency of movement from one job to another. Normally higher education and training enhances frequent occupational changes. Higher the level of education, greater is the possibility for occupational mobility. But in contradiction we can see that 93.6 per cent of the total sample are not willing to change the job for various reasons.(Table 5.10). There are people who give weightage not only to the economic aspect but also to the social and other privileges that they can enjoy with the existing job.

Unavailability of other job opportunities in accordance with their level of qualification forced 89.3 percent of the sample to stick on to this particular post. They make themselves satisfied with the particular posts they acquired, or else they would have had to remain unemployed. This phenomena can be termed as the Downward Involuntary occupational mobility – which leads to wastage of human resources. A few have other reasons (Table 5.10) like the easiness of handling the job,

Table 5.10 Distribution of sample respondents by grade and reasons for retention of the job.

Factors	3rd Grade		4th Grade		Total	
	No	Per-centage	No	Per-centage	No	Per-centage
Easiness of the job	23	5.6	2	3.3	25	5.3
Favourable atmosphere	11	2.7	---	---	11	2.4
Social and other privileges	10	2.5	4	6.6	14	3.0
Lack of scope for other job opportunities	364	59.2	54	90.0	418	89.3
Total	408	100.0	60	100.0	468	100.0

Source: Field Survey.

Note: The total includes only those who desire to continue the post.

the favourable atmosphere, social and other privileges, for not changing the job. They are satisfied with what they have.

The discussion and analysis carried out in this section, on the whole point out that whatever be the government policy in favour of the backward and the weaker sections, and whatever be the socio – economic background of the job seekers, people educate themselves and their children for getting through the long queue in the job market. It is not for attaining a status, rather for life saving and earning for a livelihood that one aspires for a particular job in any part of the world.

OVER-QUALIFICATION - INTENSITY AND DETERMINANTS

Geetha. N.R. “The dimensions of over-qualification a case study of the non-gazetted officers in Kerala state ” Thesis. Department of Economics, Dr. John Matthai Centre, University of Calicut, 2004

CHAPTER VI

OVER-QUALIFICATION – INTENSITY AND DETERMINANTS

- Qualification and over qualification
- Grade of Occupation along with excess years of education
- Determinants of over-qualification-An Analysis.

CHAPTER VI
OVER QUALIFICATION - INTENSITY AND DETERMINANTS

This chapter aims to analyse the intensity of over qualification among the non-gazetted officers. The factors determining the over qualification of the respondents are also discussed in detail.

6.1 Qualification and over qualification

Appointments to different posts of various departments are decided on the basis of educational qualifications. "Qualification" and "Over qualification" are quite commonly used terms in the field of education. At the outset these two terms seem to be self-explanatory, but a clarification with regard to the use of these two terms is found necessary for the sake of the present study.

The word 'Qualification' means to be educationally fit by acquiring the minimum necessary educational requirement for being considered for a particular job or post. Thus one who has a pass in S.S.L.C examination is considered to be educationally qualified for being considered for a clerical post in any of the

departments. A postgraduate in a particular subject though has qualifications much above a matriculate, is considered as only just qualified for being considered for the post of a college Lecturer. A graduate cannot be considered as qualified for the post of a High School teacher. He should have an additional qualification of B.Ed for being qualified for this post. Thus different posts – both public and private, have specific minimum qualifications prescribed for it. It may be just one degree in the case of one but may be two or even greater in the case of other posts.

"Over qualification" on the other hand means that an individual has educational qualification over and above the minimum prescribed level. Thus though a post graduate too is qualified for being considered for a clerical post, he is at the same time considered to be over qualified since he has qualifications over and above the minimum required level. A trained postgraduate is considered to be over qualified when considered for the post of a High School teacher, but the very same qualification is the minimum essential for being considered for the post of a Higher Secondary School teacher.

Earlier, even in the first half of the twentieth century, job seekers did not find it much difficult to get appointed in the various posts according to their qualification. But as the rate of literacy increased and the number of posts did not increase accordingly, candidates had to wait in the long queue for getting appointment. Gradually it was realised that higher qualification enabled them to come to the forefront of the queue and succeed in getting appointment. Thus due to this and many other reasons, the educational standard increased much above the minimum required level, but get appointed to an occupation of a lower category which is exclusively due to the lack of increase in the number of posts commensurate with the available supply of educated labour. This in fact is a mismatch of education and occupation as a result of over qualification. The supply of educated manpower is much ahead of the demand for it.

In the present study an attempt is made to study the intensity of over qualification by analysing the mismatch between education and occupation. A statistical analysis of the various variables influencing the over qualification of the respondents under study is also made in detail in this section.

6.2 Grade of occupation along with excess years of education

The grade of occupation here refers to either the third grade category or the fourth grade category of occupation. Since the minimum number of years of education varies in both the categories of occupation, the excess years of education for these two categories also will differ.

The third grade category for example insists a pass in matriculation as the minimum qualification whereas the fourth grade category requires only a pass in seventh standard, and the succeeding years of education in both the cases is considered as the excess years of education. As the excess years of education increases the intensity of over-qualification is considered to increase. The reason for the increase in the intensity of over-qualification is considered to be the excess supply of labour over the demand for it, without a corresponding increase in the employment opportunities. The excess years of education is classified into four groups and the corresponding observations recorded (Table 6.1)

Table 6.1 Distribution of respondents by grade and excess years of education.

Excess year group	Third grade		Fourth grade	
	Total observations	per cent of persons with excess years of education	Total observations	per cent of persons with excess years of education
Below 2 years	--	--	1	2.3
2 – 5	1	0.3	--	--
5 – 8	4	1.2	--	--
8 and above	326	98.5	42	97.7
Total	331	100.0	43	100.0

Source: Computed from the sample.

It is seen that of the total 434 third grade servants, 331 (76.3 per cent) are qualified over and above the minimum required. Of them 98.5 per cent have more than 8 years of excess years of education. At the same time of the 66 fourth grade servants, 42 (63.6 per cent) are over-qualified. Of the over-qualified fourth grade servants 97.7 per cent have more than 8 years of excess years of education. This leads us to the fact that the intensity of over-qualification is more or less the same in the case of both the third grade and fourth grade servants.

6.3 Determinants of Over qualification – An Analysis

The present section concentrates on identification of factors that determine the over qualification of the respondents. The analysis will be carried along the following lines. First, a list of some probable factors determining the over qualification will be drawn and then the significance of these factors will be examined in the light of the data collected through the field survey by using a multiple regression model.

6.3.1 Probable factors determining the over qualification

(a) Caste category of the respondent

It is generally believed that the candidates belonging to the backward castes has the chance of getting appointed to a particular post immediately on attaining the minimum specified level of education than those who belong to the general category. Reasonably it is believed that the degree of over qualification will be comparatively greater in the general category than in the case of the reservation category. It is necessary to examine whether this belief is valid or not.

(b) The interim period

It may be recalled that even during the second plan periods there was not much competition in the job market and the job seekers could enter into any post of their choice on attaining the minimum level of educational qualification. But as the level of education increased job competition too increased, which inspired the youngsters to get overqualified. So it is probable that greater the duration of interim period, greater is this chance for being overqualified than those who have a comparatively low duration of interim period. The validity of this statement is also to be tested.

