REPORT.

Report of the Kerala Education Commission

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Dr. Ashok Mitra (Chairman) Prof. S. Anandalakshmy Prof. N. Balakrishnan Nair Dr. K. Gopalan Shri. T.N. Jayachandran Dr. C.T. Kurien Prof. K.N. Panikkar Shri. P.K. Umashanker Prof. M. Vijayan





Constituted by : Kerala Sastra Sahitya Parishad

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Preface

During November 1995, Kerala Sasthra Sahitya Parishad organised a Vidyabhyasa Jatha, which toured the length and the breadth of the state highlighting the problems facing the Kerala Education Scene. As a culmination of the Jatha, a Vidyabhyasa Janasabha (people's assembly for education) was held in Thrissur on November 18, 1995. According to the consensus evolved during the Janasabha it was decided to appoint a people's commission to go into the details of the various issues and to submit a comprehensive report. The Kerala Education Commission thus came into being. The Commission began to function formally from March 1996.

Background to the Commission

The concept of a people's education commission has been in the making for about two decades. During 1981, KSSP constituted a group to investigate in detail the problems of Kerala's education system. The group put forward its proposals in the form of a document in 1982. In 1986 KSSP appointed a 'Commission' to study the problem of rampant corruption in education. The need for a comprehensive study of Kerala's education was again raised within KSSP several times, particularly in the context of the literacy campaigns of 1987-88 and 1989-90.

During the mid-nineties a major shift was taking place in the form and content of education system in Kerala. The support for government control and democratic norms in education system began to make way for large scale commercialisation and liberalisation. A parallel network of commercially oriented educational institutions began to thrive, with government support in both school and higher education, posing danger to the sustenance of general education itself. General education suffered from lack of facilities and fundings compounded by consistently poor performance. The pathetic state of affairs in the common schools became a stick to beat general education with, while espousing the cause for commercial 'unaided' sector. KSSP as an organisation committed to take science to the people, found that it is the downtrodden sections who are adversely affected by this shift in education. It was also clear that any proposal for peoples' education has to be preceded by detailed study and deliberations, which have to be undertaken by a team with commitment and innovativeness, who understand Kerala education very well. Kerala Education Commission has been the result of the efforts to find such a group of eminent persons.

The Commission is headed by the eminent economist and educationist Dr. Ashok Mitra.

The members are

Prof. S. Anandalakshmy, Former Professor of Education in Delhi University and an expert in children's education

Padmashri Dr. N. Balakrishnan Nair, wellknown Scientist, former University Professor and Former Chairman of Science Technology and Environmental Committee, Government of Kerala.

Dr. K. Gopalan, former Vice Chancellor and Former Director, NCERT

Shri. T.N. Jayachandran I.A.S., formerly Vice Chancellor as also Commissioner and Secretary for Higher Education, Government of Kerala

Dr. C.T. Kurien, renowned Economist and Former Director, MIDS Chennai

Prof. K.N. Panikkar, well known Historian, Professor and Chairman, Archives on Contemporary History, Jawaharlal Nehru University

Shri. P.K. Umashankar I.A.S., Former Senior Education Administrator both in the Kerala and Central Governments

Prof. M. Vijayan, well known Scientist, Head of the Department, Molecular Bio-Physics, Indian Institute of Sciences, Bangalore

KSSP is grateful to everyone of them for the whole-hearted co-operation extended by them.

The commission is assisted by a secretarial team consisting of Dr. M.P. Parameswaran, Shri. C.P. Narayanan, Dr. R.VG. Menon, Shri. O.M. Shankaran, Shri. C. Ramakrishnan and Dr. K.N. Ganesh.

The task given to the Commission was extremely complex, as entire education system from pre-school to higher education and research, and every type of institution and agency had to be brought under its purview. It required two sittings for the commission to finalise its Terms of Reference and fix its work schedule. It required several days of intensive tour and consultations to collect evidence from people from every walk of life, besides requesting for and receiving detailed responses to the queries of the commission from numerous individuals and organisations. It also required months of intensive data collection done by several voluntary activists.

Issues before the Commission

Numerous knotty issues had to be tackled by the Commission in the process of finalising the Report. While all the members of the Commission were in general agreement that general education, in particular the common schools where the children of downtrodden people study, should get the priority in any alternative framework, it was not so easy to conclude how could one hope to reconcile the drive for social justice and egalitarianism with the pursuit of excellence. 'Excellence' has been used as an elitist concept, designed for the privileged few who attain the pinnacles of academic performance. Hence, an element of social segregation has always existed in any attempt to introduce excellence. However, it should be possible for any socially responsible education system to maximise the educational achievement of any individual irrespective of differentiation in class, caste, or gender, though not necessarily in the same direction. In order to achieve this, a totally different curricular perspective will have to be developed, with necessary changes in the school concept.

Another question was that of the language of learning and language of instruction. While majority of the children still study in the mothertongue, there appears to be a growing sentiment in favour of English. More than any linguistic or pedagogical argument, it is the feeling that English has become necessary for higher education that is behind this trend. Attraction towards 'decent' middle class employment within India and opportunities abroad has resulted in this preference. Despite this preference, English continues to be poorly taught, and majority of the students find the language one of the biggest hurdles. This also raises the issue of teaching a language and using it as the medium of instruction. In the public mind,

learning a language effectively means using it as the medium of instruction. This question figured prominently in the deliberations of the Commission also, and there was no unanimity of opinion regarding this matter in the responses received by the Commission. However, there was near unanimity in the view that mothertongue should be the main language taught as well as the medium of instruction and that there is a distinction between proficiency in language teaching/learning and using it as the medium of instruction.

A third question was that of vocationalisation of education. This figured prominently in all discussions, particularly in the background of the moves to establish job oriented vocational courses by the government as well as by the universities. Question was posed whether it will be possible to vocationalise education at all. Vocational education can only be at the level of training for certain trades. However, responses to the commission showed that the present 'academic' education does not create an aptitude for manual labour and acquisition of technical skills nor even a healthy respect for the dignity of labour. It only helps to add to the number of unskilled unemployed. Hence transformation of the present education system to develop an aptitude for manual labour and acquisition of practical skills becomes necessary. System of evaluation was another matter of concern. The respondents pointed out that the examination system was one of the major reasons for the deplorable state of education. However, severe and often relevant criticisms were made against alternate methods of evaluation, such as internal assessment. How to develop an evaluation system that would truly facilitate the process of learning was another matter of serious discussion.

Forms of management and financing figured substantially in the deliberations of the Commission. In a structure where plurality of managements is recognised, setting common standards becomes an arduous task. This becomes even more so as the constitutional protection to minorities has been used as a shield by managements to ensure their operative freedom, particularly regarding their mode of appointments, admissions, accounts etc. The historical experience of Kerala has also shown that efforts to ensure common standards have not fully succeeded. However, there was near unanimity in accepting that some common standards were necessary, without violating the principles of social justice and due protection for the minorities.

This problem became more important with reference to the current trends of commercialisation of education through the so-called 'self financing' or 'cost sharing' institutions. Such institutions come into being under various pretexts, the Govt pleading its helplessness being unable to increase its funding, widespread "demand" for professional and job oriented courses, and the argument that an outflow of resources to similar institutions in other states (eg. Karnataka) has to be checked. Whatever be the reason, self financing institutions became a major activity for the various Govt 'undertakings' (such as IHRD and Lal Bahadur Shastri Institute) as well as several universities. Private entrepreneurs also did not miss the opportunity for raising an institution with little or no initial investment, as many could be raised through deposits and capitation fees. This resulted in one of the major debates on educational financing, a matter dealt by the Commission in some detail.

An offshoot of the debate was the role of the state. There was widespread criticism that the state was withdrawing from the field of education, under the dictates of the WTO/World Bank regime. Some of the respondents to the Commission were strongly opposed to the withdrawal of the state, but others seemed to think that given the financial constraints this was inevitable. However, there is the need to stop and reverse the rampant commercialisation for which the state had to play its role, both in its supervisory and

financing capacity. What should be the extent or the limit of state intervention was another matter that came under the consideration of the Commission.

Democratisation in education was another major point of discussion. Kerala has a better track record in developing democratic institutions in education, but recently such institutions have come under severe criticism. They have been accused of mismanagement, bureaucratism and corruption as well as not promoting and safeguarding academic interests. While studying these criticisms carefully, there is also need for preserving and expanding democratic institutions with a view to ensure social participation and accountability.

New possibilities for democratisation a rise with the development of Panchayati Raj institutions. The recent people's planning campaign has resulted in such institutions making great strides forward particularly with respect to social services. School education is already under the ambit of these institutions. Mechanisms for ensuring social evaluation and monitoring of educational institutions as well as providing facilities for teaching-learning process at the local level are important in this context.

Any debate on democratisation is accompanied by a discussion on campus politics. Politicisation of campuses has been decried by various eminent persons, educationists and academics. At the same time, there appears to be a sizeable opinion in favour of responsible political activity, particularly in higher education. Political and academic freedom has also been accepted as a cardinal principle in democratisation. The extent and limits to which politicisation of the campuses is desirable is another point of debate.

Democratisation also raises the issues of the marginal and deprived communities and also questions of gender. Any perspective of people's education will have to deal with social inequalities, and their impact on the structure of education , curriculum and pedagogy. The historical experience of Kerala's education has demonstrated that it is possible to do away with such issues and ensure a composite education process that promotes equal opportunities for all. But these achievements are not without its drawbacks, weak points and even malformations. The problem will have to be addressed carefully.

The Commission presented its Preliminary Report in February 1997 and proceeded to work on its Final Report. All the issues that were outlined above were considered by the Commission and alternative perspectives arrived upon, on the basis of the existing evidence and the given constraints, both social and pedagogical. The Commission has, as far as possible, tried to make its suggestions and proposals realistic and feasible, although it is always possible to have visionary adventures, particularly in the field of education.

The Commission has also desisted from supplementing the Report with a specific set of recommendations. The Commission has tried to problematise a set of issues, arrived instead a set of proposals which could be worked upon and also tried to raise another set of issues, which the Commission feels, should be generally discussed and debated among the people. In this sense, it is an open ended Report, intended to generate debate and concrete actions from the people's perspective.

Work Diary of Kerala Education Commission 1996-1998

November 18, 1995: Constitution of the Kerala Education Commission was formally announced in the *Vidyabhyasa Jana Sabha* (People's Assembly for Education) held at Thrissur.

March 23, 24, 1996: The first meeting of the Commission took place at Bharat Tourist Home, Ernakulam. The Commission had a preliminary discussion on the issues involved in the education system and also on the Terms of Reference set for the Commission.

The Commission stressed the need for a database and also for Task forces that would be involved in assisting the Commission.

July 12, 13, 14, 1996: The Commission had its second sitting in Thiruvananthapuram. The sitting was held (a) to finalise the Terms of Reference, (b) to define the scope of the First Report, (c) to form the various Task forces and to fix their agenda; and (d) to interact with interested groups and senior personalities.

The Commission finalised the Terms of Reference and discussed the structure of the First Report. It also adopted a work division among the commission members. The Commission also finalised the Task forces that would assist its work. The Commission interviewed Sri.E.M.S.Namboothirirpad, and several representatives of teachers, students as well as the Vice Chancellor of M.G.University.

October 3,4, 1996: The Commission divided itself into two groups and interviewed different sections of people, educationists, administrators, teachers and students at various district centres and university centres. The groups held interviews at Kannur, Calicut, Calicut University, Cochin University, M.G.University and Kerala University Campuses. The Commission was able to collect evidence from nearly 400 people from all walks of life.

October 5, 6, 1996: The Commission held its third sitting at Ernakulam. The commission interviewed among others Sri.P.J.Joseph, the Minister of Education. It also discussed in details various aspects of the perspective on education, stages of education management and financing based on the two notes presented by Sri.P.K.Umashankar and Prof. K.N.Panikkar.

November 7, 8, 9, 1996: The Commission held its fourth sitting at Thiruvananthapuram. The Commission interviewed some eminent personalities such as Dr.I.S.Gulati, Dr.K.N.Raj, Ms.B.Hridayakumari, Prof.O.N.V. Kurup and Sri.P.Govinda Pillai. Prof.Anandalakshmy, commission member reported on the meeting with women activists. A position paper by KSSP was presented in the sitting which elicited detailed discussion. On the basis of the interviews, evidence collected, and on the discussions, the Commission decided to reorganise the Chapter framework of the First Report, which was now titled Interim Report. The Commission also decided to finalise the Interim Report by the end of January 1997.

February 3, 4, 5, 6, 1997: The Commission had its 5th sitting at the Centre for Development Studies, Thiruvananthapurram to finalise the Interim Report (now retitled as Preliminary Report). It read all the chapters and decided to present it as its preliminary tentative Report.

February 7, 1997: Dr.Ashok Mitra released the Preliminary Report by presenting a copy to Sri.M.Vijayakumar, speaker, Kerala Legislative Assembly. The function was attended by the commission members, Sri.P.K.Umashankar, Prof. K.N.Panikkar, Dr.C.T.Kurien and Prof.M.Vijayan.

April 3, 4, 5, 1997: The Commission had its sixth sitting at Ernakulam. The objective of the sitting was to interview the representatives of Private Managements, both college and school, and to arrive at a clearer understanding of the issues regarding management.

June 20, 21, 22, 1997: The Commission had its seventh sitting at Thiruvananthapuram. It reviewed the Preliminary Report and considered certain modifications. Several members including the Chairman offered critical comments which would have to be considered before finalising the Report. The Commission also interviewed several Government and University officials.

September 20, 21, 22, 1997: The Commission held its eighth sitting at Alwaye. The Commission discussed the revised draft of the preliminary Report circulated before the Sting. It discussed in detail the major additions/deletions to be made in the chapters. Ir reorganisation and editing of the Report, a sub committee consisting of Dr.C.T.Kurien, St.P.K.Umashankar and Prof.S.Anandalakshmy was constituted. All the comments and Sygestions of the commission members were to be forwarded to this committee.

¹ corporating further changes, the final report was sent to press during December '98 ¹ mediately after getting the approval from the Chairman.

¹eetings of the Task forces: Meanwhile the Task forces constituted to assist the 5 mmission met on the following dates.

ugust 15, 1996: General meeting of the Task forces at Thrissur.

ptember 8, 1996: Meeting of the Task force on Management (School Education and Higher lucation) at Thrissur.

eptember 14, 1996: Meeting of the Task force on Higher Education at Ernakulam

eptember 14, 1996: Meeting of the Task force on Vocational and Technical Education at Thrissur.

eptember 15, 1996: Meeting of the Task force on Secondary Education at Thrissur

ovember 6, 1996: Meeting of the Women's Activists and Academicians at Thiruvananthapuram.

ovember 23, 24, 1996 : Workshop on Stages in Education at Thiruvananthapuram.

anuary 2, 3, 1997 : Discussion on curriculum approach at Thrissur.

anuary 3, 4, 1997: Meeting with women's activists at Calicut and Thrissur.

Cerala Sastra Sahitya Parishad

Foreword

The Kerala Education Commission was set up in March 1996 by the Kerala Sastra Sahitya L Parishad for enquiring into the problems facing the State's educational system and for suggesting the future direction it should take. The Terms of Reference assigned to the commission were comprehensive in nature with nearly every aspect of the educational syster included in it. As the commission commenced its work, it realised that such an intensive examination of each of the issues involved was no easy task. The experience of Kerala in the field of education has been markedly different from that in other parts of the country, with it achievements in some areas - such as primary education and women's literacy - equating thoe of even with several developed countries. At the same time, lacunae exist in a number of important areas. The need for improving the quality of education and levels of performance ^s obvious. The problems besetting educational management and financing are however much more acute. There is also the problem of combining academic excellence with equitable distribution of educational opportunities already largely attained. Each such issue has to be analysed against the background of the changes in Kerala society and state administration in the course of the last few decades. Of equal, and perhaps greater relevance is the challenge of the ongoing experiment in decentralised planning and its interrelationship with education at the grassroot level.

To clarify its ideas on the underlying issues, the commission held several sittings to collect data from and assess the opinion of, individuals actively engaged in the educational sphere. It also met representatives of various public organisations as well as a cross section of citizens interested in the problems of education. Members of the commission toured all over the state obtaining data from the districts, as also from university centres. On the basis of its studies and observations till then, the commission released its preliminary report in March 1997.

Even while submitting the preliminary report, the commission was fully aware of its shortcomings. It had succeeded in setting forth a general perspective for the curricula to be adopted at different levels and fields of education. The details of the course of studies it however felt were to be left to the judgement of a committee of experts in each field. That apart, the commission also encountered problems in making recommendations on the restructuring of educational management and financing in the state. The challenges confronting the state in this area are complex and multidimensional, and do not present a readymade solution within the ambit of existing state legislation. The commission found that it could state its position on what is feasible under the given circumstances; the articulation of what is desirable is a much more difficult proposition.

The commission therefore undertook a further round of interviews, seeking information and

obtaining clarification from persons closely associated with educational management and financing including representatives of private management. The tentative conclusions the commission has arrived at, taking into account the state of Kerala's economy and the educational requirements of today, are incorporated in the present report.

On this major issue of management and financing of the educational sector, the commission has no illusion that the conclusions it has reached will receive universal acceptance. Since the commission was constituted by a people's science organisation, its primary responsibility, members of the commission felt, was to the people of Kerala. It believes it is its duty to project for the people of Kerala a perspective of educational progress in the state which could be debated and discussed within the community, thereby enabling the latter to make concrete recommendations to the government. The commission has accordingly refrained from including a section on 'Recommendations'; these, in its judgement, are better left to the judgement of the people of Kerala. However, we have taken there liberty to pose a set of issues on which the public will have to concentrate their debate so as to arrive at meaningful conclusions and action programmes in the context of wide ranging reforms that are being brought about at various stages of education in Kerala.

Scores of citizens have given evidence and supported the commission in the course of its work. A detailed list of names of such individuals is included as an appendix to this report. The commission would like to thank in particular the Education Minister of Kerala, Sri.P.J.Joseph, the Secretary for Higher Education, Sri.N.Chandrasekharan Nair, the Secretary for General Education, Sri.K.Jayakumar and the Director of Public Instruction, Smt.Lida Jacob, for assisting it in various ways. The commission is also thankful to the Vice Chancellors of Kerala, Kozhikode, Mahatma Gandhi, Kannur Universities as well as the Kochi University of Science and Technology for sharing their views with the commission and providing it with local hospitality. The commission in addition wants to express its gratitude to important cultural and political personalities in Kerala, as also to people from all walks of life, too numerous to be counted, who readily shared their views with the commission.

The Report could not have been completed without the wholehearted co-operation of the activists of the Kerala Sastra Sahitya Parishad. The commission was assisted by a secretarial team consisting of Dr.M.P.Parameswaran, Sri.C.P.Narayanan, Dr.R.V.G.Menon, Sri.O.M.Shankaran, Sri.C.Ramakrishnan and Dr.K.N.Ganesh; the two last-mentioned friends worked with the commission on a full-time basis. We are grateful to each one of them.

The commission strongly holds the opinion that any final decision on the course of education to be followed in Kerala will have to be taken by the people of Kerala themselves. In all humility, the commission therefore submits this report for their consideration.

Ashok Mitra Chairman

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Abbreviations

AICTE	-	All India Council of Technical Education
AKPCTA	-	All Kerala Private College Teachers Association
B Pharm	-	Batchelor of Pharmacy
BA	-	Batchelor of Arts
BAMS	-	Batchelor of Aurvedic Medicine & Surgery
BCom	-	Batchelor of Commerce
BDS	-	Batchelor of Dental Surgery
BEd	-	Batchelor of Education
BHMS	-	Batchelor of Homoeopathic Medicine & Surgery
BRC	-	Block Resource Centre
BVSc & AH	-	Batchelor of Veterinary Science & Animal Husbandry
CBSE	-	Central Board of Secondary Education
CCRI	-	Central Coir Research Institute
CDS	-	Centre for Development Studies
CESS	_	Centre for Earth Science Studies
CIFT	-	Central Institute of Fisheries Technology
CISCE	-	Council for the Indian School Certificate Examination
CLASS	-	Computer Literacy and Studies in Schools
CPCRI	-	Central Plantation Crops Research Institute
CRC	-	Cluster Resource Centre
CRRI	-	Compulsory Residential Rotating Internship
CTCRI	_	Central Tuber Crops Research Institute
CTF	_	College for Teacher Education
CUSAT	_	Cochin University of Science and Technology
CWRDM	_	Centre for Water Resource Development and Management
DCE	_	Director of College Education
DDCE	_	Deputy Director of Collegiate Education
DDE	-	Deputy Director of Education
DIFT	-	District Institute of Education and Training
DM	-	Doctor of Medicin e
DOE	-	Department of Environment
DPA	-	Direct Payment Agreement
DPEP	-	District Primary Education Programme
DPI	-	Director of Public Instruction
DRU	_	District Resource Unit
DST	-	Department of Science and Technology
DTF	-	Director of Technical Education
DVHSF	_	Director of Vocational Higher Secondary Education
FCF	-	Farly Childhood Education
FT	-	Educational Technology
GDP	-	Gross Domestic Product
HSA	_	High School Assistant
IASE	_	Institute of Advanced Study in Education
ICAR	_	Indian Council of Agricultural Research
JCSF	-	Indian Council for Secondary Education
ICSCP	-	Indian Council of Social Science and Personal
אפפטו	-	Institute of Human Descures Development
	-	Institute of numan Resource Development
IIVIG	-	mulan medical Council

	IMR	-	Infant Mortality Rate
	KAU	-	Kerala Agricultural University
	KER	-	Kerala Education Rules
	KFRI	-	Kerala Forest Research Institute
	KSSP	-	Kerala Sastra Sahitya Parishad
	LBSIST	-	Lal Bahadur Sastri Institute of Science and Technology
	LP	-	Lower Primary
	MA	-	Master of Arts
	MBA	-	Master of Business Administration
	MBBS	-	Batchelor of Medicine and Batchelor of Surgery
	MCA	-	Master of Computer Application
	MC	-	Master Chirurgery
	MD	-	Doctor of Medicince
	MDS	-	Master of Dental Surgery
	MEd	-	Master of Education
	MG uni	-	Mahatma Gandhi University
	MPH	-	Master of Public Health
	MPhil	-	Master of Philosophy
	MSc	-	Master of Science
	MTech	-	Master of Technology
	MVSc	-	Master of Veterinary Science
	NCERT	-	National Council of Educational Research and Training
	NCVT	-	National Council for Vocational Training
	NGO	-	Non Governmetal Organisation
	NIEPA	-	National Institute of Educational Planning and Administration
	NTMIS	-	National Technological Manpower Information System
	PD	-	Primary Departmental
	PF	-	Provident Fund
	PhD	-	Doctor of Philosophy
	PSC	-	Public Service Commission
	PTA	-	Parent Teacher Association
	RRI	-	Rubber Research Institute
	RRL	-	Regional Research Laboratary
	SC	-	Scheduled Caste
	SCERT	-	State Council of Educational Research and Training
	SCTIMST	-	Sree Chitra Thirunal Institute of Medical Science and Technology
·	SDP	-	State Domestic Product
	SIE	-	State Institute of Education
	SSLC	-	Secondary School Leaving Certificate
	ST	-	Scheduled Tribe
	TBGRI	-	Tropical Botanical Garden and Research Institute
	TIFAC	-	Technology Information Forecasting and Assessment Council
	TIC	-	Teachers Training Course
	FII VOC	-	leacners Training Institute
	UGC	-	University Grants Commission
	UNESCO	-	United Nations Educational, Scientific and Cultural Organisation
	UP	-	Upper Primary
	VHS	-	vocational Higner Secondary
	VSSC	-	Vikram Sarabhai Space Centre

Chapter I Introduction

ny assessment of education in Kerala has to first take into account its 1.1 outstanding successes 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. 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 China.

A number of factors explain Kerala's success in the educational sphere even 1.2 as the rest of the country has lagged far behind. One must, for instance, mention the role played by extensive missionary activities and by the governments of the erstwhile princely states of Travancore and Cochin in the late nineteenth century, and the impact of diverse social reform movements in the early part of the twentieth century. These led to a mushrooming of schools and colleges across the state.

The incentives provided by the job opportunities that opened up inside Kerala as well as by the movement of labour from Kerala to other parts of India and to other countries, constituted another important factor. The rise of democratic forces in Kerala in the middle decades of the century contributed equally to the acceleration of educational progress. Table 1.1 gives a measure of this progress in terms of the growth of literacy.

	Giowan of Interacy in Relata										
Year	Literacy Rate (Men)	Literacy Rate (Women)	Total								
1901	19.15	3.15	11.14								
1911	22.25	4.43	13.31								
1921	27.88	10.26	19.02								
1931	30.89	11.00	21.34								
1941	-	-	-								
1951	49.79	31.41	40.47								
1961	54.97	38.90	46.85								
1971	66.62	54.31	60.42								
1981	87.74	75.65	80.42								
1991	93.62	86.17	891								
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	Tal	ole 1.1		
Growth	of	Literacy	in	Kerala

Source: Economic Review, Kerala State Planning Board, 1994.

The nineteenth-century initiatives taken by the missionaries and the princely 1.3 regimes of Travancore and Cochin were within the broad context of the colonial system. Education was seen as the principal instrument for developing an intermediate class that could assist in civil administration and ensure a steady supply of lawyers, doctors and teachers. Further, the missionaries initiated a drive for imparting education in the indigenous language, which led to a rapid expansion of reading and writing in Malayalam. The princely states of Travancore and Cochin also promoted education in Malayalam. The expansion of Malayalam education in Travancore resulted from these efforts is given in Table 1.2.

	in Travancore			
Year	Numb	No. of students		
	Govt. Schools	Aided Schools	enrolled	
1873 - 74	177	20	9,637	
1883 - 84	223	440	35,588	
1893 - 94	255	1,388	57,314	
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Table 1.2 Growth of Malayalam Education in Travancore

Source: T.K. Velu Pillai, Travancore State Manual Vol.III, Government Press, Trivandrum, 1990 p.695 (Slightly adapted).

The concomitant gains in social progress were substantial, and served to establish the fact that a breakthrough in education leans heavily on the use of the mother tongue as the medium of instruction.

Based on the foundation laid in the latter half of the nineteenth century. further advances took place in the first half of the twentieth century, resulting in a marked rise in the level of literacy and in the number of formal schools. This was in tandem with, and a byproduct of, the social transformation that was taking place all over Kerala. Reform movements, especially among the Ezhavas and the downtrodden classes, the awakening of a nationalist consciousness, and advances in the mobilisation of the working class and the peasantry combined to bring education to the fore of the agenda. School education was opened up to all sections of the population, including the downtrodden classes and women, a process that was supported by considerable 'private' initiative from social reform-oriented community groups, individuals and agencies who regarded education as a stepping-stone towards social identity and mobility. The influence of the socio-political movements was mainly responsible for the rapid spread of liberal and radical ideas among different sections of the people, which in turn created an across-the-board demand for education irrespective of the divides of class and community. The most revealing indicator of this trend was the rise in women's literacy, which increased threefold during 1931-51 and has not looked back ever since. The general trends in education during this period are shown in Table 1.3.

	Inst	itution	Enrolment	Expenditure of		
Year	Government	Private aided	Government Institutions	Private aided Institutions	the Government (Rs. thousands)	
1884 - 85	228	514	13.4	18.4	218	
1902 - 03	434	1013	49.4	56.6	641 (1904-05)	
1909 - 10	519	805	79.8	56.5	760	
1919 - 20	1116	1642	291.0	153.2	2853	
1924 - 25	NA	2108	241.8	382.5	3713	
1945 - 46	1192	-	393.5	431.5	6316	
1946 - 47	1723	2152	555.0	420.6	7853	
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 Table 1.3

 Growth of Institutions and Enrolment in Travancore (1884-1947)

Source: P.R. Gopinathan Nair: Education and Economic Change in Kerala, Centre for Development Studies, Trivandrum, 1978.

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Increasing demand for education fostered awareness of the necessity to 1.5 invest in education. Schools began to be established on a large scale either directly by the government or through private initiative. The grant-in-aid schemes of the government facilitated this process, which gradually led to the emergence of the so-called aided sector. These schools drew sustenance from extensive public support, and many of them concentrated on education for the hitherto deprived sections, including women. To achieve optimum results in this direction, several experiments were undertaken to develop curricula on the basis of precise local requirements.

The milieu was such that education came to be identified as a symbol of modernity by society at large. The school became, by general acclaim, the centre of social activity in the locality, and the schoolmaster was the quintessential public person who combined knowledge with the noble ideals of social service. The curricula adopted in schools were the same, irrespective of the composition and social outlook of the management; they reflected the major concerns of colonial education. Even unrecognised and indigenous schools were absorbed into the mainstream education system.

The cultural changes that were taking place simultaneously facilitated the 1.6 accelerated spread of school education. The focal point of the evolving school system consisted of institutions where Malayalam held pride of place. It was not merely the language used for purposes of instruction; it came to articulate a new cultural process with roots in patriotism and in liberal, even radical, ideals. A wide array of printed books, journals, and newspapers began to appear in Malayalam; reading rooms and libraries set up in the remotest villages ensured their dissemination. Given the fact that the social scene of the early twentieth century was dominated by strong nationalist and radical movements, the extensive use of Malayalam helped to provide a distinctly anti-colonial flavour to the entire educational process.

At the close of the first half of the twentieth century, a number of trends 1.7 were clearly evident. First, spread of literacy and increasing access to education among the common people were accepted as a hallmark of progress. Second, notwithstanding the overwhelming use of Malavalam in the school system, western models of education were reckoned as superior to indigenous systems. Third, education was not yet directly related to expanded employment opportunities, except in the case of professional occupations such as those of lawyers and teachers. Little serious effort was made to set up institutions specialising in profession-oriented technical education. Among the middle class, the linkage between education, social status and power continued to be strong. This was reflected in the adoption of English as the medium of instruction in secondary and collegiate education even as Malayalam was accepted as the medium in primary schools. Education at the local level provided a contrast though, and was instrumental in promoting cultural centres, reading rooms and libraries, socio-cultural organisations, peasant, working class and youth organisations. Political movements too drew sustenance from this environment.

The education system in Kerala had by this time assumed a pattern in 1.8 which the majority of educational institutions were run by non-governmental agencies, generally described as 'private, aided'. They were the result of the drive for education initiated in the nineteenth century by missionaries, various

denominational bodies, community reform organisations and individuals. Several of these institutions were set up on land donated by the concerned individuals, and were maintained by funds mobilised from the people at large. There were fewer government schools than aided schools. A third category of 'recognised' schools, who received no subsidy from the government but were accorded permission to prepare students for the state examinations, also existed. But they were as yet small in number. What was equally noteworthy was the relatively small number of secondary schools and institutions of higher learning.

1.9 A rapid expansion in secondary and collegiate education took place in the fifties and sixties (see Table 1.4). There was a quantum jump in the number of high schools, with a corresponding increase in the number of students appearing for the Secondary School Leaving Certificate (SSLC) examination. Several colleges, including engineering and medical colleges, were established. Consequent to the decision in 1964 to locate pre-degree courses in colleges instead of in secondary schools, there was a rise in the number of colleges, which in turn led to the establishment of a new university in the Malabar area. Enrolment at the primary school level increased rapidly, and by the eighties, it was near-universal. The drop-out rate declined visibly, and at the other end, the number of applicants to pre-degree courses far exceeded the number of seats available in colleges. A shift system had to be introduced in existing colleges, and many new colleges came up all over the state.

1.10

This major quantitative expansion in education was accompanied by a sociopolitical development of immense significance. The broad consensus on the purpose and content of education which was a legacy of the pre-independence phase, began to fade as Kerala society experienced the beginnings of a process of fragmentation linked to the assertive emergence of a communal consciousness. The broad understanding, perhaps tacit, which till now had joined various social forces in favour of the educational advancement of the state, was coming apart. Tension and apprehension filled the air, and even matters such as regulating the appointment of teachers by bringing them under the disciplinary ambit of a public agency met with stiff resistance. Non-governmental agencies, who had once constituted the vanguard of educational progress, became indistinguishable from groups who defended their rights as private 'proprietary' agencies; these rights often shaded into the claimed prerogatives of a particular community. Questions relating to minority rights became major points of contention. What was worse, the education agenda became an issue of confrontation among political combatants in a splintered society.