(c) Place of residence

It is an accepted fact that people living in urban areas has more chance for making use of higher educational opportunities than those living in rural areas. The urban residents can make use of such services as cheap transport facilities, public libraries, special coaching centres etc. than those of the rural residents. Hence it is assumed that the level of over qualification is higher among the urban

residents than the rural residents. The relevance of this statement is also to be examined.

(d) Lack of reservation

The job seekers belonging to the general category are liable to be more over qualified than those who are almost guaranteed of securing a job in either of the category as physically handicapped, dying in harness category, sports category etc. The validity of this hypothesis is also tested.

6.3.2 The Regression model

In order to find out which of the above mentioned factors have had significant bearing on the attainment of over qualification among the non-gazetted officers, the following multiple linear regression model has been used.

$$O_Q = a_0 + a_1 CC + a_2 IP + a_3 Res + a_4 Rese\ L\ a + U_i$$

Where

O_Q = Degree of over qualification, calculated in terms of scores (given in appendix)

CC = Caste category by the values O_1 = ST ; O_2 = SC ; O_3 = OBC ; O_4 = General.

IP = The duration of Interim period.

Res = Residence of the respondent represented by a dummy variable 1 urban and 0 if otherwise.

Rese La= Lack of reservation represented by a dummy variable 1 if there is lack of reservation, 0 if otherwise.

a_0 = Constant which represents the mean effect on 0_Q of all those variables which could not be explicitly introduced in the model.

a_1, a_2, a_3 and a_4 are the coefficients of the respective variables. The coefficients can either be positive or negative depending upon the regression results.

In the present analysis, four models have been fitted by the successive omission of each variable from its

preceding model. The results of each regression model are given separately.

6.3.3 Regression results – Grade wise

From the regression results, we find that the most influencing variable is the duration of interim period. It is found that higher the duration of interim period, greater is the chance for the respondents for being overqualified. This may be due to the recent unemployment and related labour market problems in Kerala. The other two variables (lack of reservation and residential status) are also found to be significant at 5 percent level. The influencing factors of over qualification are more significant in the case of third grade servants than in the fourth grade. Lack of reservation and residential status are not at all significant in the fourth grade category. At the same time the influence of caste variable is more significant (10 percent level) in the fourth grade category. The results of the stepwise regression analysis after using dummy variable to some of the explanatory variables are presented in tables 6.2, 6.3 and 6.4.

Table 6.2. Regression coefficients of the model.

N = 500

Variable	Regression Coefficient	SE	t
Caste Category	.683	.468	1.459***
Interim period	.247	.035	7.081*
Residence	1.221	.715	1.706**
Lack of Reservation	1.235	.684	1.804**

$R^2 = 0.108$

Table 6.3 Regression Coefficients of the model

(Grade III) N = 434

Variable	Regression Coefficient	SE	t
Caste Category	.425	.474	.896****
Interim period	.213	.035	6.018*
Residence	1.166	.710	1.643**
Lack of Reservation	1.183	.696	1.700**

$R^2 = 0.090$

Table 6.4 Regression Coefficients of the model.

(Grade IV) N = 66

Variable	Regression Coefficient	SE	t
Caste Category	2.691	1.669	1.613***
Interim period	.575	0.135	4.276*
Residence	-.848	3.009	-.282
Lack of Reservation	.352	2.359	.149

$R^2 = 0.264$

* - Significant at 0.1 percent

** - Significant at 5 percent

*** - Significant at 10 percent

**** - Significant at 25 percent

6.3.4 Caste wise regression analysis

The degree of influence of the determinants of over qualification is likely to vary according to the caste to which the employees belong. To probe into this matter regression analysis relating to the various caste category namely scheduled tribe, Scheduled caste, other backward

communities and the general category, was attempted and the inferences of such analysis are presented in Table 6.5.

Judged from the t values it is observed that none of the explanatory variables have any statistical significance in determining the level of over qualification of the ST category.

Residential status is coded as a dummy variable with a value '1' for the urban residents and '0' for the rural residents and is statistically significant at 5 percent level for the OBC and at 10 percent level of significance for the SC category. Thus although the coefficients satisfy the theoretical expectations i.e. most of them are urban residents, their influence is comparatively less significant especially in the case of general category employees.

Lack of reservation which is coded as a dummy variable with a value '1' if there is lack of reservation and '0' if there is reservation is not at all statistically significant for the ST and OBC category. However it is significant at 25 per cent level for the SC category. Majority of the OBC candidates has enjoyed the benefit of other reservation like

Table 6.5 Regression Coefficients of the model.(caste wise)

(N = 500)

Variables	ST			SC			OBC			General		
	Coeffi-cient	SE	t	Coeffi-cient	SE	t	Coeffi-cient	SE	t	Coeffi-cient	SE	t
Interim period	-.524	.421	-1.247	.242	.093	2.611 ***	.262	.047	5.556 *	.246	.058	4.216 *
Residence	--	--	--	3.413	2.665	1.576 ****	1.892	.998	1.895 **	1.298	1.134	1.145 ****
Lack of reservation	-8.335	6.638	-1.256	2.417	2.162	1.118 ****	-.388	.780	-.497	6.874	1.631	4.215 *

* - Significant at 0.1 percent

** - Significant at 5 percent

*** - Significant at 10 percent

**** - Significant at 25 percent

reservation of the physically handicapped, dying in harness reservation etc.

The duration of interim period is observed to be statistically significant and positively associated with over qualification among the OBC and general category. It confirms that those who have longer duration of interim period are more qualified than those who have a shorter duration of interim period. Though it is not statistically significant, its positive sign for the SC category shows that there are at least a few who have a shorter duration of interim period and are over qualified. The negative sign in the case of ST category leads us to the fact that the respondents in this category are not over qualified.

6.3.5 Residential status and regression analysis

In this model the respondents is taken on the basis of residential status and analysis is made as to the influence of the variables on the over qualification of the respondents. The duration of interim period is found to be statistically significant in the case of both the rural and urban residents. Although lack of reservation, is seen to be significant at one percent level in the case of urban

residents, it is not at all significant in the case of rural residents.

Table 6.6 Regression Coefficients of the model.

(Rural) N = 402

Variable	Regression Coefficient	SE	t
Caste Category	1.326	0.532	+2.492**
Interim period	.253	.040	6.388*
Lack of reservation	.135	.796	.170

$R^2 = 0.109$

Table 6.7 Regression Coefficients of the model.

(Urban) N = 98

Variable	Regression Coefficient	SE	t
Caste Category	-1.478	.969	-1.525
Interim period	.244	.071	3.429*
Lack of reservation	4.522	1.272	3.555*

$R^2 = 0.189$

6.3.6 Sex wise regression analysis

Table 6.8 Regression Coefficients of the model.

(Female) N = 204

Variable	Regression Coefficient	SE	t
Caste Category	-.879	.730	-1.204
Interim period	.369	.056	6.573*
Residence	2.786	1.075	2.591*
Lack of reservation	1.592	.994	1.601***

$R^2 = 0.191$

Table 6.9 Regression Coefficients of the model.

(Male) N = 296

Variable	Regression Coefficient	SE	t
Caste Category	1.661	.606	2.741
Interim period	.182	.045	4.077*
Residence	.199	.948	.210
Lack of reservation	.751	.924	.813

$R^2 = 0.095$

The sex wise regression results also lead us to the fact that the duration of interim period is statistically significant in the case of both the females and males. While the caste category is significant at five percent level in the case of the male employees the lack of reservation is significant at ten percent level in the case of female employees.

The essence that emerges from the regression analysis is that the factor that is most likely to determine the over qualification among the non gazetted officers in the third grade as well as fourth grade category is the duration of the interim period. In addition, lack of reservation is found to be statistically significant in the case of the employees belonging to the OBC category and the urban residents. While the caste category is of less statistical significance, the area of residence is comparatively statistically significant in determining the over qualification of the non-gazetted officers.

SUMMARY AND CONCLUSION

Geetha. N.R. “The dimensions of over-qualification a case study of the non-gazetted officers in Kerala state ” Thesis. Department of Economics, Dr. John Matthai Centre, University of Calicut, 2004

CHAPTER VII

SUMMARY AND CONCLUSION

CHAPTER VII
SUMMARY AND CONCLUSION

The conceptualisation of education as a form of capital leads to the understanding that it enhances labour productivity and efficiency. But for the sustained growth of an economy mere investment in education is not enough. Only a good, efficient and relevant system of education can yield positive returns both to the individual and to the society.

The intense desire on the part of the new generation for a university degree, the traditional social prestige attached to a degree, etc. have resulted in a serious glut in the market for educated manpower. Employment opportunities in the state have not increased commensurate with the increased supply of educated manpower. When a large number of educated persons compete for the limited number of jobs, the less educated are elbowed out by the more educated. This in turn results in devaluation of higher education leading to underemployment and misemployment of the educated.

There is a huge waste of resources due to the investment in educational development. Apart from that, the wide spread unemployment of educated persons, creates numerous social problems as well. Failure to get suitable employment despite repeated efforts causes frustrations and discontent to the educated. On a casual observation it can be seen that large number of graduates and postgraduates have taken up jobs, which do not require their skill. Educated parents can guide the children according to their plans and according to the abilities and interests of their children and thereby inspire them to get more and more qualification which will enable them to get the first position in the queue of the job market, thus making them over qualified.

If an individual is qualified over and above the minimum desired level of qualification for being selected to a particular job, he is considered to be over qualified. For e.g. a graduate or a postgraduate is considered to be over qualified when he competes for the post of a lower division clerks in a government department, the minimum desired level of qualification for which is only a matriculation. Of course the level of over qualification changes according to the changes in the nature of post. Thus the problem of

unemployment in Kerala is considered to be more of under employment rather than open unemployment. It is a situation in which employed people are contributing to production, less than they are capable of.

The problem of rapidly growing number of educated under employed should be given proper attention in order to achieve the objective of proper utilization of human resource. Reliable statistics relating to the nature, extent and characteristics of over qualified employees in the state are very limited. A deep attempt has not been made so far in Kerala regarding the problem of over qualification or educated under employment.

So with a view to throwing some light on the various dimensions of the problem of over qualification in Kerala, certain specific objectives are put forth, such as: (1) To examine the nature and dimensions of over qualification among the Non gazetted officers in State government services. (2) To examine over qualification in terms of the socio – economic status of the respondents. (3) To assess the intensity of over qualification and to discern its determinants.

The clerical posts are the most numerous and relatively homogeneous in nature and the coverage of the study is restricted to the Non - Gazetted officers in the state government services. Non-Gazetted officers are those in the government service who draw salary in the scale of pay of Rs.6500 – 10550 or below. However the high school assistants are not included in this category even though they belong to this scale of pay.

The objectives have been analysed on the basis of primary data collected from Thrissur district. The rationale for selecting Thrissur district for investigation lies in the fact that this is a district, which lies at the central part of Kerala State, and it draws employees from almost all the districts in the state and hence can provide a representative character of the employment profile at the state level. Moreover Thrissur district holds the fourth position in comparison to the size of population of the district of Kerala as per the 2001 census. Samples for the study are selected from each of the five taluks so as to get a representative sample of the district. Both males and females having not more than fifteen years of total service are included in the sample from all the five taluks.

Information for the study has been collected from the employees with the help of questionnaire specifically prepared for the purpose. The collected information has been classified, tabulated and analysed with the help of simple statistical tools like averages, ratios, percentages, chi-square test etc. A regression analysis has been made to study the determinants of over qualification. The intensity of over qualification is studied by analysing the grade of occupation along with the excess years of education. The intensity of over-qualification is greater as the excess years of education increases over the minimum number of years prescribed for the post.

7.1 Summary of findings

The study focuses attention on 500 representative non-gazetted officers, of which 434 belonged to the third grade category (the minimum qualification for which is a pass in matriculation) and 66 belonged to the fourth grade category (the minimum qualification for which is a pass in the seventh standard).

At the outset it is believed that the employment opportunities in the state are lesser than the available

supply of educated manpower. The discussion on the dimensions of over-qualification among the Non-Gazetted officers in the state has provided the following results with respect to the various objectives.

In the labour market, individuals with higher and better credentials are preferred to those with lower and lesser quality credentials. Hence a great many pursue higher education with the objective of improving their employment prospects. The distribution of the sample by grade and general education indicated that 73 percent of the third grade servants have over and above the required minimum level of qualification, whereas in the fourth grade category 67 percent were over qualified of which 6 percent of them are postgraduates.

Technically qualified personnel, for want of eligible vacancies and opportunities accept the third grade and fourth grade posts in which case they are considered as underemployed. 23.1 percent of the sample is overqualified not only in terms of general education but also in terms of technical education. They are actually qualified to get into a higher technical post but for want of suitable vacancies

and opportunities accept the non-gazetted post which is much below their qualification.

There is a long gap between the attainment of the minimum qualification and the entry into a government service. This is termed as the "interim period" for the purpose of this study. Over-qualification in case of those who have a longer interim period is much greater than those who have a comparatively shorter interim period. However the period of total service is lower in such cases. Among the third grade servants the interim period of 73.1 per cent of the over-qualified ranged between five to ten years, during which, instead of idling away the period, they make use of it by acquiring higher qualification. 60.5 per cent of the over-qualified fourth grade category too show a similar feature.

Over-qualification in terms of the socio – economic status is examined in the following way. The universalisation of education and discriminatory subsidization of education in favour of the backward sections have had a positive effect on acquiring higher qualification.

It is disappointing to note that in spite of the various policy measures for the upliftment of the backward classes and the job reservation benefit provided to them, a good number of them are still not able to get jobs in accordance with their qualification. 7.3 per cent in the scheduled caste category, 1.5 per cent of those belonging to scheduled tribes and 47.4 per cent of the other backward communities are over qualified. In the fourth grade category 18.6 per cent of the scheduled caste and 53.5 per cent of the other backward communities are over qualified. The chi-square value 8.97 is significant at 3 per cent degree of freedom and 5 per cent level of significance. However none of the scheduled tribe respondent is over qualified in this category.