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Level / Year	1960-61	1965-66	1970-71	1975-76	1981-82	1985-86	1996-97
Collegiate (General,							
Technical, Professional)	1.3	2.8	2.6	3. 3	4.9	5.1	5.8
Secondary	10.0	14.4	14.7	16.6	22.2	22.3	27.30
Primary	88.7	82.8	82.7	80.1	72.9	72.6	66 .90
Total	100	100	100	100	100	100	100

Table 1.4 Structure of Enrolment in Kerala 1960-61 to 1996-97

Source: Statistics for Planning (various issues), Kerala State Planning Board.

By the seventies, with universal enrolment of children in the schoolgoing 1.11age group, the question of access to education had been resolved for most sections of the population. But soon the realisation spread that, at the grassroots level, universal enrolment contributed little to the progress of agriculture and industry. Economic backwardness persisted over wide stretches of the state, stagnation marked industry and agriculture, and employment opportunities were few and far between. Ouestions were raised about the relationship between the fulfilment of educational targets, on the one hand, and the attainment of social and economic goals, on the other. How far, for instance, did education help to develop the process of production? Conversely, did universal enrolment in fact contribute to the stagnancy of production by fostering a bias against manual activity among the peasantry and the working class? How should education be restructured in the context of universal enrolment and low drop-out rates, so as to realise the full potential of students, while at the same time serving the cause of social justice? Has education contributed to the development of women as full social persons, despite the fact that they have left men behind both in terms of retention in courses and educational achievement?

These issues do not seem to have been thought through in a meaningful 1.12manner. The fracturing of politics apart, there were a number of other reasons for this apathy. Influential sections within the academic community could not be persuaded that pinning their faith on increasing the number of schools, colleges, students and teachers, etc., would no longer be of any avail. Optimism of a vague nature that quantitative expansion of education would somehow give rise to employment opportunities persisted. But the assumed causation was not satisfactorily explained. There was a reluctance to engage in public debate on the need or otherwise of restructuring education, since such a debate, it was felt, was bound to involve questions of caste, religion and gender, as well as 'sensitive' issues like the mode of appointment of teachers and admission of students, and the role of private institutions and agencies. Private agencies could hardly rise above sectarian interests of caste, religion or individual managements, to take a comprehensive view of education. The multiplicity of organisations, each owing allegiance to particular political groupings among teachers, students and non-teaching staff, and the intense competition among them did not promote healthy discussions on matters that transcended individual interests. The political leadership, on two sides of the major political divide in Kerala was also either unable or unwilling to deal with the hard decisions that educational reforms in the state entailed.

Another major weakness was seen in the mechanical application of an all- 1.13 India pattern in the drafting of syllabi and textbooks. Kerala was one of the first states in India to introduce the National Council of Educational Research and Training (NCERT) syllabus and almost all subsequent revisions of the central syllabus have been faithfully incorporated in the state syllabus. At the behest of all-India bodies, similar changes were introduced into teachers' training and educational evaluation programmes as well. However, except for the lower primary classes, no state curriculum was prepared for any level. Little effort was made to adapt curricula and syllabi in the context of universal enrolment and the current socio-economic realities in the state. There was no initiative to relate education to the challenges posed by production processes.

Introduction

1.14 The mechanical application of an all-India pattern became even more manifest after education was brought under the Concurrent List in 1976. National policies are after all conceived on the basis of a consideration of the problems of India as a whole. The tendency to accept central models without taking local realities into account has prevented Kerala from charting its own course in the sphere of higher education. An impelling factor appears to have been the anxiety to ensure the flow of additional funds through adherence to national schemes. The state has not been particularly successful in that either, as many centrally sponsored schemes have not been effectively utilised.

1.15 Meanwhile, the problem of quality in education has been brought into sharp focus, especially in the context of the relatively poor performance of Kerala students in all-India competitive examinations of different kinds. A recent study by the NCERT showed that Kerala ranked very low among the Indian states in terms of learning achievement of primary school children.* This seems to have overshadowed, at least in part, the major achievements like universalisation of elementary education. In addition to the concern and often despair over the real and perceived deterioration in quality, this has also led a section of the middle class to turn to private schools in the recognised unaided sector, predominantly with English as the medium of instruction. The tendency towards commercialisation of education in Kerala has also been accentuated by the recent trends towards 'globalisation' and 'liberalisation' with an almost total emphasis on the market forces. Those who can afford education offered at a price are increasingly opting out of the mainstream education system. Even those who cannot, tend to rely on private tuition, often given by teachers employed in government or aided institutions. Education has increasingly begun to be looked upon as a race, aided by money in the case of those who have it, towards better employment, preferably in medical, engineering and such other prestigious and lucrative professions. The entire educational process has been disturbed in the bargain, with the mainstream educational institutions becoming progressively irrelevant to middle-class dispositions. The chaotic state of educational transactions in many of these institutions has only strengthened this trend.

1.16

Societal control of educational institutions, especially universities, has also become a subject of considerable, often acrimonious, discussion. The democratic principle that guides the constitution of the syndicate and the senate in universities, enshrined as the cardinal principle of the management of higher education during the sixties, has come under considerable criticism. As a result the elected component of the administration of universities in Kerala has varied widely. The syndicates of older universities, such as the Universities of Kerala and Calicut, have an overwhelming majority of elected members, while Mahatma Gandhi University, set up during the eighties, has a syndicate made up of solely nominated members. However, the problems associated with the role and functioning of the syndicate in all these universities are not entirely dissimilar. The discussions on democratic control often focus on form rather than on substance. Societal control of education is essential in a democratic society, but it should not lead to undue direct interference in normal administrative and academic activities. Educational institutions should be sensitive to and respond to societal needs and concerns without compromising basic academic freedom and autonomy. Furthermore, in much of the discussion, the important problem of internal democracy within educational institutions does not appear to

* Jangira N.K. 'Learning Achievements of Primary School Children in Reading and Mathematics' Research Based Interventions in Primary Education, New Delhi, NCERT,1994, PP 59-84.

have received adequate attention. The nature, form and content of societal control and internal democracy at different levels of education in Kerala are yet to be clearly formulated.

To understand the turnabout from the views and attitudes held high thirty 1.17 years ago, it is necessary to look into the changes that have occurred in the socio-

political milieu. An emphasis on universal access and quantitative expansion alongside a belief in the intrinsic liberating role of education, constituted the idiom of the sixties; educational policies were framed accordingly. The stress was on widening the scale of education. Ensuring quality was a task delegated to teachers; the society reposed faith in the academic community to carry out its duties. This optimism was linked to the enshrinement of the principles of academic freedom, university autonomy and democratic rights for teachers. Those who cherished the idea of universal literacy, thereby ensuring opportunities of advance to the most downtrodden sections of society, and those who wanted educational institutions to be established as citadels of democracy dreamed their separate dreams, but the dreams converged in the formulation of an educational system that was liberal as well as radical.

In a society divided by class, caste and gender, education functions under 1.18 many constraints. Growth of access to education has meant that children belonging to all social classes are now enrolled in schools, a process that gained a great deal from the agrarian reforms that have been underway since 1957. But new forces have been unleashed precisely because of the changes ushered in by the transformation in the field of education. Rising community consciousness has ensured that all castes and communities play a pronouncedly participatory role in the educational arena. More important, these emerging social divisions are finding expression in new forms of pressure groups and political formations. It is no surprise that the academic community has been deeply affected by these tendencies. A fragmented social structure cannot but invoke a fractured academic community marked by conflicts of approaches and ideas.

There is also the problem of curriculum content. The liberal idea of 1.19 education proceeded on the assumption that academic pursuits are carried out for their own sake, for the advancement of knowledge and skills. However, the general experience is that this ideal has been realised only in a few institutions known for their excellence. Elsewhere, the stress on universalisation has affected quality, which contrary to expectations did not grow on its own. Hopes were then pinned on an alternative genre, vocational education, which was intended to draw away certain sections of students into job-oriented training courses. The experiment to combine vocational activity with academic pursuit, however, did not really take off. Vocationalisation, with its stress on labour skills, was out of tune with the dominant middle-class concern of social advancement.

Education has thus remained frozen as an inert 'academic' exercise, 1.20 aggravating the problems confronting a disturbed polity. Even while the children of industrial workers, the peasantry, fishermen and craft workers are undergoing academic training, a question mark hovers over the preservation and sustenance of their livelihood. Industrial production has been more or less stagnant in the state since the seventies; agriculture and agro-based industries are not only stagnating,

but showing a net decline. The children of agricultural labourers, craftsmen and workers who go through the process of education, are consequently getting dissociated from the ambience of traditional occupations but are unable to obtain stable gainful employment elsewhere. Those who do find employment are engaged in work that has nothing to do with the education they have received. The only education in the liberal mould which has links with a gainful profession continues to be in the fields of medicine, engineering, business administration and law, followed by teaching, nursing, laboratory assistance and so on. The affluent classes have made a beeline for the first three, while children from poorer families opt for humbler openings. In both instances, the available opportunities fall way behind the demand.

1.21

Another side to this picture is that, given universal enrolment and the 'allpromotion' scheme, the retention rate in schools is very high up to the ninth standard, after which there is a sharp fall; a substantial section of the students fail the SSLC examination. A large percentage of those who do survive fail the pre-degree courses. Thus, a large majority of the students do not manage to achieve the goals of the liberal education system. Moreover, they fail to attain the basic skills or knowledge that would render them socially useful and prepare them for gainful livelihood. They form a large section of the unemployed in Kerala, and are a living demonstration of the misguided aims and objectives of education. While popular thinking is filled with the anxieties and concerns of the dominant middle classes, little heed has been paid to the substantial sections who are being pushed out of the system through the process of examination and elimination, and who mostly belong to the downtrodden sections of Kerala society.

1.22

The evolution of the educational system in Kerala thus reflects a complex interface between social processes and education. The issues that need to be dealt with in the contemporary educational scene in the state may be listed as follows.

(i) The birth rate in the state has been coming down, due to, among other things, rising levels of female education. A consequence of this has been a fall in the number of children in schools, especially from the lower classes. Enrolment at the lower primary level peaked in 1988 and has been coming down since then. At the upper primary level the peak was reached in 1992, with enrolment coming down thereafter. This has led to the problem of 'uneconomic schools' and 'protected teachers'.

(ii) Starting with the sixties, Kerala had aimed to achieve universal primary education and make education free up to the high school level at first and subsequently up to the pre-degree level. Except in fairly identifiable pockets (among the Scheduled Castes and Scheduled Tribes in some districts of Malabar and among the fisherfolk along the coasts), universal primary education has become a reality. Measures like the Noon Meals Programme and the 'all-promotion' scheme have helped in attainment of high retention levels in schools. In terms of universal school education and retention levels, therefore, Kerala is way ahead of other states in the country. However, these achievements are accompanied by two problems: first, a fall in standards at all levels; second, a shockingly high percentage of failures at the SSLC level (in spite of very liberal moderation), which is a manifestation of the low level of preparation of the students till then and their consequent inability to cope with even a modest sifting procedure. The state thus faces the problem of a large number of children, 15 or 16 years of age, being rejected by the school system.

(iii) The poor quality of schooling in general has led, in the past decade or so, to the emergence of a number of private schools with affiliation to Boards of Education outside the state that charge high fees, claim to provide better education and almost invariably use English as the medium of instruction. These schools, naturally, concentrate on children from affluent households and with an adequate educational background. At the economic, cultural and pedagogic levels the gap between such institutions and other schools in the state has increased in recent years.

(iv) This phenomenon is also symptomatic of a wider problem. Kerala has emerged as the leading state in the country in terms of public spending for social services in general and education in particular. Though in terms of percapita income, Kerala has remained below the all-India average, public spending on education both as a share in the state's budget and as a percentage of the state's domestic product (SDP) have been among the highest in the country. While the state has received international acclaim for this privileged treatment of education, it is faced with a fiscal crisis. The budget of the government, particularly the revenue budget, has been showing excessive deficits and the state is unable to cope with the increasing demand for expenditure on education. This, it is commonly held, is partly responsible for the falling standards of education, and institutions run by the government are direct victims. The inability of the public exchequer to meet anything more than the minimal requirements of the government's commitment to aided private institutions is also being openly admitted. Since these problems have surfaced during a period of changing perceptions about the role of the government in general and about its responsibilities towards education and other welfare activities, they have led to a broader (though often not deeper) discussion of finding ways to meet the costs of education at all levels, more particularly at higher levels and for professional courses. An emerging view is that at least in respect of professional courses, where the benefit accrues almost entirely to the direct participants, a strong case exists for them to meet the entire costs. 'Self-financing educational institutions' have put forward this argument as the rationale for their existence and as a justification for their fee structure.

(v) Some questions have also come up relating to the management of education. Are matters relating to education to be treated as social issues, with society at large and the state as its operational agency laying down the major principles and policies? Or are matters relating to education to be considered as the concerns of those directly involved in it, especially if they are also meeting the expenses involved? These questions are brought up in terms of a variety of issues and at different levels. For instance, should there be a common social policy about the medium of instruction in school, or should the decision be left to the children and their parents? If a professional college is being run solely on the strength of fees and other contributions collected from students, without any dependence on public funds, can it not devise its own admissions policy without reference to any external agency?

vi) Managerial questions of a different sort have also come to the fore. For over two centuries both the government and private agencies have been active in education. To begin with, when the government extended some financial support to private institutions, the latter were free to make their own decisions on the fee structure as well as admissions and appointment policies. But when the government

initiated the policy of making school education free in Kerala, the financial support to private schools had to increase and a grant-in-aid policy had to be systematically worked out. The government also had to make stipulations about admissions, particularly to ensure that those who were educationally backward were no longer neglected. With the role of the state in education thus increasing, it was but natural that the government would accept responsibility for payment of salaries to all teachers, including those in private aided schools. Who, then, would be responsible for recruiting and appointing teachers? How much and what kind of managerial power would private managements have, for they too carried financial responsibility for their institutions? In 1972, the government assumed responsibility for payment of salaries to all college teachers in the state and private colleges remitted to the treasury their tuition fee collections. After this, the issue of management became more of a contested issue, partly because the government did not want to infringe on the special privileges of institutions claiming 'minority rights', as provided in the Indian Constitution.

(vii) After the settlement of 1972, there has been a rise in the level and intensification of the 'communal spirit' in the educational sphere in the state. Earlier even though educational institutions belonging to particular religious communities (Christians in the initial period) had explicit religious curricula and schedules (such as prayers and teaching of the scriptures), they were quite open both in terms of admission of students and appointment of teachers. In recent years, however, a kind of competitive denominationalism has emerged in the private sector, partly because of the increase in the number of such institutions and the variety of positions they represent, but mainly because, after the 1972 arrangement, they have become explicitly jealous about projecting and defending their separate identities. Such tendencies have been reinforced by the community-based party politics in the state.

Another unintended consequence (which, however, could have been anticipated) of the 1972 arrangement was that the teachers had a sense of divided loyalties: to the institution in which they served, to the government which was their paymaster, and to the university which defined the nature of their work — a, situation that is not conducive to develop and maintain a commitment to knowledge and to students.

(viii) Underlying many of the issues mentioned above is the basic problem of the relationship between a democratic polity and the educational process. In the politically conscious state of Kerala, during the formative years of its polity, elections and expression of the will of the majority appeared to be the essence of democracy. In the fifties and the sixties, many well-intentioned politicians and educationists worked hard to introduce the electoral system into the educational sphere also. It is, however, easier to hold on to the forms of democracy than to cultivate its substantive aspects. The emphasis on form to the detriment of substance led to all sorts of perversions, which became entrenched in later years. A significant challenge that faces Kerala today with consequences for its future, is how to redeem the educational system from the excessive and unhealthy politicisation that has crept into it at different levels and how to nurture the spirit of a healthy democracy.

(ix) It will not be fair, however, to give the impression that the democratic encounter has only had negative results. Concern for the weaker sections and the

determination to pay special attention to those who had been neglected so far is a wholesome outcome of the democratic spirit. How these concerns are to be translated into practical policies is one of the major issues that needs to be resolved.

(x) Kerala society is currently experiencing the impact of two social forces pulling in opposite directions, both of which have a bearing on the educational system. The first is a process of external opening up of the economy, referred to as 'globalisation' in popular parlance. One of its features is a revolutionary change in information and communication systems. There is no doubt that in the years ahead the production, preservation and communication of knowledge will undergo radical transformation, and that, in turn, they will have unforeseeable consequences on pedagogy and the learning process. A second feature of the opening-up process is the wide range of contacts with other parts of the world, through increased trade, flow of funds, migration, job opportunities and the like, to which the people of Kerala have shown themselves to be exceptionally responsive. The society will undergo major changes, and there will be suggestions, ideas and demands from different sections within it. The educational system in the state too will have to gear itself to suit the needs and opportunities thrown up by globalisation.

At the same time, Kerala society is experiencing an equally powerful internal opening up process, the result of a conscious decision and concerted action to decentralise political power. Panchayati Raj institutions are being energised and enabled to draw in people in their respective localities to decide issues that directly affect their lives. School education in general, and primary education in particular, have already been brought under the purview of these agencies, allowing the people in a locality to make major decisions about the learning process in accordance with local needs and local resources. Matters relating to a just and democratic social order are sure to receive a new impetus in the light of these changes.

The social ethos in Kerala presently is, therefore, one of flux and dynamism 1.23 with many new challenges, tensions and opportunities. What is the role of education in this context? What guidelines can be suggested to render the process of learning meaningful to its participants and relevant to society at large?

It is as an expression of these concerns that the Kerala Education Commission 1.24 has been constituted by the Kerala Sastra Sahitya Parishath to conduct a comprehensive enquiry of the state of education in Kerala and put forward concrete proposals towards an alternative education system. The Commission, constituted in November, 1995 and formally convened in March 1996, was given the following Terms of Reference.

Terms of Reference

- 1. To undertake a comprehensive review of the existing education system in Kerala, at all levels, in government and private sectors, with a view to restructuring it, taking into account societal needs and priorities
- 2. To suggest ways in which social and cultural values can be incorporated in education for development of an egalitarian, just and sustainable social order
- 3. To identify the factors that facilitate the achievement of the goals of equity and excellence in education and suggest measures to strengthen them
- 4. To define the scope and objectives of each stage of education and consider the interlinkages among the different stages

- 5. To examine the existing curricula, media of instruction and methods of evaluation, and suggest changes wherever necessary
- 6. To review the existing methods of recruitment, training of teachers and methods of instruction and suggest necessary changes
- 7. To evaluate the system of management of educational institutions and to indicate the role of the state and the local government
- 8. To consider issues relating to the financing of education in Kerala and the role envisaged in this context for the government and private agencies
- 9. To suggest measures for ensuring people's participation and the active involvement of teachers, students and parents in the educational process
- 10. To identify the problems encountered by deprived sections and women in the sphere of education and propose measures to solve them.

Chapter II Towards a Perspective on Education

he Education Commission decided that in order to guide its deliberations it 2.1 needed to have a broad framework on which all the members were in general agreement. So a perspective with a high degree of consensus was evolved through preliminary discussions. The agenda of the Commission was not only to give a critique of the existing system of education in Kerala, but to suggest alternative approaches and positive strategies to revitalise it. Towards this end, the principles on which there was unanimity and which were considered nonnegotiable were discussed and articulated.

The Commission's main concern has been to move towards what may be 2.2 described as a system of people's education — one that transcends the prevailing biases and discriminations on the basis of caste, class, religion and gender. The imperative for such an approach arises from the fact that the educational system that emerged during the colonial period and which still continues, despite some attempted alterations, is highly selective and extremely discriminatory. The two major lacunae in the production and dissemination of knowledge under the colonial system of education (which prevailed even in princely states like Travancore and Cochin with regional variations and modifications) were: (i) it concentrated on the privileged sections of the society, (ii) it was alienated from the local culture. The former was the result of a policy that sought to create a buffer class between the foreign rulers and the masses in the country, a class that would collaborate with the rulers in disseminating their ideology. Consequently, access to education was limited to a few, leaving the majority of the population in a state of illiteracy. The content of education was drawn largely from an alien cultural and epistemological tradition. It adversely affected the ability of young minds to develop their creative potential. Apart from these serious drawbacks, the system also suffered from the bureaucratic and undemocratic character of educational administration.

Since independence, attempts have been made, as may be seen from 2.3 observations in policy statements and reports, to dismantle the colonial system of education in the country. However, only peripheral changes have been achieved so far and several features of the old system are still in place all over the country. Kerala is no exception, despite the initiatives taken by the government, professional bodies and voluntary organisations to effect a qualitative change.

Two important pre-requisites for developing and organising a system of 2.4 people's education are universalisation and cultural rootedness. To realise the former, the right to education, in principle, is a necessary, but not sufficient condition. That right has to be supported by a common education infrastructure that is accessible to all, regardless of social and economic distinctions. Universalisation is more than mere access to education; it includes the content of knowledge and its mode of communication. Without these, universalisation will not succeed in eliminating the existing social differentiations and asymmetrical power relations.

The problem may be illustrated with reference to the ongoing 2.5 communications revolution. In one sense, the changes taking place in the electronic media 'open up' the learning process and have the potential to universalise education.

But if the necessary infrastructure is not available, these changes will only be selectively available and will tend to exacerbate the already existing disparities in the access to knowledge. We also need to be aware of the colonising potential, both intellectual and cultural, of the communications revolution.

2.6 The development of people's education also depends upon the nature of the relationship between the learning process and cultural experience. Education in colonial India was conducted in English, and largely drew upon an alien cultural experience. It had no organic link with people's lives. For economic and political reasons, the quest for 'English education' has not waned but, rather, has gained momentum in independent India. In Kerala, it has been particularly noticeable in recent times. The question is not only one of medium of instruction (where the case for making the mother tongue the medium of instruction rests on the fact that language is an important repository and vehicle of the cultural resources of society), but of going beyond it and making the learning process draw upon the cultural and intellectual traditions of society without being insensitive to the world outside.

In order to relate education to life, it is necessary to link education to life's major activities, production being the most crucial among them. When education loses its link with the production process, an inevitable consequence is a divorce between the mental and the manual, with the latter almost invariably getting an inferior status. This dichotomy is starkly visible in Kerala and has several manifestations, an obsession with whitecollar jobs and a general reluctance to undertake manual labour being the most prominent. Creative interaction between the mental and the manual is integral to a socially responsive system of education because the two realms are complementary and mutually enriching. How the complementarity is to be actualised is not easy to decide, but one way to achieve it is to make manual work an integral part of the educational system.

If a link between education and the production process is necessary in order to relate it to specific aspects of social life, a new orientation to education cannot be achieved without also opting for a pedagogic revolution based on a holistic view of knowledge. The enormous increase in knowledge over the years has tended to fragment it. This is typified by the division of knowledge into the sciences, the arts and the humanities and the further fragmentation within these categories. Some measure of compartmentalisation of knowledge is a pedagogic requirement, but it can be, and often is, carried to a meaningless extent. It is important that this be prevented from happening at lower levels, by linking the learning process to the concrete social realities of children. At higher levels, where disciplinary specialisation is necessary, inter-disciplinary discussions must be insisted upon, again, in relation to social and physical realities.

For this purpose, a radical change in teaching is essential at all levels. Teaching now is mostly a one-way process of imparting information. The students are passive recipients, not active participants, in the exciting quest for knowledge. A change in the latter direction requires transformation of the classroom into a site of learning where both teachers and students are creatively involved — a change from teaching to learning.

2.10

2.9

The pedagogic practice called for is not unrelated to the extent of democratic space at the command of the academic community. This space is generally defined

Towards a Perspective on Education

2.7

2.8

in terms of representation within policy-formulating and decision-making bodies. This, however, is not sufficient. Democratisation, to be meaningful, has to embrace the academic sphere, ensuring freedom for creative involvement and initiative of teachers and students.

Education, broadly speaking, is a process whereby an individual matures 2.11 through socialisation. It enables human beings to locate themselves in relation to society and nature and to continuously engage with them in a creative and reflective manner. Equipping students for such an engagement by transmitting social and moral values and sensibilities, is one of the major concerns of education. What constitutes these values and what the nature of these sensibilities should be, are issues on which it is not easy to arrive at unanimity. Yet, it is possible to identify some of them in the light of the society we envision. Equality, justice and secularism integral to a democratic order, and respect for the environment necessary for sustainable development, for instance, are crucial to the well-being of contemporary Indian society. The education system may foreground such values, among others, as part of the learning process.

Equity and excellence are twin attributes of a system of people's education. 2.12 Equity in education entails equal opportunities for all, not only in access, but in conditions for performance. Equity in education can be brought into effect by the removal of prejudices transmitted through the accident of birth or the social environment, and in terms of special consideration for those who have been discriminated against in the past on such grounds. In this perspective, what is envisaged is a neighbourhood school, where children come together irrespective of class, caste or economic status. The learning in the school will be pitched at the child's level and a wide choice of interest areas and practices will be available. The guidance provided by qualified and understanding teachers will enable the child to identify and develop his/her own potential rather than making him/her feel that non-conformity will result in being left behind or pushed out. It is possible to take all children in this manner up to the Higher Secondary stage and provide continuing education in the form of facilities for upgrading knowledge.

While the conceptual and operational aspects of equity in education are 2.13 now widely recognised (though not always accepted or adhered to), excellence in education is not a properly understood concept. Far too often it is identified with individual merit allegedly established through some 'objective' process such as competition in an external examination. Such an interpretation, closely associated with an educational system that is confined to the upper crust of society, confuses externality with objectivity and overlooks the objective fact that children are not all alike, but are endowed with different aptitudes and capabilities. Excellence in education must then be considered in terms of measures adopted to bring out the best in each child, to build up his/her capabilities to educate himself/herself even after completing formal schooling, and above all, to prepare him/her to reflect meaningfully on life in an ever-changing social order. Thus, equity and excellence are both aspects that need to be developed and upheld in an educational system in order to make it universal and wholesome; they are not competing objectives with an unavoidable trade-off between them.

In essence, people's education is an important component of the larger 2.14 effort to create a humane society capable of realising its economic, cultural and intellectual potential. It is an endeavour both compelling and challenging.

Towards a Perspective on Education

Chapter-III Review of the State of Education in Kerala

Literacy

3.1

erala is today the most literate state in India. It had an overall literacy rate of 89.81% in 1991 as against the national literacy rate of 52.21%; a female literacy rate of 86.17% in 1991 as against 75.65% in 1981, and a male literacy rate of 93.62% in 1991, compared to 87.73% in 1981.

However, the literacy rate in Kerala among Scheduled Castes (SC) and Scheduled Tribes (ST) in 1991 was only 79.65% and 51.09% respectively. This shows that a lot remains to be done for the depressed sections, particularly the Scheduled Tribes. An inter-district comparison of literacy rates for SC and ST brings out the strengths and weaknesses of the achievement of literacy in Kerala more clearly. Further, it shows that uniform and comprehensive literacy remains an unfinished task.

Spread of Education in General

3.2

More than 98% of children in the 5-11 age group in Kerala go to primary school. The state has thus achieved near-universal enrolment at the primary level.

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TADIE												
Literacy Rate (Percentage) - 1991												
District	District Scheduled Castes Scheduled Tribes Total Population											
	Male	Female	Total	Male	Female	Total	Male	Female	Total			
Kasargod	59.05	47.80	53.45	63.55	49.75	56.74	88.97	76.29	82.51			
Kannur	78.64	70.51	74.56	55.15	44.10	49.65	95.54	87.65	91.48			
Wayanad	70.13	58.90	64.62	48.29	36.54	42.41	87.59	77.69	82.73			
Kozhikkode	80.15	71.62	75.85	48.42	40.46	44.37	95.58	86.79	91.10			
Malappuram	70.72	62.37	66.49	40.80	31.49	36.09	92.08	84.09	87.94			
Palakkad	63.32	51.07	57.05	34.31	25.10	29.75	87.24	75.72	81.27			
Thrissur	73.77	65.54	69.55	46.53	40.70	43.57	93.77	86.94	90.18			
Ernakulam	77.43	69.45	73.42	70.75	62.42	66.72	95.46	89.27	92.35			
Idukki	69.56	55.16	62.37	57.89	49.07	53.54	90.82	82.96	86.94			
Kottayam	83.08	77.00	80.03	79.88	78.05	78.96	97.46	94.00	95.72			
Alappuzha	83.02	75.89	79.42	70.50	61.33	65.94	96.79	91.12	93.87			
Pathanamthitta	79.09	73.58	76.29	65.97	61.10	63.53	96.55	93.29	94.86			
Kollam	74.30	65.24	69.71	58.62	47.60	53.11	94.09	87.00	90.47			
Thiruvananthapuram	74.97	68.02	71.41	70.57	57.98	64.10	92.84	85.76	89.22			
Kerala	Kerala 73.86 65.03 69.38 53.68 43.53 48.62 93.62 86.17 89.81											

Source: Census 1991.

Source: Statistics for Planning (various issues), Kerala State Planning Board.

Educational facilities are equally and well distributed in both urban and rural areas. The distribution of schools works out to about one school for every 3 sq. km., and the number of schools per lakh of population is about 42. Table 3.2 gives an idea of the distribution of schools in terms of area and population.

The total enrolment of students in standards I to X in the year 1997-98 was 54.14 lakh, of whom boys constituted 27.46 lakh and girls 26.68 lakh. The estimated population of Kerala being 307.68 lakh (as on 1 April 1995), this means that about one sixth of the total population are in schools.

Table 3.2											
Number of Schools per 10 sq.km. & per lakh of Population											
_	Schools pe	r 10 ca km	Schools	per lakh	Population	served by					
Туре	Schools pe	i io sq kiii	of pop	ulation	one school						
of school	1986-87	1996-97	1986-87	1996-97	1986-87	1996-97					
HS	0.63	0.66	8.74	8.35	11440	11967					
UP	0.74	0.76	10.37	9.62	9640	10391					
LP	1.76	1.73	24.56	21.86	4071	4575					

Source: Directorate of Public Instruction, Government of Kerala.

In 1996-97, the total number of teachers in schools was 1.88 lakh and the 3.3 teacher-student ratio 1:30. The total number of recognised schools in 1996-97 was 12,257 (high schools 2,571, upper primary 2,961, lower primary 6,725). Of these, 4,457 (36.36%) are government schools, 7,310 (59.64%) are private aided schools, and 490 (4.00%) are private unaided schools. In addition, there are a number of unauthorised and unrecognised schools.

The relatively even distribution of schools in Kerala is demonstrated by the 3.4 Sixth All India Educational Survey conducted by the NCERT in 1993-94. The survey showed that about 77% of the lower primary schools and 50.5% of the upper primary schools are located within the requisite habitation (of population of 5,000). About

	Table 3.3								
	Student E	Inrolment	in Schools	(in lakhs)					
Year	LP	UP	LP+UP	Secondary	Total				
1960-61	20.57	8.82	29.39	3.31	32.70				
1965-66	25.21	10.32	35.53	6.15	41.68				
1969-70	27.69	12.20	39.89	7.09	46.98				
1972-73	29.89	13.86	43.75	7.81	51.56				
1975-76	26.71	17.96	44.67	9.08	53.75				
1979-80	26.48	16.68	43.16	12.65	55.81				
1983-84	25.01	18.05	43.06	13.42	56.48				
1987-88	26.37	18.05	44.42	13.46	57.88				
1988-89	25.96	18.48	44.44	14.08	58.52				
1989-90	25.27	18.95	44,22	14.60	58.82				
1990-91	24.72	19.30	44.02	14.99	59.01				
1991-92	24.20	19.33	43.53	15.49	59.02				
1992-93	23.62	19.03	42.65	15.86	58.51				
1993-94	23.25	18.67	41.92	16.16	58.08				
1994-95	22.52	18.39	40.91	16.26	57.17				
1995-96	21.98	18.13	40.11	16.17	56.28				
1996-97	21.22	17.81	39.03	16.05	55.08				
1997-98	20.68	17.50	38.18	15.96	54.14				

Source: Directorate of Public Instruction, Government of Kerala.

Review of the State of Education in Kerala

90% of the population had a lower primary school, 67.5% an upper primary school, and 62% a secondary school within a reach of 1 km. The relevant data are given in Table 3.4

					Т	able 3.4	ł			
Locatio	n,	Dist	ance	and	the	Feeder	Popu	lation	of the	Schools
		in D	Differ	ent S	stag	es (Ru	ral ha	bitatio	ons)	

Distance	Population with Schools lower Primary	Population with Schools upper Primary	Population with Schools Secondary	Population with Schools Higher Secondary
Schools located in the habitation*	16989209 (76.68)**	11199914 (50.55)	6567040 (29.64)	1272867 (5.74)
School at a distance of 1 km	2879487 (13.00)	3758167 (16.96)	7332729 (33.09)	4516890 (20.39)
School at a distance of 2 km	1327783 (5.99)	3399001 (15.34)	-	-
School at a distance of more than 2 km	960215 (4.33)	3799612 (17.15)	-	-
School at a distance 2-4 km	-	-	5389277 (24.32)	3329979 (15.03)
School at a distance more than 4 km	-	- - -	2867648 (12.95)	13036958 (58.84)

*Compiled from data of NCERT Survey 1993

** Rural habitations are defined on the basis of various population slabs in the survey ranging from 5000+to 500. Here 5000 is taken as the slab.