Urban area is expected to have better educational facilities and hence over qualification is expected to be greater among urban residents. But the study revealed that the respondents – whether of rural or urban area, acquire higher qualification in order to assure themselves of getting a higher government post, but ultimately has to be contented with the clerical posts. The place of residence thus is not a barrier for attaining higher qualification.

The chi-square value 0.755 which is lower than the table value 3.84 at 5 per cent level of significance leads us to the fact that people of both – rural and urban areas become over-qualified to make themselves eligible for a particular post. Thus there is no association between residential status and over-qualification.

Educated underemployment is found to be more predominant among males than among females. While the overall female literacy rate in the state increased faster than the male literacy, over qualification in respect of the females (40.2 per cent) is much less than the males which is 59.8 per cent. The percentage of over-qualified personnels is greater among the third grade male servants (59.8 per cent) than the fourth grade male servants (3.5 per cent). Moreover the percentage of over-qualified female in both the categories (47.0 per cent) is much less than the percentage of over-qualified males (53.0 per cent). This can be not because the female aspiration for higher qualification is low, but because most of them prefer, rather are compelled to remain as responsible housewives. However the chi-square value leads us to the fact that there is no association between sex and over-qualification.

Attainment of a job in accordance with their qualification is not an essential condition for job satisfaction. Of the total sample only 6.3 per cent are employed in accordance with their qualification. Yet 64 per cent of the over qualified employees are fully satisfied for reasons like the very fact that they are employed rather than unemployed, monetary benefits, job security, proximity to their residence, non availability of other job opportunities etc.

Under employment rather than unemployment gives a mental satisfaction to the sample under survey. Instead of remaining unemployed they prefer to stick on to the job they acquire; even though it is not according to their qualification.

Normally it is believed that higher the level of education, greater is the possibility for occupational mobility. But 93.6 per cent of the samples are not willing to change the job, even though the clerical cadre is much below their qualification. This phenomenon can be termed as the Downward Involuntary Occupational Mobility. 89.3 per cent of the sample is forced to stick on to the same post

because of the non-availability of other job opportunities. There are a few who give weightage not only to the economic aspect but also to the social and other privileges they can enjoy with the existing job, due to which they do not even think of moving to other jobs which is in tune with their qualification.

Marriage is not a barrier for attaining higher educational qualification. With respect to the marital status, of the total over qualified servants in the third grade category 84.3 per cent belonged to the married category of which 54.3 per cent attained higher qualification after marriage. Of course the aim was to qualify them for a higher post but ultimately could get through only to this post.

The study revealed that spouse's educational qualification does not influence the education of the counter part. Of the total married 6.8 percent were inspired by their spouse's educational qualification, to attain additional qualification even after getting a job. But 93.2 percent of the sample opined that they were not at all influenced by their spouse's educational qualification.

Service benefits and relaxation does not act as a guarantee for the various posts. Of the various beneficiaries 42.3 percent are qualified over and above the minimum required. This indicates that even though they are sure of attaining a job they are not able to get into the post they deserve, according to their qualification.

It was also possible to locate some reasons, which led to job dissatisfaction. Over – qualification - but low emoluments is one of the most important reasons, which led to job dissatisfaction. Emoluments are determined for occupation and not for credentials. At the same time higher credentials are preferred for recruitment to a particular post, ultimately leading to job dissatisfaction. 67.2 per cent of the respondents are dissatisfied due to the low salary they are paid, whereas 20.6 per cent are dissatisfied since the job is not in accordance with their qualification. Other reasons mentioned are lack of promotion scope, tough rules and procedures of work, the monotonous nature of the work and a few other factors, as chance for transfer of job away from the hometown, political influence and harassment etc.

The intensity of over-qualification is studied by taking into consideration the grade of occupation along with the excess years of education. As the excess years of education increases the intensity of over-qualification also will increase. Excess years of education is considered as the number of years in excess of the number of years of education for the respective posts. (A pass in Matriculation for the third grade post, and a pass in seventh standard, for the fourth grade posts). The respondents are classified on the basis of the excess years of education into four groups and it is found that 97.7 per cent of the over-qualified in the fourth grade category have more than eight years of excess years of education. At the same time 98.5 per cent of the third grade servants are included in this category. This leads us to the fact that the intensity of over-qualification is more or less the same in the case of both the third grade and fourth grade respondents.

The essence that emerges from the regression analysis is that the factor that is most likely to determine the over qualification among the Non-Gazetted officers in the third grade as well as in the fourth grade category is the interim period (The period in between the attainment of the

minimum qualification and the entry into the particular post).

The interim period and the lack of reservation are found to be statistically significant for urban residential employees.

While the caste category is of less statistical significance, the place of residence is comparatively statistically significant in determining the over qualification of the Non-Gazetted officers.

Over qualification to a large extent is thus as a result of lack of job opportunities, and the intensity as a result of the long interim period. What is the way out for this problem? Of course opening up of new ventures for employment. Apart from that in this age of advanced computer application and tight competition, why not the minimum level of education is raised further than matriculation, so that the problem of unemployment as well as underemployment could be solved to a considerable extend. Also the efficiency in handling the work (though there is no accurate measurement of efficiency relating to such posts) can be improved if such works are entrusted

with one who has higher qualification. Another area of research could be thought of, by taking into consideration the various steps for improving the efficiency of work.

BIBLIOGRAPHY

BIBLIOGRAPHY

BOOKS

Agarwal,J.C. (1966) - *Educational Research – An introduction.* Arya Book Depot, New Delhi

Agarwal,J.C. (1982) - *Development and Planning of Modern Education with special Reference to India.* Vikas, New Delhi.

Agarwal,S.P. (1970) - *Manpower Supply: concepts and Methodology.* Meenakshi Prakashan, Meerut.

Ahuja, Ram. (1992) - *Social Problems in India.* Rawat Publications, Jaipur.

Aiya V.Nagam. (1906) - *The Travancore State Manuel,* Vol. II, Part I, Superintendent, Government Press, Thiruvananthapuram.

Alan.L.Sorkin. (1974) - *Education, Unemployment and Economic growth.* Lexington Books, D.C.Health and Company, Lexington.

Anderson,C.A. and Bouman,M.J. (1996) - *Education and Economic Development.* Frank Cass, London.

Azad,J.L. (1991) - *Graduate Unemployment in India.* Association of Indian Universities, AIV House, 16, Kotla Marg.

Bhattacharya,A.K. (1982) - *The Problem of Educated Unemployment in India.* Meenakshi Prakashan, Meerut.

Blaug Mark, Layard Richard and Wood Hall Maureen. (1969) - *The causes of graduate Unemployment in India.* Allen lane, The Penguin Press, London.

Blaug Mark. (1972) - *An Introduction to the Economics of Education.* Penguin Books, Batlimore.

Blaug.M. (1969) - *Economics of Education.* Vol. I & II. Penguin Books, London:

Bose,P.K. (1977) - *Higher Education at Cross Roads.* World Press, Calcutta.

Braverman.H. (1979) - *Labour and Monopoly Capital* the degradation of work in the twentieth Century. Social Scientist Press, reprinted, Thiruvananthapuram.

Brosan, George, etal (1971) - *Patterns and Policies in Higher Education.* The Penguin Books, London.

Burgress,T.S., Layard,R.and Pant,P. (1968) - *Manpower and Educational Development in India.* Oliver and Boyd, Edinburgh and London.

David, Turnham. (1971) - *The Employment Problem in Less Developed Countries.* Development Centre of the organisation for Economic Co-operation and Development, Paris.

Dhar.T.N. (1979) - *The politics of Man-power planning, graduate Unemployment and the planning of Higher Education in India.* Minerva, Calcutta.

Fields,G.S. (1980) - *Poverty, Inequality and Development.* Cambridge University Press, Cambridge.

Ginzberg, Eli and Smith, Herbert,A. (1967) - *Manpower Strategy for Developing Countries.* Columbia University Press, New York.

Goel,S.C. (1975) - *Education and Economic Growth.* Macmillan, Delhi.

Gopinathan Nair.P.R. (1981) - *Primary Education. Population growth and Socio-Economic change.* Allied Publishers Private Limited, New Delhi.

Harbinson.R.Wand Mayers. (1964) - *Strategies of Human Resource Development – Education. Manpower and Economic growth,* McGraw-Hill Publications, New York:

Harris,S.E. (1962) - *Higher Education: Resource and Finance.* Mc Graw Hill, New York.

Innes,C.A. (1908) - *Madras District Gazetters, Malabar and Anjengo.* Superintendent, Government Press, Madras.

Jeffry,R. (1976) - *The Decline Of Nayar Dominance: Society and Politics in Travancore.* Vikas, New Delhi.

Kapur,J.N. (1975) - *Current Issues in Higher Education in India.* S.Chand, New Delhi.

Kaul,J.M. (1974) - *Indian Higher Education: Two decades of planned Drift.* Indian Institute of Advanced studies, Simla.

Kidder,E. (1973) - *Education and Manpower Planning in India.* Progressive, Bombay.

Kochar,S.K. (1981) - *Pivotal Issues in Indian Education.* Sterling, New Delhi.

Kothari,C.R. (2002) - *Research Methodology-Methods and Techniques.* Wishwa Prakashan, New Age International (p) Ltd, New Delhi.

Kothari.V.N. and Panchamukhi.P.R. (1975) - *A Survey of Research in Economics of Education in India.* Indian Council of Social Science Research, New Delhi.

Kumar.B. (1988) - *Planning, Development and Poverty Alleviation – A 21st Century perspective.* Deep and Deep publishers, New Delhi.

Mahendra Kumar, Premi. (1972) - *Educational Planning in India.* Sterling Publishers, New Delhi.

Marshall Alfred. (1930) - *Principles of Economics.* Macmillan and Co. Ltd, London.

Martin Carny. (1977) - *Education and Employment – A Critical appraisal.* UNESCO, International Institute for Educational Planning, Paris.

Michael,H.Banks andPhilip Ullah. (1988) - *Youth Unemployment in the 1980s: Its Psychological Effects.* Groom Helm, London.

Mincer,J. (1974) - *Schooling: Experience and Earnings.* NBER, New York.

Mingat.A and Tan,J.P. (1987) - *Measuring the Economic efficiency of Project Related Training.* Some evidence from World Bank Projects, World Bank, E & T Department, Washington.D.C.

Mohan, Madan. (1972) - *Problems of University Education in India.* Meenakshi Prakashan, Meerut.

Mohandas,Mand Rajan Nair.N. (1989) - *Concurrent Evaluation of the Self – Employment Programme for the educated unemployed youth in Thrissur District.* Directorate of Extension, Kerala Agricultural University, Mannuthy.

Myrdal,G. (1968) - *Asian Drama: An Inquiry into the poverty of Nations.* Allen Lane, The Penguin Press, London.

Naik.J.P. (1975) - *Policy and Performance in Indian Education 1947-1974.*Orient Longman, New Delhi.

Nair,J.R. (1982) - *A Statistical Portrait Of Kerala University.* Lily Publishers, Thiruvananthapuram.

Nair.P.A. (1968) - *Employment Market in an Industrial Metropolis : A Survey of Educated Unemployment in Bombay.* Lalvani Publishing House, Bombay.

Oberai,A.S. (1978) - *Changes in the structure of Employment with Economic Development.* International Labour Office, Geneva.

Oommen.M.A. (Ed). (1979) - *Kerala Economy Since Independence.* Mohan Pewmilani, Oxford 7 IBH Publishing Co, New Delhi.

Panchamukhi,P.R. (ed.) (1989) - *Studies in Educational Reform in India: Educational Reforms at Different Levels.* Vol. II, Indian Institute of Education, Pune: Himalaya Publishing House, Bombay.

Peer, Mohammed (1994) - *Higher Education and Employment.* Rawat Publications, Jaipur.

Pillai, Velu,T.K. (1940) - *The Travancore State Manuel.* Vol. III, Superintendent, Government Press, Thiruvananthapuram.

Psacharopoulos,G. (1975) - *Returns to Education – An International comparison.* Elselvier Scientific Publishing company, Amsterdam.

Puttaswamaiah.K. (1977) - *Unemployment in India : Policy for Manpower.* Oxford & IBH Publishing Company, New Delhi.

Rajeev.P.V. (1983) - *Economic Development and* Unemployment. Asian Publication Service, New Delhi.

Rao,V.K.R.V. (1961) - *University Education and Employment – A case study of Delhi University graduates.* Institute of Economic growth, Asia Publishing House, New Delhi.

Sankaranarayanan, K.C.and Karunakaran,V. (1985) - *Kerala Economy.* Oxford and IBH Publishing Co., New Delhi.

Sanyal,B.C. (1985) - *Higher Education and Employment: A Synthesis of IIEP Research.* IIEP (Mimeo), Paris.

Saxena,J.P. (1979) - *Educated Unemployment in India, Problems and Suggestions.* Commercial Publications Bureau, New Delhi.

Shri.Prakash. (1977) - *Educational System of India : An Economic Study.* Concept Publishing Co, New Delhi.

Singh Bhawdeep and Kumar Prem, (1995) - *Current Trends in Human Resource Development - Challenges and Strategies in a changing Scenario.* Deep & Deep Publications, New Delhi.

Subramaniyan.S. - *Poverty, Unemployment and Perspective of development.* Chugh Publications, Allahabad.

Sukhia,S.P. (1966) - *Elements of Educational Research.* Allied Publication, Bombay.

Thurow,L.C.(1975) - *Generating Inequality.* Macmillan, London.

Tilak, Jandhyala,B.G. (1982) - *Educational Planning and Unemployment in India.* National Institute of Educational Planning and Administration, New Delhi.

Tilak,J.B.G. (1987) - *The Economics of Inequality in Education.* Sage Publications, New Delhi.

Tilak,J.B.G. (1994) - *Education for Development in Asia.* Sage Publications, New Delhi.

Todaro, Michael.P. (1987) - *Economic Development in the Third World.* Orient Longman, New Delhi.