3.5

In the sphere of girls' education, the progress achieved by the state is phenomenal. The percentage of enrolment of girls in schools (standards I-X) is almost equal to that of boys. Table 3.5 gives the figures for the last seven years.

Table 3.5					
Enrolment of Boys & Girls in Schools (Standards I-X)					
Year	Boys	Girls			
1990-91	51.04%	48.96%			
1991-92	50.95%	49.05%			
1992-93	50.77%	49.23%			
1994-95	50.74%	49.26%			
1995-96	50.75%	49.25%			
1996-97	50.65%	49.35%			
1997-98	50.80%	49.20%			

Source: Directorate of Public Instruction, Government of Kerala.

3.6

Another feature of education in Kerala is that the drop-out rate at the primary level is practically nil, whereas at the all-India level it is about 53%. The drop-out rate in Kerala from standards I to X is about 30%, as against 70% at the national level. There appears to be a sharp slump in retention after standard IX; this is because school authorities are entitled to detain students with low performance levels. The drop-out rate among Scheduled Castes and Tribes is far higher than among other students, with about 60% of ST students dropping out. This, again, is a matter of serious concern.

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aided Institutions (percentage in brackets)							
Year	Cohort	Govt.	Pvt.	Pvt.	SC	ST	
		Schools	Aided	Unaided			
1986-87	614636	253615	344902	16119	74735	8084	
	(100)	(100)	(100)	(100)	(100)	(100)	
1987-88	687381	281147	389748	16486	81602	8861	
	(111.84)	(110.86)	(113.00)	(102.28)	(109.19)	(109.61)	
1988-89	671373	275343	380044	15986	78807	8279	
	(109.23)	(108.57)	(110.19)	(99.17)	(105.45)	(102.41)	
1989-90	660417	270354	373983	16080	76640	7818	
	(107.45)	(106.60)	(108.43)	(99.76)	(102.55)	(96.71)	
1990-91	660062	237583	407512	14967	74868	7248	
	(107.39)	(93.68)	(118.15)	(92.85)	(100.18)	(89.66)	
1991-92	643425	227675	400750	16000	72570	6463	
	(104.68)	(89.77)	(116.19)	(99.26)	(97.10)	(79.95)	
1992-93	655294	229486	411696	14135	71873	6142	
	(106.61)	(90.49)	(119.37)	(87.69)	(96.17)	(75.98)	
1993-94	620609	248288	358045	14276	68957	5537	
	(100.97)	(97.9)	(103.81)	(88.57)	(92.27)	(68.49)	
1994-95	569137	225677	329809	13651	60499	4648	
	(92.60)	(88.98)	(95.62)	(84.69)	(80.95)	(57.50)	
1995-96	446466	175908	258274	12284	44039	3164	
	(72.64)	(69.36)	(74.88)	(76.21)	(58.93)	(39.14)	

Table 3.6 Progress of a Sample Cohort in Government, Aided and Un-

1996: No. appeared for SSLC - 434507 (70.69)

No. passed - 201603 (32.81)

Source: Compiled from Directorate of Public Instruction, Government of Kerala.

Kerala also has a widespread network of institutions of higher education. 3.7 There are 206 arts and science colleges affiliated to 4 universities, with a combined strength of about 3.54 lakh students. There are 105 other colleges — professional colleges, Arabic colleges and Fine Arts colleges - bringing the total number of colleges up to 311. In addition, there are more than 4,000 parallel colleges in the higher education sector. Parallel colleges are unaided and unaffiliated institutions run by private agencies, offering pre-degree, degree and even post-graduate courses to students who are privately registered in a university. It is estimated that about 9 lakh students study in these institutions, most of which do not have even basic infrastructural facilities.

The growth of education in Kerala is not centered around urban areas. Of 3.8 the total number of students in 1995-96, 8.98 lakh (15.96%) were in urban areas, and 47.29 lakh (84.04%) in rural areas. This compares well with the distribution of the state's population in urban-rural terms — only about 18,74% of the total population is to be found in urban areas. The percentage of students among the urban population is 21.9%, and among the rural population, 19.84%. Differences in enrolment between urban and rural areas are thus not as alarming as in most other states.

About one-fifth of the population of Kerala are students and providing 3.9^{+60007} facilities for their education takes up a substantial part of government expenditure. Until recently, the state used to spend 35 to 40% of its budgeted expenditure on

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education. In 1994-95, the state spent 30.09% of its budgeted expenditure on education, as against the national figure (including the central sector) of only 11.10%. In terms of the proportion of public expenditure on education to state income, Kerala is on par with several advanced countries in the world. The state spends 7.5% of its SDP on education, while the corresponding figure for the country as a whole is 3.90%. Here it must be stated that most of the expenditure (more than 90%) is on staff salaries; investment in quality improvement programmes has taken a back seat.

Pre-School Education

Sanders involve encode fronts success and a balance

The importance of early childhood education (ECE) is universally recognised as catering to the most impressionable and educationally potent period of a child's life. ECE provides the foundation for all later development. A number of agencies and government departments in Kerala conduct ECE programmes: anganvadis, balavadis, nursery schools, and creches. The Sixth All India Educational Survey by NCERT and social welfare department, Government of Kerala give the following figures for various ECE institutions.

Table 3.7Pre-Primary Institutions in KeralaInstitutions: typeNumberBalavadi and Anganvadi (Upto 1992-93)16293Independent Pre-Primary Schools846Attached to Schools540Total17679

Source: 6th All India Educational Survey, NCERT 1993 & State plan of action for the child in Kerala.

There are over 20,000 anganavadis now. However, the survey does not cover the numerous unrecognised institutions that have come into being. If these are taken into consideration, the number of pre-school institutions will be around 25,000.

3.11

3.10

A study undertaken some time ago by the State Institute of Education (SIE) showed that there was no fixed pattern in the curriculum, standard of teaching and facilities provided in ECE institutions. The number of teachers varies from 1 to 5, with 1 or 2 helpers. The teacher-pupil ratio also varies from 1:20 to 1:50 and above. In government ECE institutions, all teachers are trained for a year as nursery teachers and balasevikas. Most teachers in the unrecognised institutions either have no training or have a training of only 3 months, which is far from satisfactory. There are also disparities in the salaries paid to teachers. They are paid very low salaries in unrecognised institutions, and they tend to do their job as a monotonous ritual, because of lack of motivation and ability.

Children are forced to go through admission tests and interviews for admission to ECE institutions, especially in urban areas. This practice, which lacks scientific validity, only succeeds in creating an enormous amount of anxiety in children and parents and leads to feelings of rejection and failure.

3.12 While government institutions levy no fees, many unrecognised schools charge high fees. There is no system of registration or recognition of pre-primary

Review of the State of Education in Kerala schools and ECE programmes. Since ECE is characteristically a play-based and activity-based programme, an essential requirement is adequate space, both indoors and outdoors, and appropriate arrangements in terms of safety, sanitation, light and ventilation. Most of the ECE institutions do not meet these requirements. Particularly in urban areas, they are generally located in cramped, poorly ventilated spaces, in extensions of houses or even on rooftops. They do not have safe open space or other facilities for children to play. In rural areas, in addition to other constraints, there is the problem of non-availability of suitable staff.

Most ECE institutions do not follow the recommended methods of teaching. Formal teaching is the most commonly used mode and the pre-primary schools are often downward extensions of primary schools. In many cases, they tend to be merely custodial in nature and thus do not at all meet the objectives of an ECE programme.

Primary Education

The age for admission to Standard I in Kerala is 5 years as on 1 June. 3.13 Primary education consists of two levels; lower primary (Standards I to IV) and upper primary (Standards V to VII). Primary education comprises the biggest segment of the state's education system. According to 1997-98 figures, there are 38.19 lakh students at the primary level, of which 19.61 lakh (48.73%) are girls. They are being taught by 1.28 lakh teachers, of whom 88,865 (68%) are females. Children at the primary level of education constitute 12.45% of the total population. There are 6,725 lower primary and 2,961 upper primary schools in Kerala. Almost every village has more than five primary schools. Of the primary schools, 61.07% are private aided, 2.98% are private unaided and 35.95% are government schools. The growth of schools at the primary level appears to have more or less stabilised. The number of schools at the primary level was 9,702 (LP 6,917 and UP 2,885) in 1987-88; this number came down to 9,686 (LP 6,725 and UP 2,961) in 1996-97.

Over the years, there has also been growth in the number of teachers. The 3.14 number of lower primary teachers grew from 62,000 in 1961-62 to 74,613 by 1987-88, and then came down to 65,687 in 1996-97. During the same period, the number of upper primary teachers grew from 33,000 to 61,985 and then fell to 60,378. The teacher-student ratio at the lower primary level stood at 1:33 in 1961-62 as well as 1996-97. The corresponding ratio at the upper primary level was 1:27 and 1:30. Thus, for over 35 years, the teacher-student ratio at the primary level has remained more or less constant, at around 1:30. Table 3.8 gives the details.

	Teache	Table 3.8 r-Student	Ratio	
Level	1960-61	1988-89	1995-96	1996-97
Lower primary	1:33	1:35	1:33	1:33
Upper primary	1:27	1:29	1:30	1:30
Secondary	1:24	1:24	1:27	1:26
Average	1:28	1:29	1:30	1:29

Source: Directorate of Public Instruction, Government of Kerala.

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3.15 In recent years, enrolment at the lower primary (Standards I-IV) and upper primary (Standards V-VII) levels has registered a decline. Lower primary enrolment rose from 20.57 lakh in 1960-61 to 29.89 lakh in 1972-73, after which steadily declined to 21.22 lakh in 1996-97. At the upper primary level, enrolment rose from 8.82 lakh in 1960-61 to 19.33 lakh in 1991-92 and then declined to 17.81 lakh in 1996-97. On the whole, enrolment at the primary level (Standards I-VII) rose from 29.39 lakh in 1960-61 to 44.44 lakh in the late eighties, and then steadily declined to 39.03 lakh in 1996-97.

3.16 Detailed study of school enrolment, particularly at the primary level, shows that the decline is due to demographic factors-decline of population in the relevant age group. Given the continuing tendency of decline in birth rate, there is a possibility that school enrolment will further decline in absolute terms. The relevant data for the school-going age groups are given in Table 3.9.

Table 3.9 Population Trends in the School Age Groups					
Year	0 - 4	5 - 9	10 - 14		
1991	2748612	2867642	2949611		
1996	2592234	2698659	2823894		
2001	2313360	2592126	2695141		

Source: 1981 and 1991 census. Projections for 1996 and 2001 taken from Report of the Expert Committee on School Age Group Population in 2001 A.D and its Implications on Educational Policy and Planning, State Planning Board, June, 1994, Table 3.5.

3.17

The impact of the demographic change is reflected in the emergence of uneconomic schools. According to Kerala Education Rules (KER), a school is defined as uneconomic if the strength of students in each class falls below 25. There were 650 uneconomic schools in the state in 1988-89, of which 278 were in the government sector and the remaining in the private sector. In 1996, there were 1,413 uneconomic schools, of which 609 were in the government sector and the remaining in the private sector (Table 3.10).

Table 3.10 Uneconomic Schools in Kerala					
Year	Government	Private	Total		
199 3	491	798	1289		
1994	482	793	1265		
1995	542	805	1347		
1996	609	804	1413		
1997	625	782	1407		

Source: Economic Review (Different years).

In addition to this, there is the phenomenon of protected teachers. Protected 3.18 teachers are those who risk losing their jobs because of the decline in enrolment in private schools and are given protection by the government. Protection first came into effect in 1969. Later, in 1970, the protection benefits granted to teachers were made available to non-teaching staff also.

Table 3.11 Protected Teachers in Kerala (1996 - 97)					
District	HSA	PD Teachers	Special Teachers	Total	
Thiruvananthapuram	14	92	8	114	
Kollam	64	186	62	312	
Pathanamthitta	21	29	38	88	
Alappuzha	104	146	135	385	
Kottayam	43	79	101	223	
Idukki	4	42	14	60	
Ernakulam	64	219	104	387	
Thrissur	13	51	48	112	
Palakkad	15	79	13	107	
Malappuram	2	83	8	· 93	
Kozhikkode	22	185	32	239	
Kannur	6	21	4	31	
Wayanad	3	37	17	57	
Kasaragod	5	18	8	31	
Total	380	1267	592	2239	

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Source: Economic Review, 1997.

Another reason for the decline in enrolment is the indiscriminate sanctioning 3.19 of schools against the advice of the State Planning Board, which has cut into the strength of existing private and government schools. This situation appears to have led to a lot of corruption. It is reported that the system of periodical inspection to determine the strength of classes in aided schools for sanctioning teaching posts, is not being strictly enforced. Managements are therefore in a position to manipulate the strength to get additional posts sanctioned. Further, dubious methods are adopted by managements to extend the services of teachers so as to give them the benefit of two consecutive vacations which will qualify them for protection. For these and other reasons, the number of teachers coming under the protection category is likely to increase year after year, unless some radical steps are taken through appropriate policies and strict supervision.

Although the achievement in terms of expansion of schools is impressive, 3.20 many of the schools do not have adequate infrastructural facilities. Several of them do not even have their own premises. According to government directives, LP schools should have a site of one acre, UP schools 1.5 acres and secondary schools 3 acres. Many of the schools do not fulfil these requirements. Several of them are run in old dilapidated buildings, and thatched sheds. They do not have basic facilities like laboratories, libraries and furniture. Many schools even lack drinking water facilities, latrines and urinals. These problems are more acute in government schools. No special provision is made for girl students in most schools and colleges.

- 3.21 Serious questions have been raised about the learning achievement of children in primary schools. It has been pointed out that about 30% of the children who complete primary school do not reach the necessary achievement levels in literacy and numeracy. The base line study for the District Primary Education Programme (DPEP) conducted in Malappuram district by the National Institute of Educational Planning and Administration (NIEPA) substantiates this criticism. An NCERT study states that serious measures need to be taken to improve the teaching learning process in schools in order to enhance learner achievement.
- 3.22

DPEP, a centrally sponsored scheme, is a major multi-faceted programme seeking to overhaul and reconstruct primary education as a whole in selected educationally backward districts. Its emphasis is on decentralised planning and management as well as community participation. The programme was introduced in the districts of Malappuram, Wayanad and Kasargod in December 1994. Unfortunately, it is reported that it has not taken off as envisaged. The various functionaries and stakeholders in the programme do not seem to be aware of their roles and responsibilities. Community participation is not satisfactory and the participatory process in planning and implementation is inadequate. The programme is viewed primarily as a money distributing scheme. The District Institutes of Education and Training (DIETs), which have a key role to play in the implementation of the programme, require adequate staffing and other resources to become fully effective. Primary education thus remains largely departmentally administered, the victim of a standardised routine programme with little concern for the learning process taking place in classrooms, academic decentralisation, innovation and environment and community-based initiatives.

Secondary Education

3.23

In 1996-97, there were 2,588 secondary schools in Kerala, as against 895 in 1960-61 — a substantial increase. These include 975 government schools (37.67%), 1,400 private aided schools (54.1%), and 213 private unaided schools (8.23%). Student enrolment too has increased, from 3.31 lakh in 1960-61 to 16.17 lakh in 1996-97. A similar increase is seen in the number of teachers, from about 14,000 in 1960-61 to 62,422 in 1996-97.

3.24 Enrolment figures at the secondary level show some interesting trends. Students seem to make a smooth transition from the primary level to the secondary level with hardly any drop-outs. Drop-outs appear at the secondary level, and after Standard IX there is a clear slump, with the schools applying the promotion rules. Only 70% of the initially enrolled students finally make it to Standard X.

- 3.25 The SSLC examination, conducted after Standard X is the final stage of school education in Kerala. SSLC results over recent years show an unvarying pattern, only about 50% of the students who appear for the examination get through. A closer study of the results reveals that the pass percentages are normally inflated with liberal valuation and allocation of 'grace' marks. An incidental observation is that girls generally perform better than boys in the final examination.
- 3.26 A study has shown that of every 1,000 children who joined school in Standard I in 1974-75, only 174 passed the SSLC examination in 1983-84, that is, only 17.40%. In the examination held in 1984-85, the corresponding figure was 206, that is, 20.60%. In recent years, since valuation as well as moderation have been liberalised,

the number of passes at the SSLC level is around 330 (that is, 33%) for every 1,000 admitted in Standard I.

Table 3.12 SSLC Results 1993 - 1998					
Year	Number of	Pass Percentage			
March 1993	5,14,030	2,80,655	54.47		
March 1994	5,70,011	2,80,297	49.12		
March 1995	5,38,707	2,72,366	50.55		
March 1996	5,36,617	2,62,038	48.83		
March 1997	5,50,192	2,78,544	50.62		
March 1998	5,41,479	2,81,961	52.07		

Source: Pareeksha Bhavan, Government of Kerala.

A study of SSLC results of recent years also reveals some interesting features 3.27 of school education. A vast gulf exists between the few 'cent per cent pass' schools and the rest. Therefore, parents rush to get their children admitted in the 'cent per cent' schools, which resort to a mechanical drilling process with periodical tests, tutorials, and private tuition within the school premises. Moreover, all private unaided schools and some aided schools resort to entrance tests to restrict admissions and to admit children from high-income groups. It is clear that infrastructural facilities and mode of admission have a bearing on the results produced by a school.

The fall in the standard of teaching in government and aided schools has 3.28 paved the way in recent years for the mushrooming of a number of unaided English medium schools. Some of them have been established with the profit motive, collection of money being in the form of donations, interest-free loans and high fees.

There are more than 230 schools affiliated to the Central Board of Secondary Education (CBSE) and the Council for the Indian School Certificate Examination (CISCE). Of these, 25 are *Kendriya Vidyalayas* and 12 are *Navodaya Vidyalayas*. Many more are awaiting affiliation to these bodies. Although CBSE and CISCE rules prohibit donations and high fees, many schools are known to indulge in such practices.

The rapid expansion of secondary education has created problems of 3.29 accommodation and equipment in schools. Several secondary schools are even today run in temporary sheds and sub-standard buildings. The average classroom space is far below the prescribed norms and classrooms are therefore generally overcrowded. Classroom furniture is either inadequate or unsuitable. School libraries are non-existent, and where they exist, are not optimally used.

Another important issue is the nature of the curriculum and syllabus 3.30 prescribed for various subjects. There is no formal curriculum at the upper primary and secondary levels, only a few 'aims and objectives'. The syllabus is outdated, most teachers do not get to see the syllabus, and the classroom transaction concentrates solely on textbooks. Occasionally they contain inconsistencies and mistakes which the students are made to learn and repeat in their examination. Learning at the secondary level is entirely oriented towards cramming and the information load is so high that most children find it impossible to cope with. The teaching-learning process does not excite the imagination and interest of students,

and there is no effort to introduce child-centred learning at any level.

3.31 In a teaching-learning process that is oriented towards coaching, cramming and reproducing the crammed materials in the SSLC examination, it is not surprising that schools have not shown much concern for providing students with modern teaching materials, and using equipment such as audio-visual aids and computers.

3.32 An Educational Technology (ET) cell was established in Kerala in 1980. Later made a unit of the State Institute of Education (SIE), reconstituted as the State Council of Educational Research and Training (SCERT), this cell was expected to promote the use of ET in the school education system. But it has not made any worthwhile progress in this direction. Neither has the Computer Literacy and Studies in Schools (CLASS) project, launched in 1984-85, been fully implemented. Most of the computers procured under the project are reported to be lying idle.

3.33 Literary societies and science clubs do not function in many schools, and where they do, they are not effectively used. There is very little stress on value education except in the form of a few lessons incorporated in the textbooks. Teachers often simply transmit the existing social biases and attitudes to students. For instance, the gender bias prevalent in Indian society inevitably finds its way into textbooks, and teachers continue to perpetrate it by disseminating patriarchal values. Although studying the reproductive system is part of the syllabus, many teachers avoid teaching it. The question of age-appropriate sex education is not even raised. Similarly, social and communal prejudices seem to linger.

3.34 Development of quality has not kept pace with the quantitative growth of school education. The present system of education is unduly rigid and does not provide for the special needs and capabilities of individual students. The manner in which cocurricular and extracurricular activities are conducted in schools is unimaginative, to say the least. Most of the work done in schools around such activities which are supposed to help developing the creative talents of children, focus on preparing them for various 'melas' in arts, sports, science or work experience. The genuine creativity of children is submerged in competition. It is well known that the state-level 'youth festivals' are huge competitive affairs where the stakes are position and power, and with victory meaning ensured admission to a professional college. For the large majority of children, these melas mean nothing and their talents remain dormant.

Education of the Disabled

3.35 There are 23 recognised special schools for the disabled and about 3,000 children study in them. Most of these schools provide education only up to the upper primary level while a few teach up to Standard X. Facilities for education of the disabled are provided mostly by charity agencies and institutions like the Kerala Federation of the Blind. But these facilities are very limited. The vast majority of disabled children remain outside the mainstream of education in Kerala.

3.36 Some efforts are now being made to admit certain categories of partially disabled children in regular schools under the scheme of integrated education for the disabled. But there are hardly any special facilities in the regular schools, to meet their specific requirements. The teachers too are not specially trained to meet their needs.

Non-formal Education

The state implements a limited non-formal education programme at the 3.37 school level. The programme is intended for drop-outs and older children who missed schooling. Details of the programme in operation are given in Table 3.13.

Table 3.13 Non-Formal Education Centres in Kerala				
Level	Government	Voluntary Agencies	Total	
Primary	4	22	26	
U.P	0	6	6	
Primary and UP	6	6	12	
Total	10	34	44	

Source: Sixth All India Educational Survey, 1993, NCERT.

The scope for non-formal education, intended mainly for children not enrolled in the formal system and drop-outs, is naturally limited in Kerala.

Higher Secondary Education

On an average, about 2.74 lakh students pass the SSLC examination every 3.38 year, and try to pursue further studies by joining various courses.

C1			Denseration
51. No	of Courses	intake	SSLC pass-outs
1	Pre-degree	99,041	35.75%
2	Higher Secondary	5,040	1.82%
3	Vocational Higher Secondary	17,250	6.22%
4	Kendriya & Navodaya Vidyalayas	5,000	1.80%
	Sub Total	1,26,331	45.59%
5	ITIs/ITCs	51,570	18.62%
6	Polytechnics	5,525	1.99%
7	Technical Higher Secondary	360	0.13%
	Sub Total	57,455	20.74%
	Grand Total	1.83.786	66.33%

Source: Directorate of Higher Secondary Education.

Almost all students who pass the SSLC and are not able to get admission to 3.39 various institutions because of non-availability of seats, join parallel colleges and register privately for pre-degree courses offered by affiliating universities. In 1995 the total number of candidates who registered privately for pre-degree courses was 95,704. Only about 20% of these privately registered candidates pass the pre-degree examination.

Consequent to the adoption of a common structure of school education 3.40 throughout the country and the introduction of the 10+2+3 pattern of education, Kerala also decided, rather late, to introduce the +2 stage as a part of school education. Accordingly, the higher secondary course (Standards XI and XII) was introduced in 31 government schools during the year 1990-91. It was also decided, in principle, that the entire exercise of expansion of higher secondary education in a phased manner should eventually lead to the physical delinking of the pre-degree

course from college, This process was formally started in 1997-98: pre-degree courses in 26 government colleges have been delinked and higher secondary courses have been sanctioned in 103 government schools.

In June 1998, 307 Pre degree batches (science 111, Humanitics 139, Commerce 57) from 145 colleges were delinked. The total seats delinked in 1997-98, and 98-99 were around 30,000.

3.41 In December 1995, there were 84 higher secondary schools functioning in Kerala, of which 49 were in the government sector, 33 in the aided sector and 2 in the unaided sector. Of the 49 government higher secondary schools, science subjects are offered in only 22 schools and humanities in 27 schools. In the aided sector, 26 schools offer science subjects and 7 schools, humanities. Both the unaided schools offer science subjects.

There were 11,566 students in all enrolled in the 84 higher secondary schools during 1995-96. In addition, the government sanctioned 6 residential higher secondary schools for girls during 1995-96 under the area-intensive programme for educationally backward minorities.

In october 1998, there were 524 higher secondary schools, of which 256 are in government sector, 260 in the aided sector, 2 in the unaided sector, and 6 residential higher secondary schools for girls. The possible intake of these schools was 73800 students.

No. of Higher Secondary Schools and Batches 1998-99					
Schools	Number		Batches		
		Science	Humanitics	Commerce	
Government	256	323	213	151	
Aided	260	464	153	160	
Unaided	2	2	2	2	
Area Intesive Scheme	6	6	-	-	
Total	524	795	368	313	

Table 3 15

Source: Directorate of Higher Secondary Education.

Table 3.16 Intake of Students (Higher Secondary) 1998-99					
Schools	Science	Humanitics	Commerce		
Government	16150	10650	7550		
Aided	23200	7650	8000		
Unaided	100	100	100		
Area Intensive Scheme	300	-	-		
Total	39750	18400	15650		

Source: Directorate of Higher Secondary Education.

A Directorate of Higher Secondary Education was established in 1990-91 to look after administrative, academic and establishment matters. But no powers were delegated to it formally till December 1995, and it was also not adequately staffed or equipped. Higher secondary schools are yet to receive acceptance, the

^{3.42}

first preference being pre-degree courses. Higher secondary courses are administered in an indifferent manner with no concern for standard or quality.

Vocational Higher Secondary Education

Vocational education was formally introduced in Kerala at the higher secondary 3.43 level (+2 stage of school education) in the academic year 1983-84. Initially the scheme was implemented only in 11 government high schools and 8 technical high schools. Later it was introduced in more high schools and these schools were called vocational higher secondary (VHS) schools. In 1998, when the centrally sponsored scheme of vocationalisation of higher secondary education was launched, implementation of the scheme in Kerala got a boost. At present there are 322 VHS schools (231 government and 91 private) handling 814 sections of vocational courses in 45 subjects. These schools admit about 20,350 students in all to various vocational courses.

The duration of the course is two years (at the +2 stage), with a public 3.44 examination at the end of the course. The 45 vocational subjects offered relate to agriculture (including livestock management and fisheries), health and paramedical services, business and commerce, home science and humanities, and the service sectors in engineering and technology.

All vocational courses are broadly divided into four groups A,B,C and D 3.45 (Those who enrol for vocational courses under group A can go for higher studies in physics, chemistry engineering and mathematics; under group B for higher studies in zoology, botany, agriculture, veterinary science, medicine, etc., and those who pass through groups C and D can go for higher studies in arts, commerce, etc. However, many of the universities outside Kerala do not recognise the VHS courses of the state.

While girls are free to join any of the vocational courses offered, there are 3.46 three courses — Clothing and embroidery, Cosmetology and management of beauty parlours, and Creche and pre-school management — exclusively for girls. Vocational courses are offered to disabled students in the Government VHS School for the Deaf in Thiruvananthapuram and the Rahmania VHS School for the Handicapped in Kozhikode.

The performance of vocational higher secondary education in Kerala has, 3.47 however, been far from satisfactory. It is plagued by numerous problems. VHS sections function as wings of regular high schools, and they do not have a separate Principal to look after the VHS sections. The Headmaster of the high school, redesignated as Principal, looks after the VHS sections as well. Since these Principals are under the administrative control of the Directorate of Public Instruction (DPI), the Directorate of VHS Education (DVHSE) has no control over them. For this reason, VHS education is neglected. On the whole, the management structure of VHS education is weak.

All members of the 4,206 strong teaching staff in government VHS schools 3.48 are temporary; they are appointed every year from employment exchanges on a provisional basis. They are mostly inexperienced and hence incapable of imparting any meaningful education or training. The 730-strong teaching staff in the 71 aided schools are more or less permanent. There are no proper textbooks or instructional materials to teach vocational subjects. The VHS schools do not have the necessary infrastructure, such as well-equipped laboratories and workshops, to

impart practical training, and there are hardly any linkages with industry. In spite of very liberal valuation, about 40% of the students fail the VHS examination. Because of its poor quality, VHS education lacks social acceptability. Only 5 of the 45 vocational courses offered are recognised by the State Public Service Commission (PSC). There are no avenues for further professional growth. Hence most of the students who pass out go in for further tertiary level education. Thus the very purpose of vocationalisation is lost. The scarce resources spent on this programme do not bring the desired economic and social gains.

SCERT

3.49

The State Institute of Education (SIE), now renamed as the State Council of Educational Research and Training (SCERT), was established in 1964 with the objective of implementing a variety of programmes for all-round qualitative improvement of school education at all levels. Its most important function concerns the education and training of teachers.

The SCERT has about 20 units/cells with responsibilities for the preparation of textbooks and guides for teachers in various subjects, preparation of study materials and teaching aids, organising inservice and retraining programmes, conducting workshops and refresher courses, working on revision of curricula and syllabi, and conducting educational research, especially on innovations in teaching. However, the SCERT has not been able to provide the academic leadership and support expected of it for the development of secondary education in the state.

Teacher Education and Training

3.50 Teachers for primary schools in the state are trained in about 101 Teacher Training Institutes (TTIs) with an intake capacity of 3,800 per year. Most of these institutions are private aided and they all function under the DPI. The duration of the teacher training course (TTC) is 2 years, with SSLC as the minimum qualification for admission. Language Teacher Training courses are conducted for teachers of Malayalam, Hindi, Tamil, Sanskrit, Arabic, Kannada and Urdu at various training centres.

3.51 B.Ed. courses for training teachers for secondary schools are offered by 42 training colleges and 25 university teacher education centres. The *Kendriya Sanskrit Vidya Peeth* at Thrissur and the various institutions recognised by the *Dakshin Bharat Hindi Prachar Sabha* offer B.Ed. courses in Sanskrit and Hindi respectively. The duration of the course is one year and the qualification for admission is graduation in the relevant subject. All universities in Kerala (except Cochin University teacher education centres are run on a self-financing basis. Many of them, reportedly, do not have basic minimum facilities to offer these courses.

3.52

Teacher training courses at all levels are in great demand in Kerala. This has given rise to rampant corruption in the system. Most private institutions collect donations for admission. There are cases of institutions presenting their B.Ed. students for university examinations after conducting the course for hardly three or four months.

3.53 Every year many candidates who are unable to get admission to teacher training courses in Kerala go to the neighbouring states, where it is easier to get admission. There they pay exorbitant fees and get their degrees. Correspondence

courses offered by universities in the neighbouring states are also popular among students from Kerala.

There are hardly any facilities in Kerala to train teachers for vocational 3.54 education. Facilities are also not available for training teachers to teach physically and mentally handicapped children. Another situation peculiar to Kerala is that commerce graduates are not admitted to B.Ed. courses. Therefore they are forced to go to the neighbouring states. These issues need to be looked into.

The proliferation of teacher training programmes, at times on a commercial 3.55 basis, has given rise to a number of new issues. The one-year training, or even less, imparted to teachers has been found to be inadequate for handling complex problems in the classroom.

The level of achievement of the B.Ed. holder is hardly looked into. More often than not, a mere B.Ed. degree is considered sufficient for being appointed as a teacher. This has resulted in deterioration in the standards of teaching, particularly in the ability of teachers to upgrade their knowledge and introduce creative approaches in the teaching-learning process.

DIETs or District Institutes of Education and Training are important 3.56 interventions in the academic administration of primary schools. Every DIET consists of a District Resource Unit (DRU) and units for pre-service and inservice teacher education, educational technology, work experience, curriculum and evaluation, and planning and management. The Principal is attached to the pre-service teacher education branch. Other branches function under senior lecturers. The DRU assists adult education. DIETs have been set up in all revenue districts and have been central in the implementation of DPEP programmes. Some DIETs have also developed their own programmes for quality improvement in primary schools.

CTEs, or Colleges for Teacher Education are designed to provide academic 3.57 support to secondary schools in the same way as DIETs do for primary schools. They have not been functioning effectively as yet. CTEs have been handicapped by the fact that they are formally under the Directorate of Collegiate Education, while their programmes are designed for school education.

An Institute of Advanced Study in Education (IASE) has been set up at 3.58 Thrissur to provide training and resource support to the secondary school system and to complement the work of the SCERT. However, the IASE is yet to perform the tasks expected of it satisfactorily.

School Management

State-level Management

The state-level management of school education at present is organised at 3.59 three levels. First there is the general education department under a secretary; the second is the various directorates, of which the Directorate of Public Instruction is the most important; and third the newly constituted SCERT, which provides academic support for education of all children from $3^{1}/_{2}$ to 15 years of age.

Apart from policy matters, rules and regulations, the details of education 3.60 management such as problems of teachers, school buildings, printing of textbooks, syllabus, curriculum and vocational education are handled by various sections in the secretariat. This gives the department in the secretariat powers to intervene in

routine matters, making various specialist departments and structures dependent on the secretariat. This results in procedural delays and waste of administrative time.

3.61

61 School administration is easily the most complex part of educational management in terms of the numbers involved and the issues handled. In order to streamline the system and ensure efficiency, the entire operational area of school education has been divided into 34 educational districts and 160 sub-districts, besides the normal 14 revenue districts for the state, and officers have been appointed at each level. The effort was to ensure a certain level of decentralisation, particularly at the district and sub-district levels, in order to allow the officers to concentrate on the academic performance of schools. However, in practice the lower-level officers get bogged down in administrative details and trivia and all major decisions are taken centrally.

District-level Management

3.62 The district-level management of school education has a three-tier structure — the revenue district, the educational district and the educational sub-district. Educational districts and sub-districts constitute the element of decentralisation which is needed to ensure direct monitoring of all schools. Primary schools are monitored at the sub-district level and high schools at the educational district level. The Deputy Director of Education (DDE) for the revenue district provides the link between these layers and the state-level management. The District Educational Officers (DEO) functioning at the educational district level are in charge of high schools besides being the superior officers (AEO) at the sub-district level are in charge of primary schools. There is not much involvement of the community or panchayat institutions in the educational process. However, under the decentralised planning campaign, the situation is gradually improving. PTAs do function and constitute the main form of community involvement.

3.63 Over the years, the management of school education has become centralised and cumbersome, which has resulted in the system losing its flexibility and vitality. Multiplicity of institutions and structures, which were set up as answers to felt needs at different historical periods, and outmoded protocol and procedure, some of them a legacy of the colonial period, have been responsible for this situation. A system of management that is simple, flexible and effective is required for school education to regain its vibrancy.

3.64 The Kerala Education Act and Rules have given statutory support for the basis of school management. But they have also unwittingly promoted centralisation, rigidity and conformity. They need to be reviewed and made to respond to changing circumstances and the current demand for decentralisation.

Higher Education

3.65

5 Kerala at present has seven universities: Kerala University at Thiruvananthapuram, Calicut University at Kozhikode, Cochin University of Science and Technology at Kochi, Mahatma Gandhi University at Kottayam, Kannur University at Kannur, Kerala Agricultural University at Thrissur, and Sri Sankara University of Sanskrit at Kalady. The universities at Thiruvananthapuram, Kozhikode, Kottayam and Kannur are of the affiliating type. In addition, Kerala has the Sree Chitra Tirunal

Institute of Medical Science and Technology (SCTIMST), an 'Institution of National Importance' with the status of a full-fledged university.

The ever-growing demand for higher education has persuaded the state 3.66 government to seek new ways and means to meet the requirements of the student population. The past few years witnessed several changes in educational efforts and policies with a view to providing adequate facilities for higher education: more colleges were set up, the shift system was introduced, more seats were sanctioned, new courses were started, correspondence courses and private registration were introduced, and so on. The increase in the enrolment of students in the arts and science colleges alone give a clear indication of the growth and expansion of higher education in the state. In 1956-57 the total enrolment of students for pre-degree, degree and postgraduate degree courses in the then existing 28 arts and science college was a mere 22,254. This went up to 2.82 lakh in 174 colleges in 1982-83, and further, to 3.54 lakh in 206 colleges in 1996-97. About 59% of the total enrolment is at the pre-degree level.

An analysis of the enrolment of students in the higher education system in 3.67 Kerala during 1995-96 shows that in most courses enrolment of girls is higher than that of boys. However, more boys are enrolled in professional/technical courses. The details, as given in Table 3.15, are revealing.

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Enrolment of Girls in the Higher Education System in Kerala				
Course	Total enrolment	Enrolment of girls	Percentages of girls	
Pre-degree	2,07,850	1,12,250	54%	
B.Ed	3,688	2,858	77%	
B.A	58,453	37,539	64%	
B.Sc	58,695	37,115	63%	
B.Com	16,865	8,770	52%	
M.B.B.S	3,367	1,259	37%	
B.E./B.Tech	13,110	3,120	24%	
M.Sc	3,738	2,586	69%	
M.A	6,301	4,004	64%	
M.Com	1,221	681	56%	
Ph.D./D.Sc	1,526	678	44%	
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Source: Selected Educational Statistics 1996, MHRD, Government of India.

The prime malady afflicting higher education in Kerala is its failure to 3.68 maintain standards. Many of the colleges have been established, not in response to the needs of the localities concerned, but under political and communal pressures. Many of them do not have competent faculty and lack even basic minimum facilities such as buildings, classrooms, laboratories and libraries. But they exist and continue to impart sub-standard education. Consequently, the degrees of the universities of Kerala have not only lost their prestige, but are also being heavily discounted.*

3.69 The majority of the courses and programmes offered are not relevant to contemporary or emerging needs. They have not been redesigned to meet the growing complexity of various specialisations or to facilitate mobility between

* Report of the High Level Committee on education and employment, State Planning Board, 1984, Vol.II, P.9

courses. Furthermore, they do not integrate practical experience with the learning process and course contents are not related to local, regional and national requirements.

3.70 Another recent development is the arbitrary introduction of several selffinancing courses without adequate thought or preparation. The curricula and syllabi of these courses have often been prepared in the absence of or without consulting the academic bodies of universities. Many of these courses have been introduced without taking into consideration financial viability, infrastructural facilities, availability of qualified teachers and career prospects for students. The admission procedures too are not designed to attract the most deserving students.

3.71 College libraries suffer from inadequate book-stocks, unscientific technical organisation, poor services, and above all lack of recognition of their important academic role. In most cases, books are not properly classified or catalogued. There are no in-house reading facilities. There are colleges where students are not even allowed inside the library, let alone books being issued to them. Reference services are not provided due to lack of basic reference books and adequate professional staff. The college libraries function as ritual appendages to the institution. Lecture-centred classroom instruction, dependence on guide books and 'capsules' and the present pattern of examinations combine in making the library irrelevant for students and teachers.

3.72 The University Grants Commission (UGC) has laid down that universities and colleges should work for at least 180 days in a year. This never happens in Kerala. A large number of working days are wasted in all kinds of non-academic activities. Frequent strikes engineered by various groups account for the loss of a sizeable number of working days. Universities contribute their share to the dislocation of teaching work by spreading examinations over an unreasonably long period, sometimes extending to several months. This has a highly deleterious effect on teaching as also on the morale of students. The problem of falling attendance in classes is another serious issue. Taking attendance in the class has become a formality. Even though a minimum attendance is prescribed for appearing for university examinations, this condition is not fulfilled in most cases.

3.73 The efficiency of the higher education system is also a matter of serious concern. The drop-out rate at the degree level in arts and science colleges alone is estimated to be around 30% (by the third year of the course).* Analysis of the results of examinations conducted by Kerala University during the last five years (1991-92 to 1995-96) shows that the average failure rates are: pre-degree 60%, BA 38%, MA 59%, B.Com. 69%. In the MA Economics final examination conducted by Kerala University in April 1996, only 92 of the 1,296 candidates passed, recording a failure rate of 93%. Things are not different in other affiliating universities. In the B.Com. final in April/May 1996, a total of 12,737 candidates appeared, of whom 3,012 passed, recording a pass percentage of only 23.65%.

3.74 Distinguished teachers are as important to the advancement of higher education as details of curricula or adequacy of other facilities. The quality of higher education depends upon the skill, ability, commitment and professional preparedness of the teacher. Teachers selected on parochial, communal and such other considerations and not on merit cannot build up a faculty of quality.

State of Education in Kerala

Review of the

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^{*} Calculated from the figures given by the Directorate of Collegiate Education

There is widespread complaint among the student community that many 3.75 teachers do not teach properly and that many classes are not worth attending. Cases have been reported where teachers mark their attendance for several days in advance and absent themselves to attend to private business. The practice of conducting private tuition, though illegal, is prevalent. Moreover, the existing scheme of assured salaries, absence of a performance credit system and lack of application of academic criteria for promotions has adversely affected the performance of teachers.

In 1988, the UGC prepared and adopted a code of professional ethics for 3.76 teachers in consultation with teachers' organisations. But its implementation has not been insisted upon either by the UGC or by the central and state governments.

There are no impartial, objective and open recruitment procedures that 3.77 can ensure the appointment of persons of high quality and calibre to teaching positions. There is a need for a transparent, participatory and data-based system of teachers' evaluation. Teachers have the obligation to ensure that the highest levels of scholarship, objectivity and recognition of merit distinguish all their activities. Norms of accountability are necessary with incentives for good performance and disincentives for bad performance.

There is also a need to review the affiliating university system which dates 3.78 back to a century and a half. In the United Kingdom, where the affiliating system originated, the university system has undergone major changes. Kerala continues to set up affiliating universities in the outmoded form. The affiliating system, in the opinion of many, has prevented universities from concentrating of their prime responsibility on post-graduate education, research, and extension and development of education.

The universities in Kerala continue to follow the annual examination system, 3.79 which has been a major contributing factor to the poor quality of higher education. Continuous and comprehensive internal evaluation, successfully experimented in other universities, has been resisted by the academic community for various reasons. Kerala University is reported to have introduced the credit and semester system in 38 teaching departments. CUSAT and MG University have the system of internal evaluation up to a certain level. But continuous and comprehensive evaluation is yet to be introduced in the higher education system as a whole.

Democratisation of education, practised in higher education institutions in 3.80 Kerala for several decades, has contributed to the development of a healthy campus atmosphere. However, of late certain undesirable trends such as inter-organisational rivalry, conducted along the lines of the major political combinations in the state, have become dominant on campuses, preventing healthy political debate and discussion. These trends will have to be curbed, and adequate checks and balances provided to maintain a healthy atmosphere on campuses.

The performance of centres of distance education in various universities, 3.81 envisaged to disseminate knowledge to those who need it, has been unsatisfactory. They conduct conventional degree courses through contact programmes and with study materials that are reportedly poorly organised. The School of Correspondence Courses and Continuing Education has introduced a liberalised degree programme, which has attracted thousands of students. This programme is designed not to

impart knowledge, but to award degrees by conducting examinations, and hence the main purpose is lost. The distance education centres are also ill-equipped to use modern educational technologies.

Although there is growing awareness about continuing education and retraining programmes, the existing facilities for these are far from sufficient. Two academic staff colleges have been sanctioned to the Kerala and Calicut Universities, but the refresher courses and orientation courses they conduct on a routine basis are grossly inadequate. College teachers are therefore unable to cope with the expansion of knowledge taking place in their subjects.

3.82 The existing management structure of universities in Kerala is marked by bureaucratisation and politicisation: the former, a legacy of the colonial period, and the latter, a post-independence phenomenon. In terms of their composition, functions and powers, the work of university bodies such as the Syndicate, Senate and Academic Council needs to be reorganised. There have been instances of interference by the government and by Syndicate members in the day-to-day administration of the universities. At times even decisions on what new courses should be introduced and in which institutions, have been taken under political pressure.

While the requirements of funds for higher education have increased substantially, there has been a comparative decline in the allocation of funds to this sector. Lack of adequate resources too is one of the major factors responsible for the present state of affairs in the higher education sector. The fee structure in colleges, determined a quarter century ago, has not changed since then. While government colleges are starved of funds, private managements resort to various measures, not altogether ethical, for mobilising resources. Such practices have also contributed to the fall in standards.

Postgraduate Education and Research

3.84 Facilities for postgraduate education are mostly concentrated in the departments of the seven universities, affiliated colleges and the Sri Chitra Tirunal Institute of Medical Science and Technology. There are 140 postgraduate colleges in Kerala (20 government colleges and 120 private colleges). The total number of students enrolled in these in 1996-97 was 11,160 (2,954 boys, 8,206 girls). There are 38 postgraduate departments in Kerala University, 25 in Calicut University, 20 in MG University and 27 in CUSAT. Besides these there are postgraduate courses in medical colleges, engineering colleges and in the agricultural university. There are about 2,000 postgraduate students and 200 teachers in CuSAT. The standards of postgraduate education in universities are found to be deteriorating. Affiliated colleges offering postgraduate courses are generally not adequately equipped to conduct them.

3.85

3.83

Research is an essential component of higher education, particularly of postgraduate education. Research in the education system of Kerala is found to consist mainly of Ph.D. programmes. During the last five years Kerala University has produced an average of 123 Ph.Ds per year, and 189 persons were registered for Ph.D. in 1995. In Calicut University, 96 persons were registered for Ph.D. in 1996 and it produced 36 Ph.Ds in 1996. During the last eight years MG University has produced 120 Ph.Ds and in the last five years, CUSAT has produced 51 Ph.Ds. While

there are a few islands of research in certain university departments, it is not a widespread phenomenon within the system. There is no social auditing of research.

To promote research, a university library needs to deliver a package of 3.86 many related services: provision of books, journals, documentation, selective dissemination of information, current awareness, indexing and abstracting, bibliographies, translations, inter-library loan, referral service, advisory service on source materials and retrieval of information and documents. However, no university library in Kerala has served all these functions effectively. Libraries are starved of funds, falling low, as they do in terms of priority in the scheme of financing within the university. Libraries are unable to stock all the recent books, let alone journals and research materials. They are not treated as research centres, and adequate facilities for research do not exist. There is no networking of college or department libraries with the university library. The state of the libraries is a reflection of the state of research in the university campuses today.

Many agencies such as the UGC, the All India Council of Technical Education 3.87 (AICTE), Department of Science and Technology (DST), Department of Environment (DOE), Indian Council of Social Science Research (ICSSR) and Indian Council of Agricultural Research (ICAR) promote and fund research in universities. But, universities in Kerala do not seem to take advantage of this funding. The Kerala Agricultural University is at present operating 185 externally aided research projects with a total estimated cost of Rs.18.0 crore. The Sri Chitra Tirunal Institute of Medical Science and Technology has done well in the field of sponsored research. During the past five years, CUSAT has undertaken about 100 research projects sponsored by external agencies with funding to the tune of Rs.8.0 crore, while Mahatma Gandhi University has undertaken 26 projects with an estimated cost of Rs.1.6 crore. On the whole, however projects comprise only about 2-3% of the total resources of universities.

Research is practically non-existent in colleges, because of lack of 3.88 infrastructural facilities and an almost complete preoccupation with pre-degree and undergraduate teaching. Poor libraries, inadequate information systems, absence of computational and reprographic facilities are endemic to the majority of the educational institutions. Even in otherwise well-equipped institutions, provision for spares, consumables and replacement of short-lived equipment is inadequate. However, a new generation of young teachers with research degrees are showing some initiative to make use of the available opportunities.

There is a need for proper screening and evaluation of research programmes 3.89 undertaken by postgraduate students and research scholars. Much of the research done at present is reported to be mediocre, repetitive and not always relevant. There are instances where the research topic of the supervisor is reproduced by students with minor modifications. Because of the importance of a research degree under UGC prescriptions, a lot of research is undertaken on irrelevant or even outdated topics; there are research theses that do not cite a single reference after 1930!

There are a few autonomous institutions that provide good facilities for 3.90 research, and perform far better than university centres: the Centre for Development Studies (CDS), Centre for Earth Science Studies (CESS), Centre for Water Resources Development and Management (CWRDM), Kerala Forest Research Institute (KFRI),

Tropical Botanic Garden and Research Institute (TBGRI). But they work in limited and specific areas, and are also mostly dependent on the state government for funding.

3.91 Other important research and development centres in Kerala include the Vikram Sarabhai Space Centre (VSSC), Central Plantation Crops Research Institute (CPCRI), Central Tuber Crops Research Institute (CTCRI), Central Institute of Fisheries Technology (CIFT), Central Coir Research Institute (CCRI), Rubber Research Institute (RRI) and Regional Research Laboratory (RRL). They are all autonomous institutions under the central government.

Technical Education

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Technical education in the state during recent years, to a large extent, has been guided by the policies and guidelines set at the national level by the All India Council of Technical Education. The technical education system has expanded during he past four decades. In 1962, Kerala had only 6 engineering colleges and 15 olytechnics with annual intake capacities of 780 and 3,024, respectively. Today, it as 16 engineering colleges and 33 polytechnics with annual intake capacities of about 4,500 and 5,500, respectively. In addition, there are 51 technical high schools, of which 47 are government institutions.

3.93

There is a great demand for technical education in the state, for it ensures a secure profession that guarantees social status and power. However, only about one in six applicants get admission in engineering colleges, while the ratio is 1:10 in the case of polytechnics. This has resulted in a scramble for admission to engineering courses, and a number of students go to institutions in the neighbouring states of Karnataka, Tamil Nadu and even Maharashtra, paying out huge amounts as donations, capitation fees and other charges. The demand for technical professional education provides the social setting for the spread of the so-called self-financing institutions in the technical sector.

3.94 The infrastructural facilities in many of the engineering colleges and polytechnics in the state are alarmingly inadequate. The quality of training and the teaching-learning process need upgradation; many of the courses are outdated; and there are no meaningful research and development activities. By and large, technical education institutions function in isolation, with hardly any linkages or interaction with user agencies.

3.95 Unemployment among engineers and technicians is on the rise. Student Counselling and Placement Cells are either non-existent or non-functional. The scheme of apprenticeship training for engineering graduates and technician diplomats is not being utilised properly. The drop-out rate too is high: about 30% at the degree level, 35% at the diploma level, 40% at the technical high school level, and 45% at postgraduate level. There is a shortage of faculty: about 25% of the faculty positions remain unfilled. Most of the teachers do not have industrial or practical experience in their field.

3.96 Technical education institutions in Kerala function under the Directorate of Technical Education (DTE) which was established in 1957. The Commissioner for Higher Education is the controlling authority at the government level. The present affiliated status of the colleges makes them inefficient and unproductive. They have very limited powers and there is total lack of delegation of power to officers

next in line to the Principal. Therefore there is no involvement of the faculty in the administration and management of institutions. For various reasons, many of the centrally sponsored programmes and schemes have not been adequately made use of by the state to strengthen the fabric of technical education.

Generally speaking, technical education does not have an organic link with 3.97 the development of the state and its people. They function in isolation and discharge their functions in a mechanical and routine manner.

Medical Education

All systems of medical education come under the Department of Health 3.98 and Family Welfare of the government.

(i) Allopathy

The first medical college in Kerala was established in Thiruvananthapuram in 1951. Since then, the medical education and training infrastructure in the state has grown to comprise 6 medical colleges (one each at Thiruvananthapuram, Kozhikode, Kottayam, Alappuzha, Thrissur and Kannur) and 4 dental colleges (one each at Thiruvananthapuram, Kozhikode, Kottayam and Alappuzha). The total annual intake for the different courses are: MBBS-700, BDS-80; B.Pharm-28, B.Sc Nursing 150, Dental Hygienist Certification Course-10, Diploma in Clinical Child Development - 12, Postgraduate degree courses - 227, Specialised courses in subjects such as Plastic Surgery, Gastroenterology, Cardiology, etc.-40, Diploma and certificate course in subjects such as Child Health, Ophthalmology, Dental Mechanics, etc. - 793.

The medical college at Kannur is a new one. Originally established in the 3.99 private sector, it was taken over by the government recently. The School of Medical Education in M.G. University conducts a number of medical and paramedical courses, particularly nursing, some of them in coordination with the Medical College Hospital, Kottayam. The Directorate of Medical Education, formed in 1983, coordinates the activities and functions of medical colleges in the state.

Most of the medical colleges are overcrowded. The medical colleges at 3.100 Thiruvananthapuram and Kozhikode, which were meant to have an annual intake of 50 students each at the MBBS level, have now increased their annual intake to 200 each without a proportionate increase in infrastructure. This has led to several problems, for example, shortage of equipment and library facilities. The hospitals attached to the medical colleges have their own problems: X-ray machines do not work for days together; hospital laboratories do not have the necessary facilities; and the condition of blood banks leaves much to be desired. Recently conditions in the Kozhikode Medical College Hospital set off a wide-scale popular protest.

Internship training (CRRI) is neglected. Many students do not stay in the 3.101 hospital even though this is a regulation of the Indian Medical Council (IMC). Instead, some of them use this time to prepare for the entrance examination to postgraduate courses. Those who take their internship seriously do not get due credit; most graduates are given a blank 'satisfactory' or 'good' rating and this does not count for selection to postgraduate courses. Steps need to be taken to give due weightage to scores obtained in the qualifying examination as well as to internship training. It may be made mandatory for fresh graduates to work in rural areas for a period of two years under a qualified doctor before they can apply for postgraduate study.

3.102

The Sree Chitra Tirunal Institute of Medical Science and Technology, which is outside the purview of the Directorate of Medical Education, is an 'Institute of National Importance' with the status of a full-fledged university. It offers a number of postgraduate training programmes leading to DM and MCL degrees in cardiovascular and neurological disciplines, and Ph.D. in medical and allied sciences, and bio-medical technology. The Institute also conducts postdoctoral certificate courses in Anesthesiology and Radiology and an 18-month course leading to the degree of Master of Public Health (MPH). Post-basic courses in cardiovascular and neuronursing, diplomas in cardiac laboratory techniques, operation theatre technology, advanced medical imaging, neurology, and modern blood banking techniques are other courses offered by the Institute. In addition to the above, which are regular courses, the Institute extends short-term training facilities to postgraduate students in medicine, nursing and other related areas in several centres in India and abroad.

(ii) Ayurveda

Review of the State of Education in Kerala

3.103 The state has a network of ayurvedic institutions: there are five ayurveda colleges (in Thiruvananthapuram, Thrippunithura, Ollur, Kottakkal and Kannur), with a total annual intake of 170 students for the BAMS course. The Ayurveda College at Thiruvananthapuram also conducts MD courses in ayurveda with an annual intake of 42 students. Only the BAMS degree of the Ayurveda College at Thiruvananthapuram is recognised by the Central Council of Indian Medicine. The college falls under the purview of the Directorate of Indian Systems of Medicine. While ayurveda in Kerala enjoys national recognition, efforts and measures to maintain high quality are not evident.

(iii) Homeopathy

3.104

The first homeopathic medical college with degree course in homeopathic medicine was started at Kozhikode in 1975. Today, there are five homeopathy medical colleges in the state, of which two are in the government sector and the remaining three in the private sector. The two government colleges offer BHMS degree courses, and BHMS (graded) degree courses with an annual intake of 100 students for each course. The private Athurasramam NSS Homeo Medical College at Kurichy conducts both BHMS degree and diploma courses with annual intakes of 50 and 120 students, respectively. The other two private colleges conduct BHMS diploma courses with an annual intake of 60 students each. The homeopathy medical colleges in the state come under the Directorate of Homeopathy. Recently another private college, Vidyadhiraja Homeo Medical College, has been given temporary affiliation by Kerala University. The homeopathy system has a steady clientele, in part due to its low cost. However, measures to accord it a role in the state's overall health policy are not observed.

Agricultural Education

3.105 Higher education in agriculture is the responsibility of the Kerala Agricultural University (KAU). The first college of agriculture was established in 1953 at Vellayani, Thiruvananthapuram, as an affiliated institution of Kerala University. A college of veterinary and animal sciences was also established simultaneously at Mannuthy, Thrissur.

3.106 Kerala Agricultural University was established in 1971, under the administrative control of the government's Department of Agriculture. It started

functioning in 1972, and the above-mentioned institutions and research farms were transferred to it to function as constituents of the university. The KAU has four departments: agriculture, agriculture engineering and technology, veterinary and animal sciences, and fisheries science and technology. Thus, agricultural education comprises all the areas in the food production cycle, namely crop science, animal science and fisheries science. Teaching, research and extension work are integrated in all the academic programmes. Originally, the university followed a trimester system with internal evaluation. In 1987, the semester system with internal evaluation as well. The university has about 404 teachers in all, of whom 141 are women.

The KAU has 8 constituent colleges spread over 6 campuses and 23 research 3.107 stations. In the faculty of agriculture, there are three colleges of agriculture, one each at Thiruvananthapuram, Thrissur and Pilicode-Nileshwar (Kasargode district). The colleges at Thiruvananthapuram and Thrissur have run undergraduate, postgraduate and doctoral level programmes over the last two decades in various disciplines of agricultural science. The college at Pilicode-Nileswar was established in 1993-94 and it offers only undergraduate courses at present. Then there is a College of Forestry and College of Cooperation, Banking and Management, both of which offer undergraduate as well as postgraduate course in their areas. The College of Agricultural Engineering and Technology, Thavanur, Malappuram district, offers a 4-year B.Tech. course in agricultural engineering and 2-year M.Tech. courses with specialisation in different areas. The College of Veterinary and Animal Science, Mannuthy, is considered to be one of the leading faculties in the country, offering BVSc and AH, MVSc and Ph.D. programmes in several disciplines. The national level Advanced Centre in Veterinary Technology is located in this college. The college also offers a 4-year degree programme in dairy science and technology.

A one year postgraduate diploma is offered by the Faculty of Veterinary 3.108 and Animal Sciences, utilising the facilities of the Meat Technology Centre, which is a nationally recognised referral laboratory for detection of adulteration and species identification. It is a recognised national centre of excellence in meat storing technologies.

Besides the formal academic programmes, various faculties offer in-service 3.109 courses to benefit personnel working in the departments of agriculture, animal husbandry, dairying, fisheries, etc. Job-oriented, short-term courses of durations varying from a few weeks to six months are also offered by the various faculties and research stations.

A weak area in the agricultural education sector is the lack of well organised 3.110 middle-level training to develop the capabilities of the technical staff. This area remains practically unattended at present. Such training courses may be organised similar to those in the medical and paramedical fields. Retraining and continuing education programmes will be able to update and strengthen the capability of personnel working in the departments of agriculture, animal husbandry, dairy and fisheries.

Almost all the academic programmes offered by the university are modelled 3.111 on conventional lines. There is need to introduce more problem solving contents. Modern teaching aids and educational technology may replace traditional lecturing and giving notes.

Management of Higher Education

3.112 There are three nodal points for the management of higher education: 1) the government 2) the university and 3) the college. Each of these has built complex structures which have become increasingly unwieldy. There is considerable amount of diffuseness and loose as well as unimaginative management structures built at each level, which have resulted in endless number of issues and controversies.

The Government Level

3.113

13 The Government operates through three levels of establishment: 1) The Higher Education Department at the Secretariat, 2) Various directorates, such as the Directorate of Collegiate Education (DCE), the Directorate of Technical Education (DTE) and the Directorate of Medical Education (DME) and 3) the Deputy Directorates of Collegiate Education (DDCE) at regional level.

3.114

Review of the State of Education in Kerala 4 The Higher Education Department in the Secretariat has a staff pattern broadly similar to that of the General Education department. Apart from policy decisions, funding, and matters related to universities, service matters of teachers and non-teaching staff are brought to the Higher Education department, which results in duplication of functions with the DCE and other directorates, and has helped the consolidation of centralised, bureaucratic structure as in the case of General Education Department.

3.115 An examination of the administrative structure of the Directorate of College Education shows that the administration of higher education is centralised. Apart from the entire administration of government colleges, the PF pension schemes, and scholarships for all colleges are handled by the Directorate. The authority of the Directorate in the disbursement of funds, grants and salaries to colleges has been used in recent times for intervening in academic aspects also, such as fixing qualifications and work load of teachers which are the statutory responsibilities of the universities. The initiative taken by the Government recently in introducing self-financing colleges has also been due to its position as the disburser of funds. All these have also contributed to centralising tendencies.

3.116 There are five deputy directorates of collegiate education at Kollam, Kottayam, Ernakulam, Thrissur and Calicut with the arts and science and training colleges evenly divided among them. About 40 arts and science colleges, physical education colleges, music colleges, sanskrit colleges and college hostels come directly under DCE. This curious 'decentralisation' was to facilitate the disbursement of salaries to private colleges. Approvals to teachers in private colleges are also given by the Deputy Directorates. However, the colleges have to communicate directly to DCE on most of the other financial and establishment matters.

3.117 The administration of colleges consist of the Principal, the college staff council and the administrative branch. Governing Bodies and Governing Council are constituted in private colleges. They either do not exist at all in many colleges or exist as extensions of managements. Recently, bodies called College Development Councils have been constituted in some government colleges.

3.118 Several differences do exist between the structure of administration in private and government colleges. A government college Principal is the drawing officer of his institution, and he has authority over almost all routine matters concerning the college. A private college Principal is not the drawing officer, and his/her authority is checked by the Deputy Director of Collegiate Education on one side and the management on the other. Almost all papers regarding salary and service matters including leave are processed by DDCE and the sanctioning authority of leave, except casual leave, is the manager.

The Direct Payment Agreement of 1972 between the government and the 3.119 private college management has imposed a dual system of management on private colleges. The salary of teachers and non-teaching staff are paid by the Government, and the service conditions of teachers are the same as those of Government college teachers. The DPA has sanctioned the right of appointment of teachers and that of student admissions to managements subject to certain generally accepted procedures. The present mode of appointment of teachers is selection by a selection committee in which the management nominees have a decisive influence. The provision of community merit and management quota in student admissions are results of this agreement.

The DPA has, on the one hand, brought the private colleges into the common 3.120 system of management, while ensuring adequate protection for minorities. At the same time, the system has preserved the sectarian interests of various communities even at the expense of constitutional provisions. Even majority communities were given the same kind of protection as minority communities. The constitutional provision for reservation for SC/ST are not observed by private college managements in the appointment of teachers. Numerous managements openly commercialise both the teacher appointments and student admissions by collecting huge sums from candidates with bare minimum qualifications. In government institutions transfers and postings have assumed political overtones while they enjoy very little academic or administrative powers to develop institutional distinctiveness. Management of higher education in Kerala whether at university or government or institutional level remains centralised with very little autonomy or flexibility. Involvement of the academic and student communities remain a formality and does not extend to academic innovation and experimentation.

Chapter IV The Structure and Content of School Education

- 4.1 t is necessary to view the education scenario as a whole, and identify its core character and basic objectives, before we move on to its different stages. The entire education system is an integrated one and each sector and segment, while retaining its distinctive character and features, maintains links with other sectors and segments. The different sectors in the system are therefore mutually dependent and complementary. Any such holistic system of education is directed by a set of social goals, academic standards, skills and vocations, which need to be continuously upgraded and suitably orchestrated within the system. It offers diversity at the horizontal and vertical levels, while retaining a core of broad objectives.
- 4.2 Certain distinctive features of the demographic scene in Kerala which will play a major role in any attempt at restructuring the education system, need to be considered at the outset. The size of the school-going population in the state, particularly at the primary level, is sharply declining. The latest census reports and demographic analysis show that this downward trend which has been on for some time, is likely to persist in the near future, extending to higher age groups.
- 4.3 This fall of aggregate population in the school-going age group poses certain issues for planning. The state does not need to plan for expansion of the primary and secondary stages of education, but efforts will have to be made to rationalise the existing structure and facilities for ensuring their optimal use and effecting quality improvement. The falling numbers would enable the teacher-pupil ratio to be brought within desirable limits; this in turn will have an impact on the quality of classroom instruction. The existing teacher training facilities could be used for retraining and in-service upgradation. Programmes and proposals to improve enrolment at the higher secondary and degree levels could be considered. It is possible to foresee a stable level of admissions from the primary stage up to degree courses and an increasing emphasis on quality improvement.
- 4.4 Education in Kerala has certain features, which set it apart from other Indian states: accessibility in terms of physical infrastructure, high levels of admission and retention up to the higher secondary level. Hence, a system of education which ensures universalisation up to the higher secondary level is both possible and feasible in the near future. Detailed planning and management of all sections of education can be made possible, taking into consideration the demographic features mentioned above. What is exciting is that this is possible with emphasis on equity, quality and social relevance.

General Issues Concerning Curricula for Secondary and Higher Education

4.5

The content of education, the curriculum, should help attain the basic goals of education in the given socio-political milieu. It should aim at all-round development, promote awareness of the world and equip one to deal with it, help acquisition of knowledge and skills, and engender creativity. It should result in character-building, realisation of one's physical and mental potentialities and inculcation of social and human values. It should provide one with a global perspective, while at the same time equipping one to pursue national and subnational goals and aspirations. It should promote awareness of one's cultural heritage as well as societal obligations. It should lead to equality and empowerment of all sections of society. It should uphold the dignity of labour and give value to both manual and mental work. Upgradation and creation of knowledge is an indispensable component of education. The content of education should be such as to interlink the educational and productive processes, one enriching the other. It should also lead to gainful employment.