Varghese,N.V. (1986) - *Higher Education and Employment in India: A Review.* NIEPA (Mimeo), New Delhi.

Willy,V.R. (ed) (1976) - *Employment problems and Policies in developing Countries.* University Press, Rotterdam.

Wootten,B. (1955) - *The Social Foundations of Wage Policy.* George Allen and Unwin, London.

Yesudas,R.N. (1977) - *Col. John Munro in Travancore.* Kerala Historical Society, Thiruvananthapuram.

PERIODICALS AND ARTICLES

Agarwala Verendra. (1978) - "Need for Employment Oriented Education Policy", *Education Quarterly.* Vol.30, No.1, April.

Apte,M.D.. (1975) - "Education and Unemployment in Kerala", *Economic and Political Weekly.* Vol.10, No. 28, 12th July.

Arrow,K.J. (1973) - "Higher Education as Filter", *Journal of Public Economics.* Vol.2, pp. 193-216.

Balasubramanyan, Vimal. (1980) - "Qualification Syndrome". *Mainstream.*

Bhagawati,J.N. and Srinivasan,T.N. (1977) - "Education in a Job-Ladder Model and Fairness-in-Hiring Rule", *Journal of Public Economics.* Vol.7, pp. 1-22.

Bhandari, R.K. (1984) - Crisis in Education in India, *New Frontiers in Education.* No. 14, p.24.

Bhandari,R.K. (1985) _ "Educational Development during six five year plans: an evaluation", *New Frontiers in Education.* No. 15, p.15.

Blaug.M. (1973) - "Education and the Employment Problem in developing Countries", International Labour Office. Geneva: p.62.

Bowel,S. (1972) - "Schooling and Inequality from generation to generation", *Journal of Political Economy.* May/June, pp. 219-251.

Bowman,M.J. (1968) - "The Human Investment Revolution in Economic Thought", in Blaug,M. (ed.) *Economics of Education:* 1, Penguin, London.

Bowman,M.J. (1972) - "The Human investment revolution in Economic thought", B.R.Losin (ed) *Education, structure and Society.* Penguine Books, p.45, Baltuere.

Carnoy,M. (1980) - 'Segmented Labour Markets', *Education, Work and Employment.* IIEP, Paris.

Carnoy.M. (1977) - "Education and Economic Development: the first generation", *Economic Development and cultural change.* Vol. 25, supplement, pp. 428 - 448.

Centre for Development studies, Trivandrum. (1975) - "Poverty, Unemployment and Development Policy: A case study of selected issues with reference to Kerala". United Nations, New York.

Colclough, Christopher. (1982) - "The Impact of Primary Schooling on Economic Development – A review of the evidence", World Development. Vol X, No. 3.

Dholakia.J. (1970) - "Some aspects of unemployment among the Educated in Gujarat", *Arthavikas.* Vol.6, No.2, July.

Edwards Edgar.O andTodaro Micheal.P. (1973) - "Educational demand and supply in the context of growing unemployment in less developed countries", *World Development.* Vol.1, Nos. 3& 4, pp. 107-117.

Fields,G.S. (1974) - "Private Demand for Education in relation to labour market conditions in Less developed Countries", *The Economic Journal.* Vol. 84, pp. 906-925.

Hauser, Philip,M. (1974) - "The Measurement of labour utilization", *The Malayan Economic Review.* Vol.No. 1, April.

Hommes Enno.W. & Thrivedi Niveditha . (1971) - "The Market for graduates: A filed Report", *Economic & Political weekly.* Vol.6, No.50, 11th December.

Houtarak,F., Lemercinier,G. (1978) - "Socio–Religious Movements In Kerala: A reaction to the capitalist mode of production", Part II, *Social Scientist.* Vol. VI, No. 12, July.

Husain,I.Z. (1967) - "Returns to Education in India", in Singh, B (ed) *Education as Investment.* Meenakshi Prakashan, Meerut.

Iichman, Warren.F. & Dhar, Trilok,N. (1970) - "Student discontent and Educated unemployment", *Economic and Political Weekly.* Vol.V, Special No, July.

Iichman,W.F. and Dhar,T.N. (1970) - "Student Discontent and Educated Unemployment", *Economic and Political Weekly.*

ILO (1972) - "Employment, Incomes and Equality: A Strategy for Increasing Productive Employment in Kenya". Geneva.

ILO, Ceylon Report (1971) - "Matching Employment opportunities and expectations: A programme of action for Ceylon". Geneva: pp.4, 20, 25 and 175.

ILO. (1970) - *Towards full Employment: A Programme for Colombia.* Geneva.

Iyer.K.V. (1967) - "More men for fewer jobs", *Yojana.* Vol.XI, No.17, September 3rd.

Jha.L.K. (1982) - "Education and Employment", *Social Welfare.* Vol. 28, No.11, February.

Kamat,A.R. (1965) - "Private Institutions of Education", *The Economic and Political Weekly.* pp. 1691 – 96.

King.A.D. (1970) - "The IIT graduates: 1970, Aspirations, expectations and ambitions", *Economic and Political Weekly.* Vol.V, No.36, 5th September, pp. 1497-1510.

Kothari,V.N. (1967) - "Economic Issues in Education Policy in India" *Education and Psychology Review.*

Kundu Usha. (1990) - "Employment position of Educated Women", *Yojana.* Jan 26th.

Lakdawala.D.T. (1978) - "Educated Unemployment in India", *Yojana.* March.

Layard.R. and Psacharo poulos.G. (1974) - "The screening hypothesis and the returns to Education", *Journal of Political Economy.* Vol. 82, No.5, pp. 985-998.

Lewis,W.A. (1962) - "Education and Economic Development", *International Social Science Journal.* Vol. 14, No.4.

Manpower Journal. (1997) - "Surplus Manpower – A potential for the Economic Development: An Empirical Investigation in Himachal Pradesh". IAMR, Vol. XXXIII, No. 2.

Mathew.E.T., & Nair.P.R.G. (1979) - "Demand for Higher Education, A Socio Economic Profile of Evening College Students in Kerala", *Journal of Kerala Studies.* Vol. VI, March – June.

Mukherjee, Chandan, and Thomas, Isaac,T.M. (1991) - "A study of Educated Unemployed in Kerala", *Report of Sample Survey of Registrants of Employment Exchange*, Centre for Development Studies. Thiruvananthapuram.

Mukherjee, Chandan. (1979) - "The market for the Educated in Kerala", Working paper, No. 32, Centre for Development Studies. Thiruvananthapuram.

Naidu, Venkatraman. (1982) - "Creating Employment for the Rural Educated Unemployed", *Kurukshetra.* Vol. 30, No. 19, 1st July.

Naik,Bhagwan,K. (1980)- "Problem of Educated Unemployed", *Commerce.* Vol. 140, No. 3582, 16th February.

Naik,J.P. (1965) – "Objectives of Educational Development", *Manpower Journal.* Vol. I, No. 2.

Naik.J.P. (1969) - "The Problem", *Seminar.* Vol. 120, August.

Nair,P.R.G and Thomas Joseph. (1983) - "Paradox of the Market for the Educated", Paper. NO. 2.1, society for the study of Regional Disparitis, Fourth Annual Conference on "Education and Regional Development", L.N.Mishra Institute of Economic Development and change. Patna.