A balanced curriculum should harmonise elements with universal 4.6 applicability, the national framework, sub-national variations, and regional and local requirements. These are elements which form part of the curriculum anywhere in the world. For example, acquisition of competence in reading, writing and arithmetic is the most important function of elementary education in all countries or, to take an example at another level, the study of quantum mechanics is an indispensable component of higher education in physics all over the world. As Kerala forms an integral part of India politically, economically, administratively, socially and culturally, the national curricular framework, evolved after much deliberation and discussion, and which was not intended to be rigid and immutable, should define the broad contours of the educational curriculum in Kerala. However, a mechanical application of the national framework is unnecessary. The status of education in Kerala is very different from what obtains in most other states in the country. So is the socio-political milieu in the state. The curriculum, therefore, should reflect the Kerala reality and the concerns of the people of the state. Even within the state, the curriculum should be flexible enough to accommodate regional and local needs and concerns.

A perception, shared by many, is that a substantial section of the people in 4.7 Kerala view the different levels of education simply as stepping stones towards the ultimate goal of professional degrees, entry into administrative services, or training abroad. At another level, in the absence of avenues for other useful occupations, students who successfully complete one stage of education, by and large, move on to the next higher stage as a matter of course. Thus, no stage logically appears to be terminal except for those who drop out of the system on account of failure. This is not a satisfactory situation. It is important to define the purpose of each stage of education and design curricula with that purpose in view. It is important to remember that after the primary stage, each stage could be a terminal stage or a preparatory stage. The curriculum at each stage should therefore serve both these roles. There is no inherent incompatibility between these two roles. They are a natural concomitant of the dynamics and continuity of the educational process. Each stage is at once an end in itself and a means to another end.

Education is a powerful tool for human resource development and nation 4.8 building. Its content should be such as to promote national ideals and cultural self-esteem. This is particularly important in the present ambience of an unwholesome alien influence on all facets of life, the tendency towards unchecked consumerism and indifference to indigenous cultural moorings and heritage. A typical manifestation of this problem in Kerala is the attitude towards Malayalam. Malayalam should be the medium of instruction and should be taught as a subject at least until the end of the secondary stage. However, the study of other languages should not in any way be neglected. English and Hindi should be introduced at the

upper primary stage and should continue to be subjects of study throughout the secondary stage. The distinctive features of the culture and history of Kerala should also form part of the core of the school curriculum. Care should be taken to prevent revivalism of any kind creeping into the curriculum. The cultural distinctiveness of Kerala should be viewed in the national and international contexts. The essential plurality of the cultural heritage of Kerala, indeed India, needs to be emphasised.

The educational curriculum should specifically address the problems of widespread unemployment and underemployment in Kerala, especially among the educated youth, and the unwillingness and inability of most of them to take up anything other than white-collar jobs. While on the one hand there is rampant unemployment, on the other, there is a dearth of competent artisans, technicians and those who can imaginatively seek the different employment opportunities that Kerala can offer. The curriculum should address the attitudinal and pedagogical problems involved in this paradox. Gardening, keeping the school premises clean and such other manual activities should be encouraged with the involvement of the local population, from the primary classes onwards. Locality-specific, work-oriented activities should also be encouraged right from the beginning. Crafts, technical training, floriculture, agricultural practices, fisheries, etc., could form part of the formal curriculum at the secondary and higher secondary stages for a section of students, most of whom could then enter useful occupations after the higher secondary stage or go on to higher training in the relevant areas. Adequate flexibility should be exercised in designing the courses for this component of the curriculum. The local population, especially those directly involved in productive processes, should be actively involved in developing the courses.

4.10 The curriculum for higher education should be such as to lead one to the frontiers of knowledge. The curriculum requirements for university, technical (engineering and medicine) and vocational higher education should respond to immediate societal needs. Technical education should also relate to societal requirements, but it should have a higher and deeper knowledge content. In general, the engineering curriculum at the degree level should aim at a thorough grounding in basic engineering subjects, with specialisation reserved primarily for the postgraduate stage. The curriculum for university education should also relate to society, but it need not necessarily be such as to serve immediate societal needs. At the higher level, emphasis should be on a thorough understanding of the subjects learned. Universities should be the standard-bearers of excellence at the state, national and international level and should assume a leading role in the intellectual life of the state.

4.11 In the educational process, the mode in which knowledge is communicated is as important as knowledge content. The current mode places undue emphasis on mechanical acquisition, retention and reproduction of often unprocessed information. This needs to change. The learning process should be student-centred and the emphasis should be on knowledge and analytical abilities rather than on decontextualised information and learning by-rote. Furthermore, learning about the process of generating knowledge is as important as acquisition of knowledge. The teaching learning process should be interactive and flexible. Learning should be an enjoyable process and help creative self-expression. The curriculum for teacher

The Structure and Content of School Education 4.9

training should be such as to enable the teachers to effect this shift in emphasis. Adequate attention should be paid to periodic retraining of teachers in teaching methods as well as to updating their specializations. Vacations should also serve as a time for self-improvement for teachers. The criteria for appointment of teachers should include aptitude for and interest in teaching.

Non-conventional means of teaching have been and are becoming increasingly 4.12 important in the teaching process. The widespread reach of the electronic media and the ready availability of electronic teaching aids have added a new and important. dimension to this area. These means should be developed and expanded to derive their full benefit. Attention should be paid to finding appropriate ways of using the media for the dissemination of knowledge. That, however, does not obviate the need for well-stocked libraries. It is important to inculcate the reading habit in students at all levels and the importance of libraries in this context cannot be overemphasised. Reading and analysing research papers appearing in journals should also become part of the schedule at the postgraduate level.

Evaluation of students is an important component of the educational 4.13 process. In an overwhelming majority of situations, evaluation consists of terminal examinations where the student's quality is judged solely on the basis of written answers produced within a few hours. It is well recognised that excessive dependence on this mode of evaluation is undesirable. In addition to written examinations there should be provision for problem-solving sessions, experimentation projects and so on. Different evaluation modes should be carefully chosen depending on the level and nature of the subject. The terminal examinations themselves need to be reformed so that they test not only powers of retention and reproduction, but real understanding of the subject and creativity. Evaluation is meant not only for grading the performance of students but also to identify and assess their strengths and weaknesses with a view to helping them make further progress. Evaluation within an educational system should also encompass teachers and institutions.

The development of curricula and syllabi is a continuous process. Institutional 4.14 mechanisms should be set up at different levels for their continuous review and necessary upgradation. The process of change and upgradation should involve the participation of all the relevant sections. Mechanisms for curriculum development should permit substantial autonomy and flexibility at different levels. Development of instructional material, especially textbooks, is also an area that merits attention. Teachers themselves are best suited to write textbooks, but it is useful to have subject experts as consultants. The same is true of other teaching aids.

It needs to be emphasised that proper implementation of the curriculum is 4.15 very important. It is a hard enough task to develop good, appropriate curricula. But this would be a useless exercise unless their implementation is planned well. Appropriate mechanisms should be developed to ensure that the prescribed curricula are properly implemented. A committed and enthusiastic body of teachers is a precondition for the successful implementation of any curriculum.

Having considered the general issues concerning curriculum formulation and 4.16 its role in building up the relevance and excellence of educational programmes, we shall now examine in detail the structure and content of education at different stages.

School Education

4.17 Until recently, Kerala had a ten-year school system. Now, with pre-school gaining acceptance as a viable institution and the +2 stream becoming part of schools, the school system has an expanded format. The objectives of ten-year schooling will therefore have to be modified from the perspective of twelve- year schooling with two-year pre-schooling.

The Pre-school Stage

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Social recognition of pre-school education has increased over the past few decades. The pre-school is sought as a place for children of working parents in a nuclear family set-up, and as a place for preparing children for regular schooling. A day-care centre or creche often provides only custodial care for infants and children of the pre-school age. A nursery school, on the other hand, emphasizes cognitive development and school-readiness. Some pre-school programmes consider the child-care centre mainly as a place where health, nutrition and immunization can be delivered, play being the ideal method. However, many pre-schools lay stress on the child's formal learning skills and this has resulted in pre-school centres being treated by parents and teachers as downward extensions of regular schools.

4.19 Experience and research in the field have shown that the child is ready for formal schooling at the age of six or seven years. However, long before formal schooling, the child shows an inclination to explore immediate surroundings and even displays aesthetic appreciation. Children are very mobile and curious about natural phenomena, people around them and things in the environment. Providing access to these and ensuring the opportunity for both sensory motor development and the evolution of concepts constitute the agenda of pre-school education. The ideal age group for structured sensory development and assimilation of concepts for most children is from the fourth year to the sixth year, which should be the period of pre-schooling as well.

4.20 Growth and development of the child in the physical, socio-emotional, cognitive and linguistic sense is the basic function of the pre-school curriculum. Children are creative, and have an original and fresh response to all events. They have a natural sense of humour. They need to have a variety of play activities which will enable them to grow gradually physically and mentally, as well as to develop selfesteem and friendship with other children. These could include, for instance, handling natural materials such as sand, water, clay, leaves, sticks and pebbles. Children love to manipulate clay, making simple shapes. They enjoy the feeling of moulding sand, serving and breaking sand pies and so on. Blocks of different sizes and shapes could be given to them for constructing houses and bridges. Finger painting and such other activities provide for gross and fine motor development. Thus the curriculum would include preliminary concepts of size, length, colour and number. It would provide for music and movement, drama, puppetry and many kinds of story-telling in which children participate, singly or in groups.

4.21 The mother-tongue is the ideal medium of communication at this stage, Both for comprehension and for expression, there is no substitute for the mothertongue. This should be used for story-telling, singing and for drama, which involve expressive situations and are therefore suitable for the socio-emotional development of the child. Language exercises of this sort are necessary as the foundation for all

later language development. Such an emphasis on language should not lead to formal instruction in linguistic skills. Rather, the child should be encouraged to speak, to communicate with his/her friends and with adults, and to listen to others. Writing and reading of the alphabet is premature at this stage and should therefore not be taught in pre-school centres.

Formal learning and rote learning at the pre-school stage should be 4.22 discouraged. Formal learning, if forced on a child at a tender age, will seriously hamper his socio-emotional and cognitive development. Play is the medium of learning at the pre-school and the only method by which concepts can be taught. Through play, motor growth takes place and the child's sense of identity is developed. The pre-school child needs a balance between individual and group activity, between rigorous and restful activity and between boisterous and quiet moments. The daily schedule must include many activities and ideally children should be able to choose any activity they like for a given period of time.

Nature walks should be a part of the pre-school programme where children 4.23 are taken out to look at trees and flowers, squirrels and butterflies and to collect pebbles and dried leaves for the school's Nature Corner. These can then become part of the learning materials. Outdoor play should be facilitated with swings, slides, seesaws, old rubber tyres, etc. The pre-school centre should be airy and well-ventilated with plenty of outdoor space which is child-friendly and safe. The rooms must be as free of furniture as possible so that there is sufficient space for group activity, and well-lit.

Both variety and flexibility are needed to make a pre-school centre 4.24 functional. There is no rigid set of activities that constitute the syllabus, only the right attitudes towards children, the right setting for them to express their growing abilities and properly motivated, trained pre-school teachers to keep the centre going. Each pre-school centre should have the freedom to adapt the framework to local features and conditions, but adaptation should not be made an excuse for formal teaching, reading and writing. Children enjoy learning about themselves and their immediate surroundings by exploration rather than by instruction. The provision of appropriate sensory material is thus a necessary condition for a functioning centre.

Children enjoy what they do when they work at their own pace, selecting 4.25 a specific activity and getting involved in it. They also like to have their friends sharing the activities. Pre-school education must be seen as a cooperative enterprise between teachers and parents. Their sharing the same objectives is essential to the success of pre-school programmes. Creative interaction with children is an enjoyable, but demanding task, and appropriate training of the teachers by child development specialists, psychologists, doctors and nutrition experts is essential. Health and nutrition programmes are an integral part of the pre-school. Any evaluation of a pre-school centre will have to be done imaginatively so that the child is not directly tested, but inferences made from the level of involvement, complexity, aesthetics and happiness in the activities.

Many centres for pre-school children as they function now are nothing 4.26 more than miniature primary schools with formal reading and writing and highly structured classroom interaction. If a child of 4-5 years is made to read and write

the alphabet, forced to use pencil and paper, and given 'homework', the child's natural creativity would be undermined. Forcing the pre-school child to master the alphabet and numbers, under the strict supervision of the teacher, with punishment for non-completion or inadequate mastery will make pre-school the child's first experience of a police state. The emphasis here need to be on the child understanding events and objects; this cannot be done through rote learning. Making children repeat nursery rhymes in an unfamiliar or alien language is the most meaningless of all activities. It fosters mechanical repetition without any pedagogic purpose. It is not an activity that helps the development of concepts or permits any fantasy or creativity. However, action songs and rhymes in the child's mother-tongue can be a learning experience and enjoyed by the children.

4.27

The Structure and Content of School Education An ideal pre-school has to be a neighbourhood school. This will provide the necessary setting to foster the participation of parents, and encourage children to learn about their immediate surroundings, which is a part of both home and school. The neighbourhood school also eliminates distinctions erected by the barriers of caste, income or gender, and ensure free interaction among children irrespective of their family or social background. Ideally, an immediate neighbourhood with about 250 households should support a pre-school centre to which their children will be sent. This would also facilitate the community's involvement.

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Such neighbourhood schools will become a reality under decentralisation when the Grama Panchayats will monitor the pre-primary and primary stages of education. Under the general supervision of the panchayat, the community and voluntary agencies as well as private initiative can play a significant role in setting up neighbourhood pre-school centres. The state can provide the legal framework, broad guidelines for the organisation, content and methodology of the programme and training of the teachers. Regulation and support can be given by the panchayat system, and a system of monitoring and affiliation can also be envisaged. The pre-school centres must themselves develop a detailed programme appropriate to the local conditions, and based on the general guidelines provided by organisations such as DIET. It should also be possible to integrate the various types of pre-school centres existing at present, such as Anganwadis, Balawadis, independent pre-schools, nurseries and so on under a common system, without disturbing the diversified methodologies adopted in these different institutions. It is estimated that there are about 15 lakh children in the pre-school age group in Kerala. Enrolment of all these children in a neighbourhood pre-school system should be possible in the next ten years.

The Lower Primary Stage

4.29 The lower primary stage, constituting the first of the stages of education, is the largest segment in the education system in Kerala, both in terms of enrolment, which is near-total, and in the number of schools. There are, of course, pockets where even lower primary education does not exist, such as among certain tribal segments. A few studies conducted recently have shown that the achievement of a sizeable section of students at this stage is below expected levels. Low achievement is primarily seen among children of the downtrodden sections, scheduled castes and tribal groups — mostly children of first-generation learners, or first-generation learners themselves. Social disadvantage and perhaps discrimination appears to be the major reason for this problem. For instance, differences in the spoken dialect within schools appear to have affected the education of certain tribal segments. Cultural reasons have also played a role in the relatively low performance of Muslims in certain areas. Such problems require serious attention at the local level. Locally specific strategies both in pedagogy and school facilities may have to be developed under the supervision of the panchayats. The age of admission which is at present 5, may become 6 with universalisation of pre-schooling of the age group 3-5.

There are certain areas of general agreement regarding the purposes of 4.30 lower primary education. It is aimed at the development of basic skills in the mother-tongue, basic knowledge of the immediate physical, biological and social environment, numeracy and skills in primary mathematical operations. The lower primary stage should also aim at enhancing the creative abilities and rational thinking of the child, along with developing an aptitude towards productive processes, particularly related to the environment. Aspects of culture also need attention, and the child should be capable of appreciating and even participating in creative arts. This is the stage when the primary socialisation of the child is completed and she has her own group of friends and participates in normal social activities. It is possible to instil in the child a sense of social responsibility, a feeling of commonality of interests with other children, and the motivation to accomplish social goals.

The lower primary stage is the transition period from the play-centred 4.31 activities of the pre-school to more structured formal learning. This transition cannot be abrupt. Children should not be introduced to rigorous formal learning right away. Play and activity should continue in the lower primary stage and still be the principal method of learning. However, the play and activity will be more structured, more clearly goal-oriented.

The first abstractions to be introduced, of course, will be the alphabet and 4.32 numbers. The child recognises words, including every letter in the alphabet and makes sentences in the spoken language. This linguistic ability can be further developed through story-telling, exchanging information and by singing and conversation. The child should be naturally introduced to the world of reading and writing through the play method, and reading should precede writing. Elements like miming and role play can serve as an introduction to reading and writing.

The transition from orality to literacy can be achieved in the first two 4.33 standards, as the child learns to master the alphabet by the end of the second standard. In the third standard, the child learns to write short sentences and has an extended vocabulary which is increasingly useful in communication. By the fourth standard, the child learns to use a large part of the vocabulary of the conventional language in her locality. The child also learns to write short passages expressing her ideas, or describing a natural or social activity that she has observed.

The study of arithmetic should be based on the direct experiences of the 4.34 child. The child already knows the concepts of big and small, near and far, light and heavy, long and short, etc. as well as forms of classification. As she widens her field of experience and increases her mental abilities, counting may be introduced and later, fundamental arithmetical operations. The first standard should be fully devoted to pre-mathematical activities, towards the end of which the concept of counting may be introduced. The next three standards should deal with the four fundamental operations, by which the child will be able to solve all the problems that are a part of her natural experience. Operative problems beyond the field of

experience or conception of the child, such as a number of five or six digits, or very complex multiplication or division, should not be introduced at this stage. Weights and measures may be taught through the use of objects and implements. Reading clocks, the calendar, use of coins, recognition and construction of various shapes and forming number sequences can also be introduced at this stage.

4.35 A word of caution is necessary. Introduction of abstract concepts such as the alphabet and numbers also means the introduction of an element of formal teaching. It should not be forgotten that combining the play method with formal teaching is a challenging task. It is often easier for the teacher to fall back on mechanical rote learning which reduces the child's motivation to learn. An element of memorising may be useful in some cases, but it has to be carefully built into the system instead of being arbitrarily imposed upon the child.

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The immediate environment of children at the primary stage is limited to their homes, schools, their play area, and the locality or village where they live. The child should be taught to observe, react to, classify and discover the reasons for the phenomena observes. These include the changing seasons, flora, fauna, soil, rivers and so on. The environment should be studied through observation and activities, by which the child is also inducted into the process of science and scientific thinking.

4.37 Emphasis on the immediate environment and the oral universe as the starting point of education means that instruction at the lower primary stage will have to be entirely through the spoken language of the child, that is the mother-tongue. Any effort at artificial imposition of another language at this stage, for whatever reason, cripples the ability of the child to comprehend and react meaningfully to the world she lives in. Some children are at present prevented from learning in the mother-tongue due to socio-economic and even professional considerations — services such as the central services, transferability and so on — but such considerations should not continue to be a barrier.

4.38 However, there are certain exceptions. There are groups in Kerala whose mother-tongue is not Malayalam. Some among them have acclimatised themselves to their environment and speak Malayalam outside their homes. For them, learning Malayalam should not be a problem. However, there are linguistic minority groups in the border areas, who speak a different language, such as Kannada or Tamil, inside and outside their homes and are not well-versed in Malayalam. They should be allowed to start learning through their mother-tongue, with the provision that they will also learn Malayalam as the regional language, after they become used to the alphabet, reading and writing in their mother-tongue. There are tribals who speak their own dialects inside and outside their homes, but do not have a script. Linguistic proficiency among them should be developed through the spoken idiom and they may read and write their dialect using the Malayalam script, before making the transition to standard Malayalam at a later stage.

4.39 The child does not see the subjects which she learns — language, mathematics and environmental studies — as distinct entities, but as part of the reality that she encounters. The child's mind is not a clean slate when she enters the school; she has her own impressions, ideas and information about her surroundings. Learning at school should be an integrative and interactive process. Children should not be fed unrelated information from textbooks, asked to memorise, with the sole

purpose of passing the next examination. They should be led along the exciting path of exploration and discovery, where the teacher acts as a facilitator and guide. The integrative approach should also be reflected in textbooks. Textbooks should be designed as workbooks which children use, at this stage, to study language, mathematics and environment. The textbook is not the only element in this interactive process; a large number of activities must be designed for training other skills in the child. Sufficient opportunity must be given to develop the creative and imaginative powers of the child. Art, music, miming, role play, reading passages, stories and all other such forms of creative activity should be part of the interactive process. Another area that needs to be linked in a similar fashion is health and hygiene. Preliminary lessons should be given in preservation of health and ensuring physical development. A beginning can be made through organised physical training, including sports and games. Of course, the aim of all these is not to train sportsmen, artists or musicians, but to provide activities that are integral to the mental and physical development of children.

This leads to a major issue of debate, that of syllabus load. The present 4.40 approach is that children should get a great deal of information regarding the outside world. However, experience shows that loading the syllabus does not allow a large majority of children to cope with their school work, and hence, educationists have been arguing in favour of lessening the information load for primary students. It has also been found that deep learning of a small number of topics produces better results than superficial learning of a large number of subjects. Deep learning leaves a lasting impression on the child whereas superficial learning is useful only for writing examinations, after which the child forgets all that she has learned. The lower primary stage is the foundation for further education of the child, and it is essential that her basic education is comprehensive and thorough, but not overloaded.

Deep learning is possible only if there is emphasis on learning as a process, 4.41 when the child is encouraged to explore and find out about a particular problem, rather than be fed with readymade solutions. Such solutions are necessary for the present type of examinations. Hence the examination system, with written examinations, minimum marks, ranking and so on, will have to undergo changes, and be replaced by comprehensive and continuous internal evaluation. The child's development should also be assessed in terms of socio-emotional factors. The present system of evaluation by allotting marks should be replaced by grading, where credit is given to different accomplishments of the child. The credit system can also accommodate the various talents of children.

All these require a different concept of the teacher and the classroom. The 4.42 teacher should be a facilitator, friend and guide to children, a person who is aware of the social background and psychological make-up of the children in her class. The lower primary school teacher should have the characteristics of a sensitive social activist, and be able to conduct participatory research, if necessary. The classroom should not be a hindrance to activity or play. The present setting of classrooms with benches, desks and a platform for the teacher imposes severe limitations on creative interaction and transforms classroom procedures into mechanical practices. Classrooms now are often overcrowded. Classrooms with a reduced number of children, say, not more than twenty five, would allow for creative

interaction and activity. The entire academic work of the child should be completed in the school premises, so that the child does not have to take back 'homework'.

4.43 A different concept of a lower primary school, with reduced classroom strength, the teacher acting as facilitator, and working in intimate relationship with the surroundings, is possible in a neighbourhood school. With the supervision of primary schools by panchayats and support from the neighbourhood, reorganisation at this level is both possible and feasible.

4.44 While the broad outlines of the curricular framework may be developed at the state level, spelt out at the district level including syllabus outlines by the DIETs, sufficient freedom must be given to schools and teachers to develop these further through innovation and diversification, drawing upon the resources of the locality and community. Block resource centres, cluster resource centres and school complexes may help in this process.

The Upper Primary Stage

4.45 The upper primary stage, comprising 5th to 7th standards, is treated as a distinct entity in the state scheme and national curriculum. Enrolment at this stage is at present universal, with drop-outs only among certain groups, such as scheduled castes and tribes. The sharp decline in enrolment of scheduled castes and tribes at this level is due to reasons that have already been recounted in the case of the lower primary stage. Efforts to ensure universal enrolment in their cases require not only micro-level planning, but also an increased sensitivity to their distinct characteristics and the problems of discrimination and cultural alienation that they face today. Panchayat Raj bodies have an important role to play in these efforts.

4.46 The upper primary stage is the phase in which formal, structural learning processes are consolidated. The curiosity and creativity that marked learning in the lower primary stage will continue, but it will now involve more abstract concepts and ideas and knowledge of the world beyond their immediate surroundings. Now that the children are familiar with the alphabet, reading and writing, they can go on to more complex ideas and expressions in their mother-tongue and enter the enchanting world of literature. The structure of the mother-tongue can be introduced in terms of various usages, while the actual study of grammar may wait until a later stage. The child can also diversify her linguistic experience by studying other languages (English and Hindi). Once the child is already familiar with the basic components of one language, introducing second and third languages is pedagogically practical.

4.47 The teaching-learning process in languages will also become more complex and diversified at this stage. The child has access to a number of learning materials such as announcements, newspapers, film, TV, audio and video cassettes, magazines and books with stories and illustrations of familiar objects. The intricacies of language, both spoken and written, are appreciated. This is particularly true of the mother tongue, which they learn to use as well as any adult, with a much improved vocabulary. Familiarity with the social functions and uses of language will enable the child to learn English and Hindi better if introduced at this stage. However, the emphasis of learning English and Hindi should be on developing communicative skills. Appreciation of literature in English and Hindi may be beyond the ability of the child at this stage.

The Structure and Content of School Education

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In mathematics, the practical and theoretical aspects of numbers will be 4.48 introduced, and the child would be equipped to solve problems of a practical nature in arithmetic. The basic principles of geometric figures and their properties will be developed. Study of the decimal system and fractions can also be introduced, based as far as possible on the experience of the child. This direct relation with the immediate environment, and the study of mathematics through practical activity and persistent enquiry, will make it an enjoyable proposition. Mathematics will also assist in the development of logical thinking among children. A certain level of logical thinking is essential for an abstract subject such as algebra, which can come at the end of the upper primary stage. Mathematics should be developed as a creative and constructive activity, and its practical relevance should be stressed.

Treatment of mathematics and languages as separate subjects would mean 4,49 that the integrative approach adopted in the lower primary stage is replaced. This is in a sense inevitable; since the child is familiarised with the alphabet, numbers and their uses at the lower primary stage, it is possible to pursue their further applications in languages and mathematics separately. But, environmental studies pose a different problem. The child has so far observed and understood her surroundings in an undifferentiated manner, that is, as part of the world in which she lives. She will find it difficult to compartmentalise her world into study material for physics, chemistry, biology or history. In fact, the foundations for the various sciences are better learned in an integrated manner, as the attributes of a single object or multiple objects of study. It is possible to inculcate among children an awareness of a variety of fields of knowledge through an examination of a single natural phenomenon such as 'fire' or 'water'. It is possible to introduce integrated study of air, soil, rivers, mountains, flora, fauna, transport, communications, etc., and to link their physics, chemistry, biology, geography, history and economics so as to develop a comprehensive picture. The natural and social phenomena she learns about must be familiar to the child, so that she can observe, analyse and conduct simple experiments. Through this kind of exposition, the child will become familiar with the scientific methods --- observation, classification, making hypotheses and forming conclusions. The child must learn this not only from the classroom but by doing field projects. Children must be introduced to maps, star charts, the globe, etc., and the abstractions related to the universe may be introduced through activitybased programmes. The curriculum should rouse curiosity among children and initiative to ask questions and find the answers themselves. The child should, at this stage, learn the basic concepts of nature, life and society. She should also acquire the basic methodology to find out more about them.

Learning language, mathematics and environmental studies will remain 4.50 interlinked at this stage, each serving as an illustration or explanatory model for the other. But the nature of development of the curriculum and the cognitive and practical abilities of the child demands a certain separation of them. The separation, should not, however, be over-stressed; and strict compartmentalisation of any kind must be avoided. The methodology must involve not only the introduction of a particular problem, but also how that particular problem was perceived and solved by scientists, mathematicians and others. This would mean that the child does not treat any subject as a finished product but as a domain of knowledge both exciting and enchanting.

The Structure and Content of School Education

The personality of the child gradually matures at the upper primary stage, and he/she is on the way of becoming a full person in society. In order to develop her/his personality, the child must be exposed to all aspects of life activity; this would involve development of creative abilities in fine arts, music, other modes of visual and audio performance, aesthetic appreciation, physical culture, sports and games, health and sex education, communication and interaction skills, and skills in routine daily chores such as cooking, housekeeping, gardening, laundry, use and maintenance of household implements. It is necessary that the child understands and appreciates the cultural heritage of the nation and the state in music, dance, art and architecture, sculpture, lifestyles and productive and creative activities. They should become part of the curriculum. Along with this, the child should be introduced to productive activities where she can observe and learn through participation. The concepts of gender equality, social justice, honesty, self-reliance, patriotism and work culture need to be nurtured at this stage. Character formation that enables the child to become a responsible as well as creative social person also begins at this stage. A beginning could be made by introducing children to democratic traditions by involving them in various issues of class management.

This long list of curricular ingredients appears mind-boggling. Are we not going against the concept of less information load at the lower primary stage? Are we not burdening the child by incorporating features which have not been part of the curriculum so far? In actuality, far more information is being thrust on children today, by making them study various subjects such as general science (with seperate chapters for physics, chemistry, biology, geography, etc., in the same textbook), social studies, mathematics along with three languages. The present textbook structure is cumbersome, as there is no logical ordering or linkages among chapters in each book, forcing the child to learn separate kinds of information, without understanding their interconnections or significance. In the proposed structure, the total information load will be lower, even as the child is introduced to a number of subjects and their logical and practical possibilities, which she will be encouraged to explore. The play method would give way to a formal teaching-learning process by the end of this stage, but the elements of creativity and exploration will appear in a new form. So will the schedule for physical and mental development, now formally introduced as sports and games, fine arts and music. Hence the curriculum load is not heavier, only, the earlier components acquire a new form.

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Textbooks will perform a more important role than earlier in the teachinglearning process at this stage, but the entire curriculum cannot be covered by textbooks alone. Now that the child has learned to read and write; so, fresh reading materials and new writing assignments must be provided. The practical activities supporting the academic courses will also increase. Thus, apart from classrooms and interaction with the natural environment, the child will be introduced to a library, a workshop, or even to a natural history museum which is a part of the school or in the immediate neighbourhood. Provision should be made for teaching music, fine arts, crafts, sports and games, etc., in the school or in the immediateneighbourhood. Textbooks need to be redesigned so that they become activity-based and flexible enough to accommodate local and regional knowledge and skills. Non-detailed textbooks in the languages can be supplemented by providing reading books, magazines and newspapers. Nature tours, learning festivals, exhibitions, reading of periodicals, projects and other para-academic activities can be incorporated into the structure, for which the school has to act as the focal point.

The teacher should be willing to answer the questions of the children and 4.54 guide their activities, including projects and exploration. Some level of specialisation for teachers is useful, but they should adopt an integrated approach. While inservice training is important for teachers to upgrade their information and skills, language teachers, particularly in English and Hindi, must undergo specialised training as they are teaching second and third languages which may be unfamiliar to the child. The size of the class once again should not be large — not more than thirty-strong. Evaluation, as in the lower primary stage, should be comprehensive and continuous. Accomplishments in sports and fine arts, at present outside the examination system, must be included in the system of grading and credits. There should be periodical assessment of the levels of achievement of children at the end of the lower and upper primary stages of education all over the state by the SCERT in collaboration with DIETS, BRCS and CRCS. This will serve as indicators to apprise teachers, parents and panchayat raj bodies so that appropriate remedial measures may be undertaken if necessary.

At the end of the upper primary stage, by class VII, the child completes 4.55 elementary education. A few important issues arise at this stage. One is regarding the introduction of a certain level of vocational training. In the proposed curriculum, the student will be familiarised with various productive activities so as to create in him/her an aptitude for doing such work, and given training in such activities. The second question is of including the eighth standard in the upper primary stage, which is the national pattern. This has certain advantages. Universal elementary education up to the eighth standard will automatically become a reality in Kerala, and possibly enable legislation for free and compulsory education up to the age of 14. Moreover, the multiple objectives of the curriculum at this stage can be more thoroughly implemented with the incorporation of class VIII. But this also has the obvious disadvantage of upsetting the existing framework of school education including the composition of primary and secondary schools, the service conditions of teachers, administrative hierarchies and so on. The pros and cons of including class VIII will have to be carefully weighed and extensively debated by all before implementation.

The Secondary Stage

The secondary stage is at present the highest stage in the ten years of 4.56 schooling, comprising standards VIII to X. Unlike the primary stage, the secondary stage has a drop-out problem. Schools make use of the provision to detain 20% of the children, in an effort to maintain or improve performance. The failed students are not retained in the school. They either join other schools or drop out of the school system altogether. Some of the students do appear for the SSLC examination as private candidates, but many do not. More than one-fourth of those enrolled in the primary stage do not go beyond the upper primary, a matter of serious concern. Available information shows that the problem of drop-outs is most serious in the case of depressed classes and tribals, demonstrating their marginalisation in the present education system.
4.57 There are no clear indications regarding the quality of education imparted at this stage. If the SSLC examination is taken as one indicator, then the conclusion cannot be a happy one. Only one-third of the students enrolled at the primary stage manage to pass the SSLC and not more than 10-15% have the capability for further studies. The remaining students join parallel colleges or undergo various levels of job-oriented training.

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The structuring of the secondary stage therefore deserves serious reconsideration. There are certain general objectives regarding which there cannot be any disagreement: upgradation of linguistic skills, deeper study of the fundamental concepts in science, an acquaintance with the cultural heritage of the nation, study of different nations and cultures, cultivation of work skills, development of a democratic consciousness and growth of an aesthetic sensibility. Character formation, a secular and egalitarian approach and promotion of a scientific temper should receive particular attention at this stage through co-curricular and extra-curricular activities. It is the formulation of the curriculum and effective modes of transacting the curriculum that poses a problem. The situation is complicated by the totally examination-oriented approach to learning at this stage, whereby children are prevented even from pursuing their creative skills in sports or the fine arts, in order to concentrate on performing well in the examinations. The current SSLC examination, despite all the innovations introduced at different periods, is no better than a good memory test and it rarely succeeds in comprehensively evaluating all the accomplishments of a student.

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The secondary stage has so far been considered as the terminal point of general education, a point after which students either go in for study at a higher level or enter the workforce. However, experience shows that most of the children lack the knowledge and skills for gainful employment, and given the huge demand for employment, an ordinary SSLC-holder is given the least priority; some additional degree or skill is always required. Performance in the SSLC examination reveals the fact that most of the students neither have the necessary capabilities for further academic programmes, nor the opportunity or basic training to enter into productive activities or skilled labour. The creative ability and aptitude that many children displayed at the primary level are completely drained in the race for getting a distinction or first class in the SSLC examination, and if they do not achieve the coveted marks, it seriously affects their self-confidence.

4.60 Equality in education means equalising opportunities for any child to acquire creativity, skills and knowledge irrespective of class, caste, gender or religion; it does not imply a uniform course where every child is taught the same thing irrespective of his/her capabilities and aptitude. At the primary stage, a comprehensive uniform curriculum is necessary because all children are at a formative stage and any attempt to segregate them on the basis of aptitude is premature. By the time he/she reaches the secondary stage, the child should have a clear idea regarding the area of knowledge and skills that he/she would like to concentrate on. Otherwise, she should be encouraged to find such an area. It must be recognised that every child may not have the same capabilities in one and draw a blank in the other. What is important is that he/she should be persuaded to make a choice from a wide variety of openings, from vocational to theoretical forms of knowledge, without imposing the will of

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society, parents, or the school on the student. This will be a genuine process of democratisation of opportunities, promoting equality in education activity.

Of course, there will be limitations to this process. Opportunities in further 4.61 education or training, either academic or vocational, will naturally be related to the needs of the society at its present state of development and the facilities and resources that it can muster. Hence, it cannot satisfy all the aspirations of the students, or the demands created in them by their parents. In Kerala, where there is a serious need for skilled labour in the productive sectors, the attention of the state will have to be on creating the necessary personnel for those areas. The state will also have to plan for creating skilled technicians, artisans, various levels of workers in health, education and other social services, apart from creating professional, managerial services and planning personnel. In addition, every society needs its sportsmen and women, artists, media persons, social scientists, technologists and pure scientists. The opportunities offered to students will lie along this spectrum.

If this is to be realised, the existing uniform pattern of secondary education 4.62will have to be replaced by a more flexible one. The first step in such a new approach is the realisation that all children do not have to learn everything now prescribed at the secondary level. The secondary stage should have a general curriculum which includes the languages, general science, mathematics, social sciences, culture, and so on, which any socially responsible human being in India should acquire, irrespective of what vocation or profession she chooses. This will include a course in productive labour. These courses are not career-oriented, and will not contain specialised topics and concepts. They are intended to bring the students into the productive processes in society. The secondary curriculum will also contain a set of optional courses, ranging from vocational to theoretical, which the student may choose as a preparatory stage for advanced academic studies or pure vocational education, as the case may be. Thus, in physics, the concepts and applications every student should know are included in the general course, while the concepts and applications necessary for a student who wants to take up the subject for further study will be included in the advanced course. Those who want to prepare for a vocation, say agriculture or music, will have to take the general course, but can opt out of the advanced course (unless the course is absolutely necessary for a thorough understanding of the vocation). The optional should not be selected on a purely theoretical or totally vocational basis. Selection of a combination of both should be encouraged, so that all students, irrespective of what they aspire to do in their lives, will have at least a foundation in vocational education.

The eighth standard can continue to be in the general stream, with the 4.63 addition of compulsory vocational education, and the optional subjects may be introduced from the ninth standard. This is to prepare the student for the choice of an optional subject so that she can take her time to make a decision. This will also help the teacher to observe and evaluate the student's accomplishments and deficiencies so that she can be guided accordingly. The teacher should not impose her own preferences and prejudices regarding a career upon the student, but should evaluate the student within the framework of a carefully prepared, comprehensive evaluation scheme and focus on those attributes of the student which will provide the basis of her vocation. This means that the secondary stage should have a

The Structure and Content of School Education continuous internal evaluation system for the three years. While evaluation at the primary stage brings out the learner's basic achievement, evaluation at the secondary stage, even while being comprehensive, will at the same time bring out the special attributes of the child. The teachers would require training and orientation for this delicate task.

The role of the SSLC examination will have to change. At present its basic

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criterion is a certain level of achievement. All children, irrespective of social background, facilities, aptitude and taste are examined under a single evaluation system lasting 2-3 hours. In the highly competitive atmosphere in which the examination takes place, it is not surprising that children from higher social backgrounds with adequate facilities and systematic application, as required by a competitive system, manage to secure ranks and distinctions. It is well known that performance at this level cannot reflect aptitudes that have not been formed within the school system. On the other hand, failure or low marks secured by a student in the SSLC examination is seen as a reflection of her low social usefulness, which becomes a permanent handicap in her later social performance. Unless a student is extraordinarily versatile, her aptitude and taste are not taken into consideration. The majority of the students belong to this category. This situation can be changed only by doing away with a system that extols individual achievement of a specific kind, and declares 50% of the students as unable to perform. This can be done by doing away with the concept of determining passes by aggregate marks. The SSLC should shift to the grading system where general subjects and optional subjects will carry credits. Even co-curricular and extra-curricular activities, including arts and sports, may be given credit. Continuous assessment during the ninth and tenth standards and the final examination must be considered for grading the student for SSLC. The final examination too may be replaced by a combination of oral tests, group discussions and written examinations. This will be a more comprehensive process of evaluation of the student, and hence a more just indicator of her accomplishments. There need not be an aggregate minimum or subject minimum, but there can be a performance minimum for the general subjects, as they indicate a certain socially accepted performance level. The grading along with adequate counselling by teachers should enable the student to choose her area of further study. The new form of assessment would mean that low performance in a few subjects will not prevent the student from studying further those subjects in which she has performed well. The objective should be to carry all the students entering primary schools through ten years of schooling without rejection, push-outs or dropouts. The state owes an obligation to every child to take her through ten years of schooling in a manner beneficial to him/her.

4.65 Languages to be taught in school need to be discussed. Malayalam, English and Hindi should be part of the general curriculum, with provision for advanced optional courses, if the student so desires. Other languages such as Arabic or Sanskrit can be taken as optional. Study of Malayalam would include creative writing, translation and appreciation of the culture of the state. Students should be able to develop proficiency in use and communicative skills in English and Hindi at the secondary stage.

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Vocational studies should reflect the developmental perspective of the state as a whole and regional diversities. The developmental perspective will have to be the basis for any decision-making on the kind of vocations to be learned at school, but regional diversities are crucial in the choice of vocational courses by the school. Schools should select vocational courses according to the facilities that they and neighbourhood can provide. Vocational subjects need not be taught entirely within the school premises. Students can utilise the services of experts in the locality, workshops or firms. The panchayats can coordinate the services of such experts. The working hours of school may be restructured to provide adequate time for the study of vocational subjects and optional courses.

Another aspect of the secondary curriculum will be thorough training in 4.67 sports and the fine arts. There are at present sports schools and fine arts schools which follow their own specific curricula, but fine arts and sports should be integrated in the secondary schools, with adequate provision in the optional subjects for learning and practical work.

The nature of the secondary school and its teaching process will undergo 4.68 change, based on changes in the curriculum. The school will still be situated in the neighbourhood, with the vocational components directly supervised by the neighbourhood and the panchayats. In fact, the effort must be to make all secondary schools neighbourhood-based; this would be the best strategy for including quality consciousness. The schools, however, will have to expand their facilities for the teaching-learning process, such as a library, reading room, laboratory and workshops. If possible the classroom should be redesigned to provide facilities for teaching of specific subjects such as physics, chemistry, geography, and so on. Textbooks do play an important role, but adequate provision has to be made for children to do additional reading and undertake practical activities. Teachers will have to gain expertise in their specific areas, and their knowledge and skills will have to be continuously replenished through in-service training. They should also be provided training in guidance and counselling, because it is not only the career options of students that teachers have to handle, but their socio-emotional problems also.

Ten years of general education, considering the present spread and retention 4.69 levels, can become universal in Kerala within a conceivable period, with some measure of careful planning and imaginative management. This means that Kerala may be the first state to fulfil the constitutional obligation of compulsory elementary education. The state has ensured adequate spread of primary and upper primary education to start contemplating implementation of compulsory education in stages, covering the lower primary stage in the first instance, commencing from the first standard, and starting with districts which have better enrolment levels. This task would best be discharged by the panchayat bodies.

The Higher Secondary Stage

The concept of a higher secondary stage for school education is a new one 4.70 in Kerala. At present, the various streams of the higher secondary course, including the vocational higher secondary and pre-degree, have been transferred to the school system. While there is a consensus regarding the integration of these different streams into a single higher secondary course as part of the school system, the details are only beginning to be worked out.

The higher secondary stage as it exists today, including the pre-degree 4.71 course, displays the uncertainty and confusion that surrounds this crucial stage of

The Structure and Content of School Education education. Almost all the students who have passed their SSLC continue their education either in regular higher secondary systems or as private candidates. The remaining enrol themselves in Industrial Training Institutes. About one-third of the students who are enrolled in the higher secondary system pass the examinations, and those who fail join the ranks of the unemployed. As a pre-degree course, it has not served as a proper preparatory stage, and as a higher secondary course it has not served as a proper terminal stage. Children who complete the higher secondary are not equipped in terms of academic knowledge or vocational skills to make a contribution to society, since it was not visualised as a course designed to impart life skills. Hence, a reformulation of the objectives of the higher secondary system appears necessary.

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The Structure and Content of School Education Higher secondary education has the major objective of enabling the learner to acquire knowledge, skills and values to contribute meaningfully to social advancement. It is thus a stage in school education that is directly linked to social requirements. Kerala needs persons who can be deployed as supervisors, middlelevel managers, skilled workers and local administrators. Higher secondary education should serve as a sound foundation for this. Students who complete the two-year course should be able to take up suitable employment in any productive sector in society. They should also be able to go on to further studies in technical or academic courses. The higher secondary system envisages a merging of the academic and vocational streams, which are a logical continuation of the course at the secondary level. Thus, every student who completes her secondary examinations and shows an aptitude for any subject or subject combination, vocational or academic, should be able to select a suitable combination at the higher secondary level.

4.73 The syllabus and teaching-learning process in the higher secondary system at present is totally dominated by the spectre of the entrance examination. The syllabus chosen --- CBSE, ICSE or the state syllabus --- the method of instruction and evaluation procedures are all influenced by these selection tests. It should be recognised that the large majority of students do not opt for the higher secondary to qualify for these entrance examinations. Higher secondary and even higher education is seen by them as a necessary qualification for gainful employment. The large majority is not equipped with the necessary skills or knowledge for such employment and is also unable to compete with those who are coached and trained for passing the entrance examinations. The large number of failures in the pre-degree course reflect the utter futility of the present system as far as the majority of students are concerned. It is, therefore, necessary that the current subject combinations - science, humanities and commerce - are replaced by more flexible ones. It is possible to introduce three alternative subject combinations - vocational, vocational-academic and academic. In the first, the student will be persuaded to select one vocational area or a group of areas of social relevance. In the second, a group of vocational subjects may be chosen along with academic subjects. The third will includes sciences, social sciences, language and culture. In the scheme, the major stress will be on vocational studies, but others will also have their place, depending on their aptitude and performance. Sports and fine arts can also be introduced as specialised subjects and appropriate facilities for these provided by the school.

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Most people, including policy-makers confuse vocational education with vocational training. Vocational education and vocational training may have some

points in common, but they are different in purpose and procedure. While vocational training attaches more importance to the teaching of technical skills and knowledge required for a specific vocation through actual experience, vocational education gives priority to basic knowledge and general understanding. Vocational training helps the learner to acquire basic skills in the performance of tasks; it calls for competence in complex manipulative operations involving material things or processes. Vocational education provides for learning targeted at entrance examinations that lead to a career. Vocational education will include vocational training, but not dominantly. Another important point to note is that education and training place different demands on institutions, instruction and administrators. High schools at present are not structured, equipped or attuned to impart vocational skills.

The element of specialisation does not mean that each group remains a 4.75 totally segregated entity. One safeguard against such compartmentalisation is that the student be asked to choose four electives from any branch or discipline offered by the school. Thus, a student offering physics, chemistry and mathematics can also offer Malayalam literature or history as an elective.

Over-specialisation to make a subject 'heavy and demanding' should be 4.76 avoided while preparing the syllabus, because those who have the aptitude for a discipline can always study it at a later stage. Even in vocational courses, overspecialisation must be avoided, because the objective is to create a skilled worker with social commitment and an adequate academic background. The syllabus for even theoretical disciplines will have to be a combination of theory and practical application. The student can maintain links with general education through courses in English and Malayalam. While English will be taught as a language of technical, scientific and cultural communication, Malayalam will be the language which keeps the student abreast of recent trends in culture, society and politics.

The teaching-learning process in the higher secondary system will also 4.77 have to be reviewed. Many students want to complete the course only so that they can go in for professional or technical education. This results in a steady deterioration of standards in all major disciplines such as the sciences and humanities, as well as vocational subjects. There is need to redesign the curriculum. A more scientific, and in the long run, more rewarding study programme can be drawn up by linking academic education to social needs and problems — physics can be linked to workshops, chemistry to analytical laboratories, biology to public health institutions, and so on. This means that as part of the academic programme, the student does projects in applied areas, and such projects will indicate the aptitude of the student. Projects are also meant to inculcate in the student a value for service, where the chosen profession ceases to be merely a status symbol, but is a form of service, requiring knowledge, skills and a sense of commitment. In this way, value education can be built into the curriculum, enabling the process of education to develop a person with social awareness.

It is at this stage that organised self-learning becomes part of the curriculum. 4.78 Students will already be familiar with self-learning in the early stages, and therefore, it will be possible to ask them to do library or laboratory work and complete projects and assignments. Instead of making laboratory work routine and mechanical, a set of experiments can be given from which the student is encouraged to undertake a series of experiments. Learning how to do the experiment should be important. The Structure and Content of School Education Preliminaries of library work such as choosing a book, making use of an index, methods of reading and note-taking may be introduced for all subjects at this level.

4.79 The grading and credit system should continue in the higher secondary stage. Grading should reflect the requisite skills, knowledge and aptitude and should be used as a dependable yardstick for a prospective employer or for higher education. There must be a common public examination. But the present system of aggregate minimum and subject minimum may be discontinued. Continuous internal evaluation, including of practicals, projects or assignments, must be combined with a final public examination to determine the grade of the student.

4.80 Preparing the syllabus or evaluation should be on the basis of the optimum level that can be attained by the entire batch of students. The fact that this principle is often forgotten is demonstrated by the tendency to create a minority of high achievers, while the majority are pushed out of the educational system as low achievers. This prevents the society or the employer to make proper judgements and in the end, such students become part of the large mass of unemployed.

The higher secondary system will have a different concept of classroom and teacher. The facilities that a school can provide for self-learning will determine the intake into a class. It may be higher than in the earliest stages, say, up to fifty. More time will have to be found for self-learning. It is also possible to introduce various technological accessories for learning, which can be operated by the students. The teacher will not only be the facilitator in the learning process, but act as a supervisor of self-learning activities such as projects and assignments. The expertise of the teacher would naturally have to be very high, which would have to be ensured by upgradation programmes.

In order to develop the proposed higher secondary system, complete 4.82 integration of the existing courses with the school system is necessary. On the one hand, the higher secondary should become a continuation of the existing secondary stage, and on the other, various kinds of higher secondary courses such as VHSE, higher secondary, pre-degree, and equivalent vocational training programmes must be integrated to form a single system. The physical facilities in schools will have to be supplemented by those available in work places in the neighbourhood and collaborating institutions. Here too, panchayats can play the role of coordination. In the redesigning of the secondary education system including the higher secondary stage, the first and foremost issue is the role and responsibilities of the teacher. Teachers would need to be trained and oriented to become fully professional, selfconfident and self-reliant. They must be given enough autonomy to experiment, innovate and diversify, within the broad curricular framework. They should be encouraged to seek support and guidance from all available channels. They must remain accountable to the institutions where they serve and to the Panchayat Raj institutions under whose jurisdiction they serve. The teacher will be the pivotal point for sparking off changes. Second, the role of organisations such as SCERT, DIET, BRC, CRC and NGOs and research institutions is important. They will have to rearrange their priorities. Their foremost task must be to empower teachers to become professional, self-confident and capable of functioning on their own. They must concurrently encourage decentralisation of academic work. While they may give broad guidelines of curriculum and syllabus, their objective must be to encourage

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teachers to build on these through their own devices. These organisations must give up their present tendency to standardise all their programmes. They must encourage and promote flexibility, autonomy, innovation, experimentation, research and liveliness in the system. However, they must also be the watchtowers of the quality of education in terms of assessment of achievement levels at different stages of secondary education and designing future programmes.

Lastly, the Panchayat Raj Institutions, which represent the community, 4.83 parents and management, must assist in rooting secondary education in their environment. They can find resources in the community to provide infrastructural and activity support for the vocational programmes. They also have the responsibility of ensuring that every child receives schooling up to the higher secondary level and that education serves a higher social cause.

Gender and Education

When the Commission planned the major sections of this report, Gender 4.84 was considered to be one of them. But when the available data were studied, there appeared to be a near-equal status of boys and girls, men and women in most of the statistics of education. So the question arose: should women be treated as a separate category or should the data be aggregated? It was decided that at least a couple of pages should be devoted to the discussion of gender in education.

The history of the state, particularly its educational history, has been 4.85 presented earlier in this report. Only one or two additional points will be underlined here. The first printing press was set up in Kerala in the 16th century and this extended the opportunities of literacy to everyone including the least privileged. As early as 1817, education was made the responsibility of the state in Travancore. This legislation gave a headstart to the universalisation of education. By 1950, 80% of all girls in the age group 5-10 were attending school in Cochin and Travancore.

Kerala's literacy rate has attained the status of contemporary legend. The 4.86 state has total literacy, except for a few pockets of Wayanad, Malappuram and Palakkad. It is interesting to note, however, that the growth of female literacy has been gradual in the last five decades : from 31% in 1951 to 54% in 1971 and 86% in 1991. The national budget of India sets aside so little for education that there cannot be any comment on this other than that there is substantial evidence of lack of political will. However, from Rs.28 per capita in 1971, to Rs.167 in 1986 and Rs.282 in 1991, the allocation has grown steadily, and since girls constitute about half the children in school, the data on per capita allocation equally reflect the status of girls' education. The health statistics of the state tell a similar story. Three important indicators can be examined here. The sex ratio (M/F ratio) is 1000 males to 1036 females. The life expectancy of females in 1991 was 72.4 compared to 67.3 for males. The Infant Morality Rate (IMR) has decreased, from 61 in 1971 to 37 in 1981 and 16 in 1991. As is well known, IMR is calculated per 1000 live births and is treated as one of the best indicators of health care. The IMR for India in 1991 was 80.

Of the total number of children enrolled in higher education, 54.2% are 4.87 girls. Among teachers in schools, 2 out of 3 are women. Even in engineering colleges, more than 25% of the faculty are women. Thus in terms of the state's

The Structure and Content of School Education educational profile, the status of women is as good as that of men. However, through personal communication and discussions in informal groups, a very different picture emerges, which needs attention.

4.88 Numerous consultations were held outside the formal sittings of the Commission, in different locations in Kerala. The women who came for these discussions included university faculty, school teachers, research students, scholars, social scientists, pre-school workers, panchayat members and so on. A majority of the women agreed that the demographic picture was good, but said their quality of life left much to be desired. The discontent centered around many aspects of their daily lives. There appeared to be a strong value orientation in favour of the woman being submissive, unobtrusive and shy, and not attracting any attention to herself. These inferences were made on the basis of anecdotes from colleges and universities, where girls do not ask questions in class and women teachers do not speak up at staff meetings. The reasons are complex and no analysis can be attempted here. However, many of the women felt that some changes were necessary in the curriculum, methods of teaching and provision of infrastructural facilities. Some of these are listed below.

4.89 **Curriculum** : The gender bias must be systematically removed from the texts. Instead of being depicted as subservient and involved only in household drudgery, women should be described as they are in life, with achievements in all fields. To ensure gender fairness, all Textbook Committees must have women members.

4.90 **Counselling** : A counselling facility must be set up for students in schools and colleges and special attention must be paid to counselling girls and women.

- 4.91 **Activity Orientation**: The teaching in schools and colleges should involve students more actively. A Science Society, Laboratory, Library, Literacy Society and other such extra-curricular or co-curricular groupings should be provided for, offering opportunities to express talent, especially among girls.
- 4.92 **Improving Teachers' Attitudes**: Teachers should be oriented and retrained to use the classroom situation to increase social awareness and to enhance social skills in all children, with a focus on self-confidence among girls.
- 4.93 **Essential Infrastructure**: The need for minimal facilities such as drinking water, clean lavatories and hand-washing provision is not recognised in most schools. These are just not available, according to most of the people interviewed. These deficiencies lead to acute discomfort and are clearly a threat to health and hygiene. Improving this situation must be given top priority.

Education of Disabled Children

4.94 This appears to be an area of education not very well developed in Kerala. A census of institutions for children with disabilities, currently referred to as children with special needs, must be undertaken immediately. A full list of institutions in the voluntary sector should also be available. The census must also cover the number of disabled children of the school-going age, panchayat-wise. The terminology and nomenclature must also be updated. Instead of using terms like 'deaf and dumb', which are derogatory, one should use "children with hearing impairment", for example. Teachers handling pre-school children should be given training in early

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identification of defects, differences or disabilities, so that children with special needs can be provided rehabilitation programmes in their early years. With the right kind of intervention, children with special needs can be integrated into the mainstream and do not need separate institutions. Some of them do need special provision and care, but they do not need to be isolated from other children.

A joint working committee of representatives from the Ministry of Education 4.95 and the Ministry of Welfare, Government of Kerala, and selected experts must be formed to handle the entire question of educating children with special needs.

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Chapter V The Structure and Content of Higher Education

Higher Education

igher education is the main instrument for development and change. It has the important task of preparing persons for different walks of life — social, political, cultural, scientific and technological. Universities function as the focal centres of higher education. In addition to their scholarly functions of teaching and research, they now have extension and developmental functions. They play a key role in the generation, transfer and application of new knowledge. The intellectual dynamism, resourcefulness and economic prosperity of any nation is to a large extent determined by the quality of its university education.

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The higher education system in Kerala has extensive reach, with around 10% of those who enter primary school enrolling for degree courses of various kinds. Besides, a number of students also appear as private candidates. On a rough estimate, the total number of students entering higher education every year is around 1,00,000 which accounts for about 15% of the relevant age group. Despite the rapid expansion in the number of institutions and student enrolment, higher education in Kerala is stagnant and there is widespread public perception that the first degree course offered in Arts and Science has failed to deliver the goods. The scramble for professional and technical courses of varying duration and quality is partly due to this perception.

Degree Education

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There is absence of a clear perspective regarding the objectives of degree education. In the conventional perspective, degree education is an advanced stage of general education, as signified by the concept 10+2+3, which provides the basis for white-collar employment. This perspective corresponded well with the sociocultural milieu then developing in Kerala, and a significant number of those who completed school education, and almost all of those passing out successfully, sought admission in colleges or registered privately to appear for the degree examination. The social demand resulted in a substantial expansion of these courses over the past few decades. Courses with the same structure, content and objectives were introduced in a large number of colleges, and most of the courses, with the possible exception of commerce, were based on subjects taught at the school level. The pattern of the courses also became fixed, with a major subject, subsidiary subjects, and with a language. Any re-orientation of the courses became impossible as it ran counter to social aspirations. The teaching-learning process at the degree level has now become a mechanical exercise, with the teacher reproducing old notes and the student cramming guide-books for passing the examinations. No thought has been given to upgrading the quality of the teaching-learning process or revising the syllabi to incorporate recent developments in the discipline. The Board of Studies in universities, responsible for formulating the syllabi, have found it convenient to add recent developments as an additional section in a chapter and have ignored the changes taking place in the teaching-learning process.

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The stagnation in the content of the syllabi and in the teaching-learning process was compounded by the nature of the examination system. Since the major

objective of students who joined a course was to get a degree, and the task of institutions to prepare them for one, the entire system became examination-oriented. But the evaluation process did not change. Question papers were set and evaluations conducted without heed to the real advancement made by the student in the upgradation of knowledge, or her analytical skills or ability to generate new knowledge. The student's perception of the relationship of the subject to the needs of social and economic development was of no concern. Upgradation of knowledge was attempted to a certain extent in some science subjects, but the examination-oriented nature of learning ensured that this upgradation did not have any lasting value.

It should now be possible to reorient degree education with a set of 5.5 objectives that are generally acceptable and gained from the experience of degree education elsewhere, and from Kerala's own context. The foremost function of degree education should be the creation of a segment of population with upgraded knowledge and skills which can in turn generate new knowledge, contribute academically and technically to socio-economic development, and provide leadership in a given social context. This will include the creation of persons with professional and technical skills who are able to contribute to crucial areas such as education, public health, engineering, communication and other services. Similarly expertise will have to be developed in persons who will be involved in productive activity. Such a perspective which links degree education with the challenges of socio-economic development, is perhaps the only way to make higher education more meaningful. It is clear that the existing degree education is unable to meet any of these objectives.

It has also to be recognised that higher education is pursued to qualify for 5.6 employment, and that employment opportunities have changed significantly in the past few decades. The colonial structure of the civil servant, lawyer and teacher has given way to the technical expert, the manager and the executive, and the emphasis on professional-technical courses even within universities, reflects this dominant trend. Even a social science degree becomes more acceptable when it is tied to a discipline like management; the life sciences become more relevant when tied to biotechnology. This shift has important consequences; it pushes pure science and social science education to the background, not because they are not academically enriching or socially relevant, but because they do not seem very relevant in the pursuit of technical or managerial expertise. Studies in language, history and culture fall outside the purview of the new priorities. There is need for proliferating professional-technical education, and there must be rethinking on the expansion of social science, language and science education, to reflect the mood of the opinion-setting classes.

There are also other issues too which need mature consideration in any 5.7 state policy for higher education. A developing industrial society needs technical experts, entrepreneurs and managers. Equally it needs growth of basic scientific knowledge and research, and generation of new knowledge, which will lead economic development to new, diversified channels. There is need to persist with the existing arts and science courses, for these represent the basic foundations of higher education and research, and have an important role to play in sustaining the development of the highest levels of scholarship, research and pursuit of knowledge. However, these courses need to be updated in order to incorporate the constant

advancement of knowledge. Access to these courses should be based upon merit and aptitude in the given field of knowledge, and admissions should be made on stringent conditions. In a society like ours where imbalances based on caste, class, gender, religion, and regional inequities are manifest, enterprises cannot be run on technical or managerial abilities alone; social awareness and thinking, awareness of the vital features of our cultural diversity and heritage is equally important. While the stress on the creation of the technical expert is welcome, it cannot be the panacea for all our ills.

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The need for reorientation is evident when we consider the problems of regional development in Kerala. The 'job-oriented courses' and technical courses that have been started are already running into problems as they have to contend with the limited employment opportunities inside Kerala. The solution offered is migration of technically competent human power to other parts of India and to other parts of the world, including the Gulf countries. Even this cannot last long; the opportunities in the Gulf countries are already being exhausted, and other states in India are steadily catching up with Kerala in producing similar 'technical people'. At the same time, the economic development in Kerala is markedly slow. Kerala is unable to produce skilled workers or experts who can give leadership to productive ventures in agriculture, agro-based industries or in the industrial sector. There is no serious effort to utilise local resources or capabilities for productive purposes, a feature that should be the basis of economic development. Graduates from our colleges and universities have done precious little to contribute towards the generation of additional skills or knowledge. There have been some individual efforts, but these have not been sufficient to make an impact.

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Thus, Kerala needs its technicians and managers, just as it needs trained personnel in basic sciences and social sciences who would contribute to socio-economic development. Utilising such persons has become increasingly possible with the growth of the Panchayati Raj institutions which are being empowered to look after development needs. Every urban or rural panchayat needs a number of people with knowledge and skills in different disciplines, ranging from engineering to history and culture, to provide it with technical and scientific assistance in formulating its plans. Every problem encountered in this process is also a challenge to generate new knowledge. This will also ensure the necessary link between academic and vocational pursuits and between new knowledge and the productive process.

5.10 Based on these general considerations, we may suggest a reorientation of the degree programme in colleges. Two criteria would be useful in designing the courses. One, the aim of degree education will be upgraded to give contemporary knowledge; two, the knowledge imparted through the course will help the majority of students to play a creative role in society, both in terms of their personal 'vocation' and of the needs of society as a whole. This will mean that the degree courses will have a strong academic content on par with the knowledge imparted at that level in the best universities, and they will be supplemented by courses which are locally relevant or have practical application within the given social context. It is not difficult for a zoology programme to introduce a reasonable number of courses in aquaculture, for an economics programme to have courses on local self government or planning. While the basic programme may remain the same, the application courses may be different according to local requirements. If zoology is combined with fisheries in

one place, it may be combined with environmental science in another. Thus one can think of a number of such combinations without disturbing the basic knowledge content in a programme, and yet ensure that the programme is socially relevant.

The structuring of the degree programme is also important, because that is 5.11 where the objectives of the degree are manifested clearly. Three sets of courses may be offered: one a set of foundation courses which are essential for all students regardless of differences in discipline; two, a set of core courses; and three, a set of diversified courses which the student may choose on the basis of his/her specific interests. Foundation courses will include, for example, history of science, society and environment, the scientific method, and problems of the contemporary world. Core courses will impart the basic knowledge in the subject. The diversified courses can include both basic and vocational courses and if the student is interested in the degree as a terminal stage of education, he/she can choose the vocational course. Programmes may be offered in a single subject with an inter-disciplinary dimension, or in a group of subjects on a multi-disciplinary basis with inter-linkages among subjects. New courses on non-conventional subjects may also be included.

It is possible to reorganise the general degree education into two streams. 5.12 First, a degree course that will be terminal, where the student upgrades his/her knowledge and skills in one subject or combination of subjects. The course will be sufficient for those aspiring to various sectors of employment, and who do not plan to pursue further studies, project work or research. The second stream will be a more specialised degree course, intended for those who plan to do postgraduate studies and research. The major differences between the two streams will be that the first offers vocational courses which help students to acquire the basic knowledge and skills for employment; the second offers courses in a specialised area or discipline which facilitate their advancement towards postgraduate studies and research. A five-year integrated MA/MSc programme that leads to a specialised Master's Degree may be started in University Centres and in selected colleges which have adequate facilities and teaching staff. The core courses in both these programmes should follow the integrated approach, with courses in two or three disciplines, coterminous in character, being offered instead of the main/subsidiary pattern of today.