Nair,P.R.G., and Ajit,D. (1984) - "Parallel Colleges in Kerala: Enrolment, costs and Employment", *Economic and Political Weekly.* Vol.XIX, Nos. 42 and 43. Oct. 20 – 27, pp. 1840 – 1847.

Nayar.D.P. (1977) - "Challenge of Unemployment to Educational system", *Education Quarterly.* Vol.XXII, No.4, pp. 2486-2491.

Panchamukhi,P.R. (1975) - "Devaluation of Education: A Quantitative Analysis", *Journal of Higher Education.* No. 1.

Panchamukhi.P.R. (1965) - "Operating Cost of higher education in Bombay University", Centre for advanced study in Public Finance and Industrial Economics. Bombay University, 1965.

Panchamukhi.P.R. (1978) - "Employment and Education Policy: The Indian Experience", *Manpower Journal.* Vol. XIV, No.1, April – June.

Pscharopoulos, George, and Sanyal,B.C. (1981) - "Higher Education and Employment: The IIEP experience in five less developed countries". UNESCO, IIEP.

Schultz,T.W. (1961) - "Investment in Human Capital", *American Economic Review.* Vol.5, pp.1-17.

Sharma,G.D., and Apte,M.D. (1976) - "Graduate Unemployment in India", *Economic and Political Weekly*. Vol. II, No. 25.

Singh, Bright. (1977) - "Educated Unemployment in Tamil Nadu: A forecast", *Southern Economic Review*. Vol. VI, No.1 July.

Sinha,R.P. (1969) - "The Educated Unemployed Manpower Crisis", *Seminar*. No. 120.

Spence,M. (1963) - "Job market signalling", *Quarterly Journal of Economics*. Vol. 87, pp. 355 – 374.

Spence.M. (1973) - "Job Market Signalling", *Quarterly Journal of Economics*. Vol. 87, pp. 355-374.

Tharakan,P.K.M. (1984) - "Socio – Economic factors in educational development. The case of nineteenth century Travancore", *Economic and Political Weekly*. Vol. XIX, No. 45, November 10.

Thomas,J.A. (1984) - "Educational Progress of Backward Communities" *Prabudha Janata.* (Mal), sixth annual.

Thurow,L.C. (1974) - "Measuring economic benefits of Education", in Gorwon,M.S (ed) *Higher education and labour market.* Mc graw – Hill, New York.

Thurow.L.C. (1972) - "Education and Economic Inequality", *Public Interest.* Summer, reprinted in Baxter.

Varghese,N.V. (1981) - "Some Conceptual problem in Manpower planning", *Manpower Journal. No. 17.*

Visaria Pravin. (1970) - "Unemployment in India in Perspective", *Economic and Political Weekly.* Special Number, July, p. 1252.

WORKING PAPERS/THESIS

Azad,J.L. (1991) - "Graduate Unemployment in India", Association of Indian Universities. AIU House, 16, Kotla Marg.

Bose,P.K; Sanyal,B.C; and Mukerjee,S.P. (1983) - "Graduate Employment and Higher Education in West Bengal", International Institute for Educational Planning. Paris.

Eapen, Mridul. (1974) - "Some aspects of the unemployment in Kerala". C.D.S. working paper No. 79.

Joseph,K.V. (1986) - Migration and Economic Development in Kerala, Ph.D Thesis, Department of Economics. University of Kerala.

Nair, Gopinathan,P.R. (1983) - "Educational Reforms in India – Universalization of Primary education in Kerala". C.D.S. working paper, No. 181.

Nair, Gopinathan,P.R., and Thomas, Joseph. (1983) - "Paradox of the Market for the Educated", Paper No: 2.1, Society for the study of Regional disparities 4th Annual Conference on "Educational and Regional Development", L.N.Mishra, Institute of Economic Development and change. Patna.

Panchamukhi,P.R. (1984) - "Graduates and Job Market: A quantitative study in India". Paris: 11EP, Mimeo.

Panchamukhi.P.R. (1988) - "Economic of Education", Fifth Survey of Educational Research, 1988-92. Vol.1, NCERT, New Delhi.

Prakash,B.A. (1988) - "Educated Unemployment in Kerala – Some observation based on a field study". Working paper No. 224, Centre for Development Studies, Thiruvananthapuram.

Prakash,B.A. (1989) - "Unemployment in Kerala – An analysis of Economic Process". C.D.S. working paper No. 231.

Rao,V.K.R.V. (1961) - Education and Employment: A case study of Delhi Graduates. occasional paper No. 3, Institutes of Economic Growth, Delhi.

Sharma,R.R. (1973) - "Economics of Education with special reference to Educational development of Madhya Pradesh. Ph.D Thesis, Indore University.

Singh, Brij Pal. (1974) - "Educational progress and Economic Development in Punjab". Patiala : Punjab University.

World Bank. (1991) - "Primary Education", A World Bank policy paper. Washington.D.C.

GOVERNMENT PUBLICATIONS

Department of Economics & Statistics. (1980) - "Survey on Housing and Employment".

Department of Economics & Statistics. (1987) - Report on Unemployment in Kerala.

Directorate General of Employment & Training. (1958) - "Pattern of graduate Employment", Directorate general of Employment and Training. Ministry of Labour, New Delhi.

Directorate General of Employment & Training. (1964) - "Employment of Matriculates: A case study", Directorate general of Employment and Training. New Delhi: Ministry of Labour.

Education Commission. (1966) - *Education and National Development Report.* N.C.E.R.T. New Delhi.

Government of India. (1991) - Census of India 1991, Series – 12, India: Provisional Population Totals. Registrar general and census commissioner for India.

Government of India. (1991) - Census of India 1991, Series – 12, Kerala: Final Population Totals. Director of Census Operations, Kerala.

Government of India. (2001) - Census of India 2001, Series – 33, Kerala: Provisional Population Totals. Paper –1 of 2001, Director of Census operations, Kerala.

Government of India. (1962) - Report of the Secondary Education Commission. Delhi: Ministry of Education, p.4.

Government of India. (1966) - Education and National Development Report of the Education Commission, Ministry of Education, New Delhi.

Government of India. (1983) - National Sample Survey Organisation, Report on the second Quinquennial Survey on Employment and Unemployment. Survey result. Kerala.

Government of Kerala. (1984) - Draft Seventh Five year Plan, State Planning Board. Thiruvananthapuram.

Government of Kerala. (1979) - "A study on the characteristics of unemployed post graduates in Kerala", Bureau of Economics and statistics TVM. 1978-79, Manpower Studies, Vol.III, pp 81-96.

Government of Kerala. (2002) - Detailed budget estimates of the Government of Kerala 2001 – 02. finance department, Government of Kerala.

Government of Kerala. - *Economic Review.* State Planning Board, Thiruvananthapuram. (Various Issues).

Government of Kerala. (1963) - N.S.S.Report No.1, Bureau of Economics and Statistics. Thiruvananthapuram.

Government of Kerala. (1971) - Report of the Committee on Unemployment in Kerala. Part I.