The university may provide curricular guidelines and set the minimum 5.13 levels of achievement for the degree programme. These are to be decided on the basis of the knowledge and skills that are required by society as well as the progress made in the upgradation and generation of knowledge disseminated in the programme, and will be reviewed periodically. The actual designing of the course and syllabus may be left to the faculty of respective colleges. The teacher will have considerable freedom in working out the course structure. There is a general apprehension that autonomy to colleges implies freedom for the management to administer or interfere in the academic work of the institution. This is not what is intended. Safeguards can be built in to ensure that this does not happen. In fact, what is intended is to ensure space for an institution and its faculty to design and operate their own programmes of academic upgradation and diversification to meet the needs of students. This will give considerable flexibility and will prove to be an effective yardstick to evaluate the academic performance of colleges. The credit and semester system may be introduced for the degree programme, which would involve evaluation of students by their own teachers. To begin with, projects,

assignments and practical work may be evaluated by teachers. There could be a grievance cell to eliminate any prejudice in evaluation. Based on the experience gained, internal evaluation can then be extended to end-semester examinations. The examination, in some cases, can be replaced by a viva voce or group discussions, and the results can be finalised immediately. Students getting lower grades may be allowed to repeat the course. If the students fail to reach the required level even after repeating the courses, they may have to discontinue.

5.14 There are certain areas which do not belong conventionally to a specific discipline in science, social science or language, but which have employment potential. Journalism, Mass communication, Co-operation, Tourism, Hotel Management are some examples. Already, many universities and colleges are conducting courses in these. It is however desirable that such courses are left to agencies which are directly involved in these vocational activities, with academic support extended by universities. It is even possible that such programmes are coordinated by an accredited agency, such as a Panchayat body, or a registered society so that they can be constituted as a community college. Community colleges may prepare students for entry into life by providing a variety of flexible and openended programmes, utilising the facilities in the community for training and instruction. There could be an accrediting agency to give recognition to such courses. This will ease the pressure on conventional degree courses and professional courses, and at the same time introduce an element of social relevance to employability and preparation for a job. Such courses, which will be varied in character and duration and cannot have a standard format, as in the case of degree programmes, need not be administered by the universities. The community colleges themselves may be made the certifying authorities.

Vocational Education and Training

5.15 Vocational courses, which directly train the student for a specific trade, already exist in Industrial Training Institutes and Centres, and attract a large number of students. This form of training is given by a number of other institutions also. Some monitoring of standards has been attempted by setting up the National-level Council for Vocational Training (NCVT). However, this is an area where commerce has entered on a large scale, offering courses of doubtful quality and charging huge fees in the bargain, without proper facilities, syllabus or teaching staff. Many vocational courses started by universities have also floundered.

5.16 It is possible to categorise vocational programmes into two kinds: courses which impart skills and knowledge at a higher level, which require the entrants to have an adequate higher secondary background, and which can be taught only by competent staff with adequate facilities, such as nursing; courses which are of short duration, ranging from six months to two years, where the student learns mainly as an apprentice, with sufficient academic support. The first kind of vocational courses can either be offered in community colleges or in special, separate colleges as is done at present. The second can be offered in community polytechnic or Industrial Training Institutes. The Industrial Training Institutes and Centres can be upgraded so that, they accommodate developing trades. Courses in locally specific industrial arts and crafts may also be offered in such centres. This will be possible when the various vocational education and training institutions, now handled by different departments in the state, are brought under the panchayat system and autonomy

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given to it for developing training programmes according to local socio-economic requirements.

Vocational education and training programmes, now offered under 5.17 professional, technical and vocational streams, comprise a very large segment of the total number of programmes of study offered even today. The problem is that adequate thought and planning has not been given to developing this stream, which has led to a considerable imbalance in favour of conventional arts and science programmes and the intervention of commercial elements in the running of vocational and technical courses. The state and universities cannot afford to tail commercial interests and, at the same time, cannot ignore the importance of this sector for producing trained workers and experts with significant skills, who can contribute substantially to the development of Kerala. The state's priorities in this sector have to be clearly spelt out and clear guidelines for running this sector have to be formulated in association with the universities and panchayat institutions. At least 50% of the students completing higher secondary stage and looking for further opportunities can be diverted to vocational and technical courses.

Professional Education

Technical Education

Professional and technical education enjoy considerable prestige India. In 5.18 fact, the entire school education including the higher secondary stage, is regarded by a section of the population as an elaborate preparation for entry into professional courses. Entrance examinations of various engineering and medical colleges are probably the most prestigious and hotly contested examinations in the country. In Kerala too, the high achievers from schools almost invariably enrol for professional courses. A larger number of engineering colleges have been established, and more technical courses started by different universities. Certainly there is greater diversification in technical courses than earlier, but the quality of technical experts coming out of these programmes is questionable.

The technical education system in the state needs to be reorganised taking 5.19 into account the national perspective, social relevance and the turn-of-the century scenario. Induction of improved technologies, entrepreneurship development, promotion of innovative research, and improvement of efficiency and effectiveness at all levels through systematic and regular monitoring of all programmes need to be ensured.

A radical change in thinking is needed if technical education is to address 5.20 itself to the changing pace of science and technology. The existing lecture-homeworkquiz format is no longer adequate. The technical education system has to be redesigned to incorporate self-learning and models of innovative enquiry.

Improvement of the quality and standards of technical education can be 5.21 ensured by introducing a broad-based, flexible system through modular courses with a credit system and provision for multi-point entry. Creativity and innovation in experimental work may be encouraged by introducing problem/process-oriented laboratory exercises. Curricula have to be reviewed on a continuing basis. Recruitment to teaching positions should be made strictly on merit and by open competition. Faculty development must be emphasised through effective use of study leave, summer training, consultancy and research opportunities. A staff The Structure and Content of

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appraisal scheme needs to be conducted every year. Coordinated training programmes may be introduced for non-teaching technical supporting staff. Also, academic autonomy may be given to select institutions. An academic audit of institutions may be undertaken and their quality graded through appropriate accreditation procedures.

5.22 Even though an all-India pattern exists for undergraduate-level technical education, there is a lot of variation in the system of electives, the weightage for pure/applied science subjects and technical arts, the role assigned to the humanities and even the extent of internal evaluation. Considerable variation also exists in the regulations for promotions. There are grave lacunae in the preparation of syllabus. The field of technology is growing exponentially with a doubling period of 5-7 years. The procedure for formulation and revision or upgradation of courses are so elaborate and time-consuming that they become obsolete by the time a batch of students complete the course.

5.23 There is need to reformulate the nature of the syllabus in technical education. The syllabus must be updated periodically and it should be complemented by equipping the students to learn on their own and master the ever-expanding horizons of information and knowledge, even after leaving the college. This requires mastery over the fundamentals and methodology of science. The syllabus must be so drawn up as to emphasise learning skills and innovative approaches rather than assimilation of information. Analytical tools and techniques should be prioritised. The proportion of basic science, applied science, technical arts and humanities in courses should be regulated with the above objectives in view.

5.24 It is desirable to keep the first year common to all branches of engineering. Students should study a set of 'core' subjects and foundation subjects. They can then choose a set of electives, may be advanced topics from the same field or from inter-disciplinary subjects, like management or humanities. The core and foundation subjects should be compulsory. Students should be free to choose as many electives as they want over and above the minimum prescribed. Institutions must be given autonomy in the designing of courses.

5.25 The method of instruction must also change. Lecture hours must be combined with self-learning methods such as library work and assignments. Certain aspects of the syllabus such as trade information and product details can be covered through seminars, discussions, invited lectures, etc. The final year curriculum should include at least one project and a seminar. They will be internally evaluated. All practical subjects, including workshops, laboratory work and drawing, must be evaluated continuously and internally. Those who fail to secure the minimum grades required should be given additional work, along with their regular course work. If students fail in their second attempt, they will have to discontinue the course of study. There should be adequate safeguards against prejudiced or faulty evaluation, such as a departmental grievance committee and an institutional appellate authority.

5.26 There is need to inculcate through professional courses, social values and concern for the upliftment of the poor. It must be possible in the course of the programme to develop in the students an awareness of the use of low-cost material, design of low-cost buildings, water supply, sanitation and sewage, of particular relevance to the poorer sections of society. The use of locally available resources

and development of technology appropriate to the needs of the society is another major concern that should be inculcated through technical education. All this relates to the crucial interphase between technology and development, an area that should be part of the curriculum of technical education.

Industry-institution interaction needs to be promoted in a big way through 5.27 apprenticeship, consultancy and sponsored research, continuing education programmes for industry personnel, 'adjunct' professorship in institutions for willing and capable personnel from industry, 'residency' for institutional faculty in industry, and involvement of industry in the development of curricula and courses. Industrial liaison boards, industry-institution cells, and industrial foundations should be set up. There is need to encourage mobility and exchange of faculty between academic institutions, research institutes and industrial establishments. The scheme of networking technological institutions has to be further strengthened. There is a case for involving professional bodies in the planning and organisation of educational programmes.

It is difficult to anticipate areas of growth and plan for technical manpower 5.28 development in the absence of adequate information on manpower requirement. Forecasting of manpower needs, especially in emerging areas, is a priority requirement. The State Directorate of Technical Education can work in close collaboration with the Technology Information Forecasting and Assessment Council (TIFAC) and the National Technical Manpower Information System (NTMIS) to plan technical manpower development in Kerala.

Perhaps most important area that needs to be developed is polytechnic 5.29 education. The numerous technical capabilities required by a developing society, and which do not require the advanced professional education given in engineering colleges, can be imparted through polytechnic education. Polytechnics should form a separate stream in higher education for imparting advanced skills in several technical areas, and be equivalent to a first degree course. Courses in printing technology, textile technology, computer applications, and laboratory techniques are examples. These courses can also be brought under a system of community polytechnic, similar in structure to community colleges. Such courses will have certification from the institute itself, which is governed by an accreditation system, to ensure the standards of the training given. There can be flexibility in the duration of these programmes and the general structure of each programme will depend on social requirements. Although the programme will be essentially vocation-oriented, social values and concerns will be strengthened in the foundation courses. Expansion of community polytechnics will take care of the need for skilled workers and technicians in several fields and relieve universities and colleges of the responsibility of running similar courses under their auspices.

Medical Education

Medical education, the most sought-after stream in the state, attracts a 5.30 large number of women students. Like other professional/technical education courses, it is structured on an all-India pattern. Medical education is the bedrock on which the extensive public health services in Kerala have been built. However, as in the professional/technical fields, market trends have crept into this field too.

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The status that medical education enjoys and the enrolment procedure through entrance examinations have made medical colleges manifestly 'elite' institutions. Available studies on medical entrance examinations show that a majority of medical students come from the educated urban middle classes. They tend to move up in the medical field in terms of specialisation and research work in the best possible hospitals in India and abroad, and rarely serve in the rural areas. Therefore, linking medical education to the health care system in the state assumes importance. This can be done by designing state entrance examinations which serve as a genuine aptitude test, where, apart from the required knowledge, the social commitment of prospective students may also be taken into account. The medical curriculum can be made genuinely interdisciplinary by including the social and economic aspects of clinical practice, along with its technical, diagnostic elements. Evaluation may include projects and assignments based on actual practice; and the student may be asked to complete an internship period in a rural area and submit a detailed project report as a prerequisite for the degree. The medical profession is increasingly beset with ethical issues. Rational use of drugs, concern for public health programmes, involvement in programmes of eradication and prevention of communicable diseases characteristic of developing countries, awareness of the need to extend low-cost, effective health care to vast sections of the population who are in indigent circumstances, health care for women and children, and the population issue are some of the themes which must find a central place in medical education.

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The trend of almost every student with a bachelor's degree in medicine applying for a postgraduate degree must be discouraged. At present, an average medical graduate lacks the necessary confidence to start medical practice, and a postgraduate doctor has greater experience and social acceptability as a specialist. This is partly due to the aspiration of a sizeable number of students to work in specialist hospitals in India or abroad. It should be noted that despite the growing number of students in postgraduate education, research in our medical colleges is reportedly sparse. Postgraduate medical education must be made available only to those with a genuine aptitude for research.

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Despite their obvious relevance, para-medical courses have not been given sufficient importance in medical colleges. Their social appeal is demonstrated by the rush for seats in the school of medical education attached to M.G. University. It should be possible to set up colleges offering para-medical courses following the pattern of a community college, utilising the facilities offered by major hospitals, including those linked to a medical college. There is also need for regular training for health workers at the panchayat level, for which the existing system is inadequate. A suitable system of health workers' training at the local level needs to be formulated under the leadership of the panchayat institutions.

Medical education should also encompass components of modern biomedical research, such as drug design, biomaterials, medical instrumentation, etc. Nonclinical, biological and biotechnological areas should receive adequate attention.

Teacher Education

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Several teacher education centres have come up in the state, in response to the demand from a large number of applicants. Despite the problems faced by the education system and restricted teaching posts due to changes in the school structure, the profession of a teacher retains its appeal as a secure profession with opportunities for growth. However, the existing pattern of teacher education has not responded adequately to the social demand or the pedagogical requirements of society. The one or two-year courses for secondary and primary school teacher training are inadequate. Short-term 'sessional' programmes that are run on a commercial basis by the universities have contributed to the deterioration of standards in teacher education. A reorientation of teacher education becomes important in the context of the envisaged changes in the concept of the teacher as friend and guide, with an understanding of social reality and the psychological make-up of the child, and with sufficient knowledge and skills to back her efforts.

This reorientation is possible only by professionalising teacher education. 5.35 Selection to teacher education courses must be based on proven aptitude after the higher secondary stage. A three-year integrated course leading to a degree in education should be offered. The three-year course should include specialisation in pre-primary education, primary education and secondary education. The structure of the curriculum will be similar to that of normal three-year degree course. Students will be offered a combination of subjects with a pedagogic orientation. The three-year course will be followed by a period of internship. Teachers handling specialised subjects in secondary education, and all teachers in higher secondary education may have to have a postgraduate degree in education. The postgraduate programme will be similar in structure to other MA/MSc programmes, with students taking up education as specialisation. Students who aspire to become pre-primary teachers can be offered a two-year course after the higher secondary stage. Similar courses can be offered for teachers of disabled children. Physical education is at present offered as a separate degree course, which may be continued. Since teacher training involves acquisition of practical skills, the period of internship should be adequate, up to one year.

Evaluation of the teacher trainee should be restructured, giving 5.36 proportionate weightage to theory, practical activities, developing teaching materials and awareness of new educational technology. Evaluation should be in the form of continuous internal assessment. Internal evaluation will have two components, mutual evaluation by the students themselves and assessment by teachers. Evaluation may also include self-evaluation by the students. Evaluation must be transparent and on the basis of group discussion, where possible.

Upgradation of the standards of teacher training institutions is important 5.37 in this regard. Since education is a professional course, training colleges should be treated on par with professional colleges as colleges of education. The faculty of such colleges will have to be multi-disciplinary with all the teachers having the same qualifications as other college teachers, and an additional qualification in education. Those who teach the sciences, social sciences, psychology, sociology or mathematics must have postgraduate qualification in the subject. The syllabus for different subjects may be prepared by the faculty in consultation with the SCERT and DIET. SCERT can prepare curriculum guidelines and monitor the functioning of the colleges of education. There should be permanent institutions to give training in physical education, art education and vocational education. An integrated vocational and education degree in such subjects may be conceived. Teacher training

institutions may be used as extension centres to continuously monitor and promote pedagogical activities in the school.

Postgraduate Education

5.38 Postgraduate education in Kerala is normally considered as an extension of graduate education, leading to teaching jobs or research. Its real function in the generation of new knowledge is not adequately recognised. Some postgraduate programmes in university centres train students to do research at an advanced level, but the majority of the programmes, particularly in colleges, do not meet even the basic requirements. A complete reorientation of postgraduate programmes is necessary.

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9 Postgraduate education should be seen as a stage for the dissemination of high-level expertise and the creation of the necessary foundations for the generation of new knowledge. In this sense, the postgraduate programme is necessarily linked to project work and research. It should be realised that not all the students drifting into postgraduate studies will stay on to become research scholars or adopt research as their life-time activity. Hence, it is necessary that postgraduate programmes develop in the student the necessary capabilities for undertaking a study project based on field experience at any time in her life, as part of her vocation, or otherwise.

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The curriculum and conduct of postgraduate programmes in colleges and universities need to be reviewed. At present, while the postgraduate programmes in universities are run by departments which also have research facilities, the postgraduate departments in colleges do not have this advantage. Specialisation, seminars, research and dissertations do not figure in the colleges, or they exist only to fulfil the requirements of the syllabus. It is necessary that postgraduate programmes be conducted on the basis of an integrated curricular perspective, with colleges and university centres offering the same programmes with the same facilities and syllabus provisions. This can be done only by limiting the number of colleges where postgraduate programmes are offered and ensuring the facilities in such institutions through an appropriate accreditation agency. There can be diversified postgraduate programmes based on specific social problems or newly opened-up frontiers of knowledge, which cannot be brought under the head of a conventional discipline. For instance, several postgraduate programmes can develop from a graduate discipline such as physics or economics. This will provide the student with wider opportunities and also cater to the social need for generation of knowledge in specific problem areas. Universities can also organise postgraduate courses in collaboration with colleges with a view to making these courses accessible to eligible students and promoting standards in the colleges.

5.41 The curricular perspective of the postgraduate programme will be different from that of the degree programme. While the degree programme concentrates on upgrading the knowledge and skills of a student in an area of study, the postgraduate programme, in addition, introduces to her a set of unsolved problems and propositions that he/she is expected to pursue. Generation of new knowledge is possible only by a critique of existing knowledge; developing a critical stance should be part of the perspective. This approach will hopefully generate a research orientation and the ability to resolve social problems. This may also bring to the

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fore the social relevance of the programme and underline the crucial relationship between the generation of knowledge and social requirements, while upholding the importance and necessity of imbibing new knowledge being generated all over the world. The need for this is more important because the majority of students retained in higher education are women, and more and more students from the depressed classes including scheduled castes and tribes are entering higher education.

A restructured postgraduate programme will include a substantial amount 5.42 of self-learning, including library work, projects, practical work, seminars, along with guidance from teachers through a fixed number of lectures. Some courses in the programme will be purely seminar courses, under the guidance of the teacher. The student also may undertake projects on relevant problems, and present reports, which will be evaluated. If the project is undertaken by a group this can come under group learning. The role of the teacher will be that of a guide and supervisor, and lectures will be intended not only to cover the syllabus but to introduce the students to salient points and arguments and recent trends. Evaluation will be internal and an evaluation module which is fully transparent can be worked out. Students can be asked to do course evaluation and teacher evaluation. The methodology of evaluation, apart from seminars and projects, may include group discussions, open defence of these in the presence of the entire faculty and students and viva voce. Written examinations, if included, should test the analytical ability and critical faculty of the student.

Universities

The role of universities has to be placed in the academic context of higher 5.43 education. Universities are expected to give leadership to the entire academic process in higher education, develop curricula and syllabi for graduate and postgraduate programmes, monitor evaluation, organise research and award degrees. Universities are regarded by the entire society as embodiments of learning and scholarship. The quality of higher education in the state, in the present context, depends largely on the academic work taking place in universities.

It is now a well known fact that the universities in Kerala are not performing 5.44 their academic functions as per requirements or expectations. They have become large bureaucratic establishments mired in procedures, systems and structures. There is great need for simplicity and flexibility of procedures and a decentralised system of functioning, so that a vibrant academic community is ensured. The elaborate structures governing affiliation, development of new courses of study, upgradation of current programmes, examination reforms and extension programmes have rendered universities incapable of responding to challenges and constitute the reason for the current academic stagnation.

Both administrative and academic decentralisation of the universities is 5.45 necessary. A concerted programme of providing academic autonomy to colleges, that is, freedom to prescribe syllabi and evaluate students based on the guidelines of the university, which does not involve additional financial commitment, must be undertaken on a programmatic basis. Along with this, autonomy must be given to all university departments to develop their own academic programmes. Concurrently, various administrative and academic structures such as the senate, syndicate, academic council, faculty and board of studies must be suitably modified to ensure flexibility and diversity while retaining standards.

5.46 Decentralisation and democratisation of the academic work in universities is, probably, an immediate requirement. Decentralisation at the outset would mean delegating much of the powers held by the university administration on academic matters, to the respective university departments. A starting point would be research, where the entire responsibility can be handed over to the departments, subject to general guidelines. Funds for research, projects and extension programmes can also be assigned to departments and the departments can develop their own academic programmes. The functioning of major academic bodies such as the board of studies, faculty and academic councils can similarly be improved, if they are given more powers in decision-making and more freedom to function.

5.47 There must be periodical evaluation, assessment and monitoring of academic standards at all levels of higher education. This must be conducted by an academic review board, to be set up by the universities. The academic review board can also monitor the courses offered by community colleges. Universities and colleges must also be encouraged to seek affiliation to the national assessment and accreditation council set up by the UGC.

The academic function of universities does not merely consist in formulating syllabi and conducting examinations. They must develop innovative academic programmes and new curricula. The departments can take the leadership in this: the development of syllabi, organisation of course work and evaluation can be left to the respective departments in the affiliated colleges. Once a new curriculum is developed the board of studies can prepare guidelines based on it and the rest of the work can be left to the colleges. Universities should undertake upgradation of teachers whenever a new curricular format is introduced, and assume the responsibility of periodical upgradation of college teachers as their major extension work.

5.49 Universities have another major role to perform: they should function as resource centres for localities. At present universities are only approached for obtaining degrees, but almost never for knowledge or skills. The university is never consulted on a social or scientific problem arising in a locality, and the university on its part has forgotten that it can play the role of a socially useful resource centre. Every effort must be made to help universities to assume this role; this can be done only by creating an atmosphere of research and quest for knowledge within university campuses.

5.50 Faculties, board of studies, academic councils and other academic bodies of universities, instead of getting bogged down in details of formulation of syllabi and structuring of courses, must be more concerned with reviewing the standards of higher education, monitoring the conduct of courses of study, the soundness and openness of evaluation systems and observance of the highest academic norms and practices. We could move towards a situation where universities will be only concerned with affiliation of courses; financial grants should be delinked from academic work and managed separately. The affiliation process could also be redesigned. Universities must be more concerned with constant and regular reflection on higher education and the changes and reforms to be brought about within it.

A question also arises, in the light of liberalisation and globalisation of the national economy, regarding the entrance of foreign institutions and programmes, and affiliation to such organisations. There is no need to fight shy of such association if they serve to enhance academic standards and provide scope for diversifying and

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enhancing the standards and contents of current programmes. The main concern must be the quality of such programmes, their relevance and contribution to the development of the state and its people. We have to be on guard to ensure that it does not deteriorate into commercialisation or a dilution of standards. On the other hand, carefully crafted collaboration with institutions of repute with an acknowledged record may prove beneficial. Each case should be separately considered on merit with an open mind, keeping in view the people's broader interests.

Research

All universities, autonomous research institutions and a few colleges in the 5.52 state offer research programmes leading to an M.Phil/Ph.D degree. A number of students who have completed postgraduate programmes enrol themselves for research. Of late, a large number of college and school teachers and even officials have enrolled for research.

Despite this, the facilities for doing research in universities have not 5.53 improved. Very few institutions are engaged in research on relevant social problems or at the frontiers of knowledge. Very few of the theses submitted in universities year after year generate new knowledge. Many research theses, in the sciences and humanities, deal with outdated problems and use outmoded methodologies, and some of them are, in fact, modified versions of work done earlier in the same department. Many research students drop out on getting employment, and sometimes a thesis that is not up to the mark gets approved for award of a degree.

Upgradation of research means adequate facilities and effective guidance 5.54 by competent faculty. The quality of research can grow only by transforming universities into real centres of knowledge, vibrant with ideas and debates. Commitment to the generation of new knowledge can be found only when there is commitment as well to the society which is the ultimate recipient of new knowledge. This can happen only when the universities set research as a priority and develop their departments into advanced research centres, both by appointing persons who have done meritorious research work and by providing sufficient facilities, including funds, for the promotion of research.

Some universities conduct entrance tests for admission of research students 5.55 and have an open defence system for evaluating research theses. An important step in the right direction would be to give autonomy to the departments to formulate their research plans, which will include identification of the areas of research and the number of students to be admitted. Entrance tests can only be a kind of screening process of aspiring researchers; the further task of admitting students for research should be left to the departments themselves. An accredited body may be set up to monitor the research done in the departments. This could be a departmental research committee, including teachers who are supervisors and a few outside experts.

Agricultural Education

The agricultural university in the state and its associated institutions are 5.56 expected to conduct training in agricultural and veterinary sciences and active research, in addition to their role as a resource centre for agricultural activity in the field. All these three components, namely training, research and extension work need to be strengthened.

5.57 The university should admit students from the academic as well as vocational streams.

The training processes should be related to ground realities and should include hands-on experience in the field.

5.58 Linkages should be developed with panchayat institutions to strengthen the university's role as a resource centre.

The university should be a centre for first-rate agricultural research in the country. This is of considerable importance in these days of great advances in agricultural biotechnology.

Non Formal and Distance Education

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A number of private candidates write various examinations, from SSLC to MA/MSc, after being tutored in parallel colleges. The universities also conduct distance education programmes through correspondence courses. Provision for private study and correspondence courses, therefore, constitute the major share of the non-formal and distance education facilities in the state, at present.

5.60 It may seem odd to characterise private study candidates as 'non-formal', because they are actually part of a formal system, only they are not enrolled in regular colleges or schools. The considerable social pressure for education beyond SSLC is primarily because of the inability of the state to develop credible alternatives. Once the higher secondary system is developed in schools, it is conceivable that all students entering the secondary stage will have opportunities to enter the higher secondary stage also. Thus a substantial number of private students will be absorbed into the regular system. But the problem of a large number of drop-outs will persist. They will have to be given other opportunities.

5.61 Private study at the university level can be reduced only through alternative education programmes. If diversified streams of academic and vocational courses are offered in regular colleges, and the system of community colleges and polytechnics is developed, many of the private students can be accommodated.

- 5.62 At present, the number of push-outs from the education system is probably larger than those who are retained. Even if many of them are absorbed into the system by the new proposals in this report, there will be an interim period when they will remain outside the system. Therefore, the formation of a credible system of non-formal education starting from the secondary level becomes an immediate and urgent need.
- 5.63 Non-formal education can be structured in two stages. The first stage, equivalent to the higher secondary stage in the formal system of education, will concentrate on drop-outs and push-outs at the secondary and higher secondary stages, and will provide them with vocational and academic education which will bring them to levels equivalent to that of formal students. It will also give them training in chosen trades so that they find gainful employment. The curriculum and methodology of the equivalent education can be devised in the pattern of the National Open School, and vocational training programmes follow the pattern of the *Shramik Vidya Peedom*, Industrial Training Institute, and other vocational training centres. Skill upgradation of drop-outs will be a major aspect of non-formal education at this stage.

The second stage will be a series of degree programmes in the non-formal 5.64 sector, to be implemented by the Schools of Distance Education. These will be oriented more towards gainful employment, or upgradation of knowledge in the case of those already employed. Courses will be developed through textbooks, contact classes, audio-visual materials, assignments, project work and through examinations. The evaluation process will be annual, both internal and external, by the faculty of the Schools of Distance Education. It will not be possible to include laboratory work, but projects can be designed in which the student works in a workshop, industry or any other practical field of activity, and submits a report. Postgraduate studies may be included in the programme, provided the Schools of Distance Education under distance education is a separate programme, it should be possible to give full autonomy to the Schools of Distance Education.

Concluding Remarks

The discussion above provides general guidelines for reviewing and 5.65 reorganising the various stages of education in Kerala. Further study, discussion and research has to go into issues such as curricula, syllabi, role of teachers, evaluation, and campus atmosphere, besides the questions of management and financing. Unfortunately, Kerala does not have a body or organisation devoted to research in areas of this kind. Setting up such an institution, or delegating that work to an existing research institution with acclaimed national status, with adequate facilities and funding may be considered.

The literate, conscious and ambitious people of Kerala deserve to be kept 5.66 informed periodically of the developments and events taking place in the field of education in the state. The media as well as sections of the population should periodically assess the developments. We find that official reports and documents are often very perfunctory and do not convey all the details needed to gain a meaningful picture. They are also in many cases considerably delayed. Publication of a journal on education in Kerala which communicates recent developments, ideas and debates on education to parents and interested sections of society may prove useful in this regard.

Upgradation and maintenance of quality in education has become a major 5.67 issue today. Even if the various suggestions on improvement of quality are implemented, there is no mechanism, except social pressure, to sustain the reforms. In order to monitor the quality of education imparted, two autonomous bodies may be constituted, one for school education and the other for higher education, which may work together to review the position from time to time, raise issues for discussion and consideration by those who are concerned with educational administration and reforms.

Chapter VI Language, Literature and The Medium of Instruction

- 6.1 alayalam is one of the richest languages of the country. It draws its strength from the classical bases of Sanskrit and Tamil. Significant grafting has also taken place from languages such as Portuguese, Arabic and English. Malayalam has grown and evolved because of continuous interaction with the other languages of south India.
- 6.2 Unlike in several other parts of the country, class divisions in Kerala are not reflected in the way Malayalam is spoken by people from different social strata. Universal literacy, the spread of libraries, publication of books, newspapers and periodicals have resulted in homogenisation of the written language and, to a certain extent, of the spoken language too. There are a few pockets of the state where Adivasis speak a distinct dialect; in the border areas, large sections of people speak Kannada, Tulu, and Tamil; and Konkani is also spoken by certain sections. Notwithstanding these areas of divergence, cutting across class stratification and community heterogeneity, Malayalam is used for social discourse in every nook and corner of Kerala. It is a live language, thriving and maturing continually.
- 6.3 Yet, there is a linguistic problem in Kerala which impinges on the educational structure of the state. The problem is a legacy of colonialism which held sway in India for nearly two centuries. Not only the ideas of the ruling classes, but even the language of the rulers established its absolute superiority under British imperial rule. Irrespective of whether or not the languages of the country could claim the inheritance of a rich literature and vocabulary, a sense of inferiority affected their development. They were shut off from use for official purposes, and English came to be used exclusively in administrative transactions as well as proceedings involving the judiciary and the magistracy. It was the language of imperialism; it was taken for granted that it would be the sole means of communication within the imperial system. It also became a symbol of high culture, a necessary attribute of social status and power. This mind-set did not disappear altogether even after Independence. On the contrary, stress was laid on the continuing importance of English as the principal language for international commerce and communication thereby justifying its dominant role in academia and administration. Even in Kerala, despite fairly widespread awareness of the immense richness of the state's principal language, Malayalam, the predilection for English persisted. This affected developments in the educational sphere as well. Although the objection to Malayalam as the only medium of instruction in the primary stage is decreasing, its suitability as the medium of instruction in later stages, particularly for undergraduate and postgraduate studies, has been seriously contested. Preconceived notions have filled a large space in this debate. Few grounds exist for assuming that Malayalam does not possess the inherent attributes of the most appropriate medium for didactic pursuit whether the subjects covered are the physical sciences or philosophy or economics. All that is necessary is extension and expansion of the vocabulary the language possesses so as to fulfil the pedagogic requirements of the major disciplines in the arts and sciences.

The remaining task is reducible to part daring and part persistence. It has been found in the history of all languages that when a few vanguard takes it upon themselves to use a language for lecture-room discourse or other wider purposes, the language takes wings. There could be some kinks and roughnesses here and there in putting across ideas in appropriate words and syntactical arrangements. By and large, though, these have not posed a major problem. It should be no different in the case of Malayalam. Whenever the need arises, expressions from other suitable languages could be grafted on or new terms and expressions coined, to take care of the occasional bumps and stumbles.

As of now, there is some heterogeneity in Kerala's educational system in 6.4 the matter of use of languages. Despite traces of resistance here and there to the use of Malayalam, and the somewhat dogmatic use of Arabic or English, for example, Malayalam has emerged as by far the most acceptable medium of instruction at the primary level. Since primary education will henceforth broadly consist of imparting training and education to young children up to 11 years with an emphasis on unraveling the beauty and mysteries of the flora and fauna around them, there is not likely to be a move away from Malayalam.

One reason for the open-minded attitude towards the use of Malayalam at 6.5 the primary stage could be the perception that most of the education at this level is fairly simple and that the views of children begin to be shaped effectively only at the post-primary stage, at the secondary and higher secondary levels. Hence, the polemicists have shifted the ground of debate away from the primary level and concentrated their arguments regarding the choice of language on the vocational, secondary, higher secondary, undergraduate and postgraduate stages. Those who hold out in favour of English draw attention to the several advantages of intensive training in this foreign language. It is the medium through which people residing in different parts of the country can interact with one another, the so-called 'link language'. Further, what is traditionally stressed is the need to ensure that children do get familiar with the world of science and technology as well as international finance and commerce. It is suggested that this objective can be attained speedily only if English is the medium from the lowest level possible and Malayalam is introduced with circumspection.