Government of Kerala. (1979) - Statistical Hand Book of Kerala, Bureau of Economics and Statistics. Thiruvananthapuram.

Government of Kerala. (1984) - Draft Seventh Five Year Plan (1985 – 90) and Annual Plan 1985 – 86. Vol. I, State Planning Board, Thiruvananthapuram.

Government of Kerala. (1985) - Draft Seventh Five Year Plan (1985-90) and Annual plan. 1985-86, State Planning Board, Thiruvananthapuram: p.1.

Government of Kerala. (1991) - Draft Eightieth Five Year Plan 1992 – 97 and Annual Plan 1992 – 93. Vol. II, State Planning Board, Thiruvananthapuram.

Government of Kerala. (1992) - Economic Review, State Planning Board. Thiruvananthapuram: p.11.

Government of Kerala. (1992) - *Economic Review.* State Planning Board. Thiruvananthapuram.

International Institute for Educational Planning. (1984) - "Post-graduate Employment Experience of weaker castes", Marthwada Region. Paris: IIEP (Mimeo).

Planning Commission. (1973) - "Report of the committee on Unemployment". New Delhi: Planning Commission.

Sarvekshna. (1992) - No.2, National Sample Survey organisation, Department of Statistics, Ministry of Planning, Government of India.

APPENDICES

Appendix I

Department of Economics
University of Calicut

Aranattukara
Thrissur – 680 651

A QUESTIONNAIRE FOR THE SURVEY OF THE DIMENSIONS OF OVER QUALIFICATION AMONG THE NON-GAZETTED OFFICERS.

Tick whichever is applicable

1. Name of the respondent :
2. Designation : :Grade you belong to III ☐ IV ☐
3. Educational Qualifications: General: Technical:
4. Official Address :

5. Permanent Address :

6. Place of Residence : Rural ☐ Urban ☐
7. Other Particulars : Age: Sex: Caste:
8. Whether belong to OBC ☐ SC ☐ ST ☐ Others ☐
9. Whether Single ☐ Married ☐ Divorced ☐ Widow ☐ Separated ☐
10. Educational Qualifications at the time of joining the job:
11. Pay and Scale of pay :
12. Age at the time of entering permanent post:

24

13. Educational background (From SSLC on wards):

Name of the Course	Year of Passing	Class obtained	Private/ Regular	Subjects taken for college education

14. Family details

Name	Age	Educational Qualification	Relation with the respondent	Name of Occupation	Salary	Educational qualification at the time of marriage

15. Other details (not mentioned in 14 above)

Members	Educational Qualification	Occupation	Income

16. Employment details:

Jobs	Post held	Date of joining	Minimum required qualification for the post	Qualification at the time of joining the post	Qualification attained there after	Nature of the post on acquiring additional qualification

17. Why did you improve your qualification after getting a job:
    1. Prospects for improving the career.
    2. Facilities offered by the institution.
    3. Motivation of the parents.
    4. Inspiration of the spouse.
    5. Service benefits.
    6. Out of curiosity.
    7. Any other (Specify)
18. If married, whether spouse's educational qualification influence you to attain higher qualification: Yes ☐ No ☐
19. Impact of additional qualification:

Qualification attained	Benefits on attaining additional qualification				
	Change of job	Additional increment	Scope for promotion	Change of pay	Others

20. How long have you waited for getting a job after minimum qualification:
21. (a) Have you enjoyed any type of reservation benefit: Yes ☐ No ☐
    (b) If yes specify:
22. Enjoyed any other benefits ? If yes put '✓'
    1. Marks relaxation
    2. Age relaxation
    3. Dying in Harness
    4. Any other (Specify)
23. (a) Are you satisfied with your present job: Yes ☐ No ☐
    (b) Reasons (Specify)

24. (a) Change of job/posts other than promotion: Yes ☐ No ☐

(b) If yes why (Please put '✓'

1. Present post not according to qualification.
2. Present income not according to qualification.
3. New job nearer to place of residence.
4. Interest towards new job.
5. Any other (Specify)

(c) If no why (Specify)

25. (a) Whether trying for other job/post

(b) If yes which type of job/post

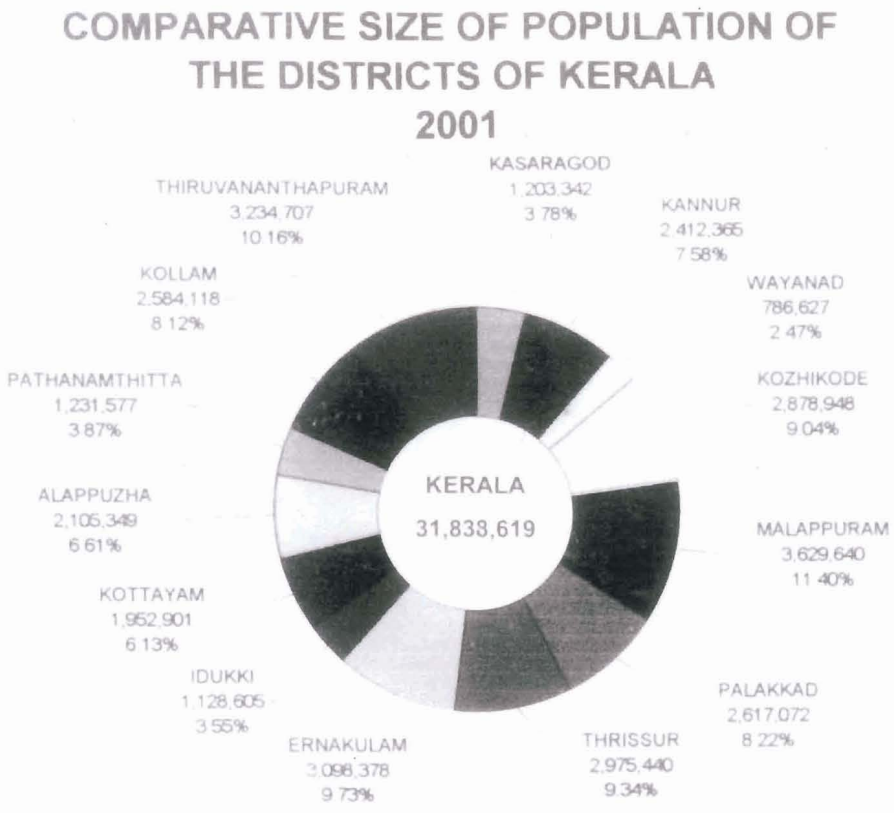
1. In other states
2. Non transferable job
3. Higher income earning job
4. According to qualification
5. Other (Specify)

(c) If not why (Specify)

26. How many members are there in the same post
27. Do they have the same level of qualification
28. Do they get the same salary irrespective of their qualification.
29. Is it justifiable
30. Has over-qualification adversely influence your performance of duties.

27

Appendix II



28

Appendix III

Scores given to different levels of qualification

Qualification	7th	10th	PDC	Degree	P.G	TTC/ B.Ed	Type-writing	Com-puter	M.Phil	Ph.d
Third grade	0	0	5	10	15	8	3	2	20	25
Fourth grade	0	5	10	15	20	15	5	3	25	30