A resolution of this issue cannot be separated from the debate over the 6.6 number of languages a child should learn. Kerala has so far accepted the three language formula. Apart from Malayalam, schools in the state have been teaching Hindi and English, both being taught together from the upper primary stage onwards. An encouraging part of the story is that the transition to Hindi has been mostly incident-free and has not evoked any strong reactions. However, there is the problem of the right combination of levels of learning based on which these languages are to be taught. Teaching three languages is intended to serve different social and linguistic objectives. Malayalam is seen primarily as the language of culture and communication, Hindi as the national language to familiarise the child with national culture and enable communication with other parts of the country, and English as the foreign language. The pedagogical approach to all the languages is the same. Besides these, the existing arrangements in Kerala also encourage learning of Arabic or Sanskrit, sometimes as classical languages but, let us acknowledge this, sometimes for sectarian reasons too. These languages are taught at different levels often at the cost of Malayalam. There is a point of view that to understand the nuances of a language it is necessary to delve into the classics which originally formed the base

Language, Literature and The Medium of Instruction of the language. The allotment of teaching slots for Sanskrit in Kerala schools is sought to be justified on this ground. There is, however, no similar demand for the teaching of Tamil, which occupies a similar position of importance. There is also a demand for Arabic up to an advanced stage among certain sections.

6.7 If all these various points of view are to be accommodated, Kerala's education system will have to make provision for teaching at least four languages for varying periods at the secondary stage. In the border areas of the state, the use of Malayalam as the medium of instruction will have to be supplemented by the use of local languages such as Tamil or Kannada. Responsiveness to local sentiments will make it inevitable that the number of languages used for pedagogic learning could go up to as many as five.

6.8

Language, Literature and The Medium of Instruction

This is not a practical proposition. It is unlikely that the teaching of languages at the secondary stage can accommodate more than three. The teachinglearning load in languages is already very heavy, and there is a certain absorptive capacity beyond which students are unable to proceed. It would lead to a decline in didactic effectiveness if the number of languages is further increased. To assuage injured feelings it may be advisable to provide choices to students to decide which three languages they are to study, with the provision that Malayalam will be compulsory for all. In normal circumstances, it is not unrealistic to assume that a fair majority of students will choose Malayalam, English and Hindi. However regrettable, this will mean that the space available for Sanskrit or Arabic is marginal, and these can be introduced at the expense of either Hindi or English at the secondary stage, while the demand for English or Arabic as a medium of instruction at the primary stage need not be entertained at all. In the case of linguistic minorities, their respective languages can be taught, with the provision that Malayalam too will be introduced, say, from the third standard. In the case of tribal communities, teaching may commence in their local dialects with provision for transition to the Malayalam script and language within an adequate period of time.

6.9

The situation is no doubt complex and at a certain juncture the state authorities will have to step into the debate. The insistence on retaining English ---and even enlarging its scope — in the secondary, post-secondary and higher stages of education has implications which go far beyond disputes over the availability of teaching hours and suitable teachers. The need for deep knowledge of a major international language is recognised. But there are other equally serious issues that need consideration. The continuing dominance of English over a large segment of the educational arena is a blow against attempts to do away with the colonial legacy and social hierarchies, ushering in a more egalitarian order in the educational system. The upper echelons in society have accumulated a number of critical advantages because of their familiarity with English, which for economic reasons the poorer sections have been deprived of both in the past and the present. The poor identify the culture of English with the culture of the upper classes. Tolerance of diversities is an attribute of a democratic society that deserves the highest respect. Social rigidities which encourage the widening the inequalities in the distribution of wealth and income in society, however, need to be resisted. The alibi of democratic tolerance cannot be allowed to be deployed as weaponry to halt the progress toward a more democratic milieu, that is to say, opening up opportunities of education for each and every member of the society, including the humblest. English is a very rich and advanced language and has undoubted advantages, but these are the consequence of the dominating role the nation and its language have played over a large part of the world for nearly two centuries. Its adoption cannot ensure an egalitarian educational system. The transition has to be made from English to Malayalam as the medium of instruction, in all stages of education. If necessary, arrangements have to be made to produce textbooks and other documents and materials to accelerate the pace of instruction in Malayalam in the secondary and post-secondary stages.

We have thus entered a further debate: what are or ought to be the attributes 6.10of democracy? Here too, the demand of the times has to be graciously accepted. Decisions at the political level are taken by a majority on the basis of adult suffrage. Priorities in education should, to a large extent, follow guidelines which flow from the same principle. If the use of the state's principal language, the mother tongue of the majority of the population, promises to facilitate a more rapid spread of education and technical training than was the case till now, the state must initiate practical measures to establish the primacy of this language. Adequate stress has to be laid on improving and expanding the use of Malavalam so as to enhance the quality of the contents the students are called upon to accept and assimilate. The choice of learning other languages or using other languages as medium of instruction may be allowed only in extraordinary cases, with adequate safeguards against the exception turning into the rule, even if such restrictions bring unhappiness to some sections of the community. This is a situation which has to be accepted by all as a compulsion of social reality. At the same time, there should be no question that where the means exist, the teaching of additional languages is encouraged. A difference, however, has to be made between the medium of instruction per se and the teaching of other languages. If those who want to function on their own beyond the pale of the government system, for example, denominational institutions or purely commercial outfits, are bent upon introducing English or any other language as the medium of instruction, even if they have the resources to do so, their efforts should be frowned upon. Capital stock carried forward from the past - and perhaps accumulated through exploitative means — ought not to be used to aggravate inequalities in the educational system. The state will be perfectly within its rights to enforce discipline on non-governmental sections of the educational system in the event of their being reluctant to accept the guidelines laid down regarding the medium of instruction.

There are however other issues which are equally relevant and which should 6.11 be openly discussed in an environment where democracy is, or should be, supreme. Malayalam will receive the pride of place in the educational curricula. But within the resources available to the state complemented through transfers effected from other bodies and institutions, learning of other languages should be encouraged to the utmost extent. In any event, no educational system which seeks social enlightenment and human progress, can disregard languages. Languages provide entry into literature; literature, which includes poetry, is the fountainhead of all imagination. A creative society cannot do without imagination. It cannot therefore do without literature and the cultivation of languages. Whatever the equilibration of the total structure of education proposed for Kerala, it is hoped that it will provide enough scope for the study of a rich variety of languages and literature, which will permit entry into philosophies of life and living as well as encourage the revelation of social dynamics.

Language, Literature and The Medium of Instruction

Chapter VII Educational Management

7.1 he proposition is now taken to be axiomatic: the major focus of attention for a poor economy trying to accelerate the pace of growth must be on education. Education provides the masses with the opportunity to get acquainted with improved processes of production and technology crucial for sustained growth. Everything else remaining the same, education also enables working people to move to a higher level of earning.

7.2 Judged in this light, Kerala has been among the luckier components of the Indian Union. Because of factors alluded to earlier in this Report, she is far ahead of the other states in the spread of literacy and primary education as well as education amongst women. Even in the sphere of secondary education, her record is not disappointing. The state has a number of universities funded by the state government and the University Grants Commission, and institutions of higher technical learning financed either by the state government or by private endowments. The quality of education imparted by these universities and institutions, however, suffers from glaring deficiencies.

7.3 Some specific problems besetting the educational scene in Kerala deserve separate mention. First, the mismatch between products of the educational stream and the requirements of the state. Graduate and postgraduate students pour out of higher education institutions, but do not find any space where they could be readily absorbed. At the other end, many new technological and professional employment opportunities have opened up on account of external and internal developments over the past few years, but the universities and institutions of higher learning are unable to supply men and women with the appropriate knowledge, training and skills. This disharmony between demand and supply is discernible at other levels as well, including women's education; the incidence of unemployment and underemployment is much higher amongst women than men in the state. Social rigidity is one of several reasons for the inability of women to make satisfactory use of the knowledge they attain from graduate and postgraduate training.

7.4 The crisis, it would appear, has several dimensions. Either there has been no educational planning in the past, or whatever planning has been attempted has failed to close the gap between the demand for and supply of technically competent persons. The system has also not succeeded in providing outlets for gainful employment to women who have come through the educational stream.

The Role of the Government

7.5

We may turn to a discussion of the management of education and of educational institutions in this context. At the outset, it is necessary to underline the basic proposition that informs this entire Report, that providing education to the members of a society is a societal responsibility and that the initiatives of private organisations and individuals are to be viewed within that overall context. A parallel may be drawn here between education and transportation, another major social responsibility in a democratic society. Individuals have the right to own vehicles and to drive them, but the ' rules of the road' which regulate the flow of traffic have to be a societal responsibility: if left totally to the desires and whims of individuals, there will either be chaos in the streets or might will turn out to be a situation that a democratic society cannot accept. The societal responsibility regarding the use of roads is not limited to deciding whether traffic should keep to the left or to the right. It includes limiting speed, installing traffic lights, authorising traffic police to regulate the movement of vehicles, and much more. In most instances, constructing roads and bridges and their upkeep are also societal responsibilities. All users of roads will have to accept these societal regulations, including those who own private vehicles and who may claim that they know better than policemen how to drive their vehicle or even how to maintain a smooth flow of traffic.

The societal responsibility in education is very similar. The basic parameters 7.6 of education, the broad framework within which different kinds of educational activities take place, must be provided by society, and by the state as the collective representative of all sections of society. This is why (as was mentioned earlier) it is important always to spell out the common social objectives and principles of education which the different groups in society (political parties and denominational groups, in the Kerala context) must subscribe to and abide by. This is no easy task, partly because there may be differences of opinion about fundamentals (such as the purpose of education) but also because with changes in society, social objectives and principles of education also undergo change. It is the role of the state as the representative of the people to continuously evolve this social consensus about education. In operational terms, this responsibility rests largely with the government of the day. Given the democratic milieu, the government will have to carry different sections of opinion along while fulfilling the educational agenda. The logic of programming which will reconcile and integrate the entire educational structure will have to be carefully formulated, brick by brick: no compartmental view can be allowed to prevail, though compartmental views have to be understood and accommodated without surrendering what must be seen as the common good. This may be thought of as the macro-aspect of the management of education.

The Management of Individual Institutions

There is a micro-aspect too to the management of education, that relates to 7.7 the management of individual educational institutions. Even in this sphere the state has special responsibilities as the guardian of societal interests. For instance, it is in society's interest that all educational institutions uphold high standards in education and the state should not permit any institution to neglect this task whatever may be the reason. It is society's concern that all those employed in educational institutions are provided reasonable service conditions, although some institutions may claim that they have a special dispensation to treat their employees as they like.

Subject to these overall social guidelines enunciated from time to time, the 7.8 exercise of the internal management of educational institutions may be left to the institutions concerned. In Kerala (as in other parts of India) education at practically all levels is imparted through 'public' and 'private' institutions. The terms 'public' and 'private' are used with different meanings under different circumstances. Usually a public educational institution is one managed by governmental agencies and those described as private, by a large variety of non-governmental agencies. However, in some places a 'public school' is typically one managed by a private (i.e. non-governmental) agency, but open to the public at large. In this sense, most private educational institutions in Kerala are 'public'; at least the student population is substantially representative of the general population, not confined to a particular

religion or denomination. And, of course, there is another sense in which private, but 'aided' institutions are public: their funding is to a large extent from the public exchequer.

7.9 Whether public or private, let us see what the nature of the managerial function is in an educational institution. We must note, first of all, that the managerial function will differ depending on the nature and activities of the institutions concerned. The differences between the management of a small school and a big university are too obvious to be told. But in all cases there is what may be described as an essential managerial function. We shall concentrate on that with reference to an institution of higher learning, a typical arts and science college, where that function can be readily seen.

7.10

The key to understanding the essential managerial function is recognition of the fact that an educational institution is an entity with different constituents students, teachers, non-teaching staff, parents and the public at large, each of which has its own specific interests in and attitude towards the institution. Students and teachers may be assumed to be primarily interested in the education that the institution offers. But even here, there may be differences; teachers may be more interested in passing on what they have already learned, while students may be excited about acquiring new knowledge. Or, teachers may have a more lasting commitment to the pursuit of knowledge, while students may be interested in what they expect to achieve later in life by acquiring the knowledge needed to perform well in examinations. Teachers and non-teaching staff, who earn their living through the institution they serve, may have a greater loyalty to it. Students may not have that kind of attachment although it is commonly observed that later in life they do develop great emotional ties with the institution that trained them! The non-teaching staff's main concern may be their service conditions; the public at large may be more interested in the prestige that an institution of higher education brings to the locality. What we have referred to as the essential managerial function is the holding together of these different groups. It is almost like coordinating a coalition of different parties and getting that coalition committed to the primary task of learning. This managerial function is never easy, and it can turn out to be quite difficult. It is achieved through formal rules and regulations up to a point (rules that insist on teachers' teaching, procedures that examine whether students are learning, etc.); but it is also achieved through informal understanding and healthy conventions, all of which contribute to the "ethos" of the institution.

7.11 The managerial function has an in-built tendency to degenerate. This happens in different ways. One of the commonest is for the management to become identified with one of the constituents — the one that is seen to be the most powerful, or perhaps the most vocal, for instance. The second possibility is for the management to become a separate interest in itself, providing its own definition of the purpose of the institution it manages, and uses the power it has to suppress all other constituents of education. In that process, obviously, it ignores the commitment to learning and knowledge. It is not only degeneration, but a perversion as well. In that perverted form 'the management' can become an agency for money-making, or for promoting the cause of particular 'communities', or for propagating some ideology — anything, in fact, other than serving the cause of education.

A crucial question, then, is how the necessary function of managing is to be 7.12 carried out without allowing it to degenerate into becoming 'the management'. It has an internal and an external component. The internal component is the democratisation of the managerial function. Democracy, here, does not mean decisions arrived at on the basis of numerical strength. What it does imply is ensuring a broad-based deliberative process leading on to carefully reasoned and transparent decision-making and implementation. Each constituent must come to feel that its legitimate interests are being recognised and satisfied. A truly representative body drawn from all constituents is necessary to resolve contested issues. Also, the performance of all the internal components of education must be subjected to periodic evaluation.

The external component to facilitate the managerial function is to actualise 7.13 the societal dimension of education. Enlightened social involvement with education without any desire to dominate over the internal autonomy of the institution can be used to enlarge the vision of the internal components and to make them responsive to social aspirations and needs.

An important aspect of the managerial function is to raise funds and to 7.14 decide on their appropriate utilisation: a task that combines both the external and internal components. It is healthy procedure for parents and the public at large to become aware of the financial requirements of the institutions that they are involved with and to accept some responsibility to raise funds for them, and for the internal constituents to recognise the extent to which the rest of society makes possible their endeavours.

The head of the institution (the headmaster or principal, as the case may) 7.15 has a crucial role to play in envisaging and executing the managerial function. It is important to select the person with special care. He/she should have had experience as a teacher for at least two decades, preferably with some administrative experience also, as head of a department, for instance, and must have at least three years of service left. He/she should also have the ability to hold together the internal constituents and to act as a link between them and the public at large.

The managerial function described above, both its nature and the possibility 7.16 of its degeneration into 'the management', is common to institutions managed by the government as well as those managed by private agencies. The degeneration may not be identical. Private agencies may use educational institutions to build up and protect the political influence of 'the management'. In institutions managed by the government, there may be attempts to strengthen the ideology and influence of the political parties running the government of the day. The democratic task is to expose and oppose such perversions, whether they happen in private institutions or public institutions. There is no inconsistency between this position and the position that we have consistently maintained, that the state must have a key role in education. What we have done is to draw a distinction between the state as the representative of society, and the state as the government of the day, which, though it is the operational counterpart of the state, will certainly be more protective of the interests of the sections of society by whose support it has come to power. The democratic task is to broaden and sharpen the role of the state in education and to be critical in the support extended to the government of the day. It may be pointed

out that the management of public educational institutions is not exercised by the state, but by the government of the day. While the educational policies and practices of the government of the day deserve support, they may have to be opposed as well, particularly if they are partisan. We may go back to the transportation analogy to get a clearer idea of the position we are taking and recommending. First, the recognition of the unavoidable social role in transportation does not imply that all vehicles should be owned and operated by the government, or that all requirements of transport should be provided by the public authority. Second, while a proper transportation system cannot function without the authority of the traffic police, instances may arise where the negligence or partiality of traffic policemen have to be exposed.

Plurality of Agencies

7.17

Against this background it is possible to take a fresh look at the role of the different agencies engaged in educational activities in Kerala. The history of education in the state shows that at different points of time western missionaries, feudal maharajas, social reformers, religious groups and broad-based popular movements have all become champions of the cause of education and have started educational institutions of different kinds and at different levels. They have all made their contribution to build up the system of education in the state and to make Kerala the most advanced among the states of the Indian Union in terms of literacy and many other features of education. At the same time, the management practices of the different agencies in the educational sphere have not always been what they should have been, and no agency can be said to have been immune to the tendency to degenerate.

7.18 What should be the policy for the future? Should the plurality of agencies in education continue, or should an attempt be made to eliminate it, perhaps not immediately and suddenly, but in a phased manner over a period of time? Our considered view on this question is that subject to overall social monitoring and regulation of the kind indicated for the management of education at the macro-level, variety and plurality of the exercise of the managerial function is not only permissible, but desirable as well. Indeed, our view is that at higher levels, particularly at the collegiate level and above, the ideal situation will be for each institution to have internal autonomy of management, once again subject to generally accepted academic and social criteria.

7.19 But let us first examine the nature of the public and private management of education in the state, using the terms 'public' and 'private' as generally understood in the context of educational enterprises in Kerala.

7.20 At the lowest level of primary education, the responsibility of running institutions will be increasingly that of the public authority. This is mainly because the responsibility of ensuring that all children have the opportunity and the means to acquire elementary education is that of the society at large. It is also because private agencies may not find it worthwhile to enter into this area any more. This is not to ignore the fact that, in the past, primary education was provided largely by private agencies who went into it with a 'missionary spirit'. But it must also be noted that, more often than not, these agencies mainly activated the local community for land and building and other major expenses. Local teachers too made their

services available at nominal salaries. Conditions have changed enormously and there is no doubt that henceforth primary education will be substantially the responsibility of public agencies, though for a while there may be a sprinkling of commercially organised private institutions that charge high fees and profess to offer better education. In general, primary schools in the future will and should function under the broad guidelines laid down by the panchayat bodies. Even the denominational schools that may continue will have to accept the rules framed by the Panchayati Raj institutions representing the people of the locality.

The same may be said about vocational schools which, of necessity, will be 7.21 closely related to local requirements and resources and where, therefore, the local community will have to play an active role.

At higher levels of school education, though the local links will still be 7.22 relevant, it may be possible to have curricula of a more general nature encompassing the state as a whole. Whether managed by the public authority or by private agencies, there is already a fairly uniform curriculum for all schools which come under the State Board leading up to the common SSLC examination. Differences in the managerial structure, therefore, are largely a reflection of the historical evolution of education in the state. The exceptions here are the schools, mostly run by private agencies, which are recognised by all-India bodies such as CBSE.

At the collegiate level and in the case of technical and professional education, 7.23 the principle must be to move towards a situation where each institution has maximum academic autonomy within the broad standards and criteria laid down by higher bodies such as the university.

Not all institutions will be ready to accept such autonomy which will call 7.24 for working out in detail the contents of each course to be taught, making adequate arrangements for evaluation, etc. Many of them will wish to have these matters decided for them by external agencies, which is the pattern that now prevails under the system of 'affiliation' (to a university). But wherever the teachers have the competence and the commitment, internal academic autonomy may be granted. This applies to institutions managed by the government's Departments of Higher and Professional Education, as well as to those managed by private agencies. This is the only way in which institutions of higher education can keep up with the rapid changes taking place in knowledge. A system dominated by external agencies and remote controls will not have flexibility for adaptation and freedom for innovation. At the same time, under autonomy standards will deteriorate, unless teachers constantly keep up with changes in their subjects, and arbitrariness and foul play will come to dominate, unless fairness and transparency are the foundations of academic and institutional transactions.

The administrative and managerial aspects of universities call for a drastic 7.25 overhaul. The following changes may be considered: (a) Each department will be accorded a greater degree of academic and financial autonomy than at present. (b) There will be a faculty committee with one faculty representative from each department. This committee, which should meet at least once a month, will deal with all routine matters. The dean of the faculty will act as chairman of the committee. (c) The Board of Studies will be concerned with general academic issues and should have external experts formally as members. (d) All decisions regarding
academic matters will rest with the Academic Council which should have representation from all departments along with outside experts. (e) Syndicates and Senates will deal only with administrative matters. Decisions of the Academic Council are to be reported to these bodies, but they should not, however, have the authority to overturn any decisions thus communicated. The Syndicate and the Senate can at most request the Academic Council to take a second look at some decisions.

7.26 Thus, decentralisation, debureaucratisation and autonomy are to be guiding principles of educational management within the broad parameters of societal determination of goals and priorities. Ensuring freedom of enquiry and making the educational process exciting are to be the objectives of management. At all levels, therefore, the academic constituency in education, especially the teachers, must come to play a decisive role in educational management, keeping in mind that, in the final analysis, the most important constituent in the educational system are the students for whose benefit it exists. But it is equally important to recognise that the functioning of the educational system depends on the services of different sets of non-academic personnel. Their expertise and devoted services are also necessary for the educational system to function smoothly. Fairness to them must be an important ingredient of educational management.

Minority Institutions

7.27 We now turn to two aspects of educational management which are of special significance to Kerala, one old and the other relatively new. We refer here to educational institutions managed by religious minorities, and self-financing institutions. There are many controversies about both these which, at times turn out to be rather high-pitched. We would attempt to view them as dispassionately as possible within the larger societal considerations that we have spelt out.

Educational institutions that now claim minority rights, particularly those 7.28 that were started by the missionaries and are now being run by different Christian denominations, are among the oldest and the best in the state. Many of the Muslim educational institutions which also claim minority rights, though not as old as the ones run by Christians, too have established themselves as reputed centres of learning. It is equally true that the standing that these institutions had in the past has come down considerably over the last few decades. The more recent minority educational institutions, with rare exceptions, do not measure up to the academic reputation of the past, nor do they enjoy the same kind of public esteem as the ones of an earlier This may be partly because of the rapid increase in the number of vintage. educational institutions, which has tended to bring down overall quality. The 1972 settlement whereby the government took over the payment of salaries of staff in private educational institutions and conceded the right of the management to appoint staff, both academic and non-academic, also had an impact on the character of the minority institutions. Many minority institutions have used this right to provide employment opportunities to 'their own' people, often ignoring academic standards. There is no doubt that this has led to a very unhealthy communalisation of the educational scene in Kerala, a fact that the leaders of the minority institutions themselves admit. Instances of minority rights acting as a cover for arbitrariness on the part of the managements and for attempts to suppress the legitimate democratic

rights of the staff are also not rare. To summarise, some minority educational institutions are good, even exemplary; some are bad, even corrupt. In this sense they are not very different from other private educational institutions or institutions managed by the government.

We do not propose to go into the constitutional aspects of minority rights 7.29 in the educational sphere, some of which are still under judicial review. We reiterate the fact that institutions that now claim minority rights have played a significant role in Kerala's educational scene in the past, that their contributions even today are considerable, and that given the plurality of approaches to education in a democratic society they will continue to play an important role in the future also. Given this fact, it will be inviting unnecessary trouble if the minority institutions are treated as aliens. Should they feel discriminated against, they may refuse to deploy the vast resources at their disposal in the traditional manner, and that will not help the cause of education in the state. In fact, it will not do harm if the sensitivities of minority institutions are attended to. For example, it is conceivable that a number of schools run by the minorities lay special stress on religious and moral studies of a particular genre. Such courses may be allowed to continue as long as they are not imposed on pupils of other faiths and are only supplements to the general curriculum. Along with other institutions in the private sector, it is also necessary to enable the educational institutions of the minorities to augment their financial resources, a point that we take up subsequently.

This is not to recommend giving a 'free hand' to these institutions. Even 7.30 the minority institutions must function within the broad societal objectives, principles and modalities of education. We would remind these institutions that if they are primarily educational institutions and only secondarily minority institutions, they cannot claim minority status to justify activities that are not compatible with the societal conditions of education at different levels. The clearest case is the appointment of teachers. In the prevailing social and economic climate of Kerala, minority educational institutions may have many incentives to consider their institutions as agencies to provide employment to the members of their community; even the obligation to the community may be forgotten if the opportunity to provide employment can be converted into an opportunity to make money or consolidate power. That appointment of teachers in some minority institutions has been so 'transformed' is widely known. This cannot be allowed to continue in the name of minority rights. In order to avoid such possibilities and allegations, we recommend that a common qualifying test be conducted for all who wish to become teachers, and that appointment of teachers even in minority institutions be made only from among the candidates thus qualified. In order to protect the legitimate concerns of the minority institutions, they may be given the first preference to draw from the common pool, ensuring that the pool contains only as many teachers as the total number of vacancies in a particular academic year. The details of this recommendation will have to be worked out, but the principle underlying it must be clear. The service conditions of those employed by minority institutions must also conform to the generally accepted social norms. Minority institutions that receive grants from the government cannot be exempted from the need to adhere to generally accepted academic preconditions. We would draw the attention of minority institutions to the fact that they will be able to spare themselves a great

deal of hostility and suspicion if they hold up academic standards, be fair to those whom they employ, and be transparent in all their financial transactions. Is this too much to expect of those who claim to be motivated by higher purposes to go into the field of education? Nor are these difficult to achieve, as several minority institutions continue to demonstrate. It is no exaggeration to say that if an objective list is drawn up of educational institutions of good performance in Kerala (at any level), many of them will be those run by the minority communities.

Self-financing Institutions

7.31

Compared to the problem relating to minority educational institutions, that of self-financing institutions is relatively new, at least in the manner in which it is being posed now. But it is worth recalling that self-financing educational institutions too have a long enough history in Kerala. In the 1940s and 1950s a number of institutions offering coaching in typewriting and short-hand sprang up all over Kerala, in urban and rural areas alike. These institutions emerged when some private entrepreneurs recognised that there was a demand for personnel trained in typewriting and short-hand both within the state and in metropolitan centres outside, like Bombay and Madras, and that there was the possibility of making some profits by offering such courses which would also meet a felt social need. Initially at least, each of these institutions was a separate entity with its own course contents, its own admission conditions, fee structure and service conditions for instructors, without any kind of societal supervision. Subsequently some kind of uniformity may have come about at least in terms of course contents. Be that as it may, the point to note is that hundreds and thousands of young men and women throughout the state who received training in them and found jobs in many places in Kerala and outside were the beneficiaries of these 'self-financing' institutions.

7.32

From this historical perspective, it is possible to identify the main features of self-financing educational institutions. First and foremost, they are commercial activities through which entrepreneurs perceive an opportunity to make profits. Second, they are a response to the felt needs that are not met at all or not adequately met. Consequently, they can be of social significance and benefit, although this may not be the primary objective of the promoters. In sum, self-financing institutions are manifestations of the market principle in the sphere of education.

7.33 Hence it is easy to understand why there has been a re-emergence of selffinancing educational institutions in the 1990s. It is closely related to the 'marketfriendly' economic reforms started in 1991 with the tacit (often explicit) view that social needs are best reflected as market demands, and that the market will also set a price for meeting such demands. When spelt out in relation to education, it translates into the dictum that those who require a skill must pay for it fully without resources from other spheres supporting it or subsidising it. An institution which operates on this principle thus becomes self-financing.

7.34 It is easy to understand why self-financing institutions emerge principally in technical and professional courses (rather than in courses of general education). The reason, of course, is that technical and professional courses confer skills on individuals and hence there is better possibility of assessing individual benefits and individual costs — a requirement for market pricing — which, therefore, provides the best opportunity for profit-oriented entrepreneurs.

The market orientation of self-financing institutions serves as the setting 7.35 for the perversions that result. Where students (and their parents), rightly or wrongly, think that a particular course of training will give them marketable skills in the future, either directly or through working for others, they will be willing to offer large sums for the course. The promoter of the institution will certainly take the money, but he is under no social compulsion to give anything worthwhile in return. Similarly, in the context of chronic unemployment of professionally trained personnel, there may be many who accept positions as teachers in self-financing institutions and the promoter is in a position to squeeze such people. Thus, selffinancing educational institutions, without any social monitoring and control, are in a position to set aside all educational considerations and exploit both students and teachers. It could, of course, be argued that this cannot be sustained in the long run, but certainly in the short run considerable havoc can be done. Whether society should be a silent spectator under such circumstances, is the question. Having looked into both the potential possibilities and perversions of self-financing educational institutions, we may consider how they are to be handled. The first thing to note is that while there may be a 'natural' tendency for such institutions to spring up, no one who is interested in their contribution to education can adopt the view that because they are subject to the discipline of the market and because the 'the market knows best', no societal intervention in self-financing institutions is necessary and the correct social policy is to let them function as they like. The market as a social institution does not 'know', cannot know. The market never functions on its own; it is always made to function. There is nothing in social theory to suggest that the market, operated by resource power, will always lead to the best social outcome. In the case of education, surely, an individual's resource power cannot be allowed to be the determining factor in deciding on the opportunity to acquire knowledge. And, as has been indicated above, if self-financing educational institutions are allowed to function without larger social supervision, they tend to degenerate into money-making rackets.

Second, self-financing educational institutions within the university system 7.36 should not be allowed to function without adequate social control because by virtue of being part of the university system, they share in the social recognition and prestige that the system possesses. It will be an irresponsible act if a university confers on an educational institution the privilege to prepare students for a degree or certificate that the university confers, but does not insist on rigorous conditions in return. Where self-financing institutions come within the ambit of the university system, they must certainly be subjected to all the academic conditions that other institutions within the system have to fulfil. If the self-financing institution proposes to offer new courses, the university has the responsibility to ensure that the institution has qualified faculty and all other academic prerequisites for the course. If this much is accepted, it is then only a small step to suggest that the service conditions of the faculty (and others employed) cannot be left to the whims and fancies of those who manage the institutions. Compliance with generally accepted social norms has to be insisted upon.

In effect, therefore, the distinction between self-financing institutions and 7.37 institutions within the university system can only be in the pattern of financing. They must be considered simply as 'unaided private institutions'. If such a category

is needed, let us say, because of the limitations of government funding of education, their financial requirements should be adequately assessed. A deliberate decision will have to be made as to what proportion of the total costs should be passed on to the students in the form of fees. The promoters of these institutions, if they have a genuine interest in education, must be willing and obliged to meet a share of the total expenses. It should not be difficult to find ways by which these institutions, at least the more enlightened among them, are persuaded and enabled to show some concern for the socially and economically disadvantaged. A differential fee structure favouring such groups can be worked out.

7.38 The position we are taking is that while it may not be easy to prevent shrewd entrepreneurs from entering into the educational sphere and setting up institutions through which they sell education according to the principle of the market, they should be provided social recognition only if they accept clearly worked out social conditions.

7.39 We need detailed studies of the social situation in Kerala and Kerala's educational requirements in order to spell out these conditions. Unfortunately there are very few studies of that kind. A survey completed in the second half of 1997 has come to our notice, titled 'Entry Barriers to Professional Education in Kerala'.

7.40 This study, by the Centre for Socio-economic and Environmental Studies, Kochi, based on a sample of students in selected courses in engineering and business administration offered by regular colleges and self-financing colleges, concentrates on the financial aspects. It shows that as against the fee charged in regular engineering colleges of Rs.1,200 per annum, fee in self-financed colleges is Rs.12,500, which goes up to Rs.24,500 if the interest foregone on the 'deposit' collected at the time of admission is also taken into account. For an MBA, fees in regular colleges are Rs.3,000 a year, and Rs.40,000 in self-financing institutions, and for an MCA Rs.4,000 and Rs.15,000, respectively. The figure mentioned last will go up to Rs.27,000 if the interest foregone is also considered.

7.41 Two observations may be made about these figures. First, while Kerala's per capita income was around Rs.8,000 during the year 1995-96, the fees in regular colleges were far below this figure and those in self-financing colleges considerably above it. Surely, the fee structure in both regular and self-financing colleges need to be reviewed in this context.

7.42 Second, apart from college fees, students, particularly in self-financing institutions, have to incur substantial expenditure for hostel fees, transport, etc. Hence the total expenses that students of self-financing institutions (or their parents) have to incur for their studies are of a very high order.

7.43 Another feature that the study brings out is that those who go in for selffinanced courses are not drawn from 'the very rich'. They come mostly from families where the father (and frequently the mother also) is in a modest salaried job. In other words, the clientele of self-financing institutions consists mainly of families who have come to recognise the value of higher education and who feel that professional education will open up many opportunities for the coming generation.

Case studies of the academic performance of self-financed colleges will also be needed before an overall assessment of their contribution to Kerala's educational scene can be made.

Educational Management

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Chapter VIII Educational Financing in Kerala

State Expenditure in Education

•he educational enterprise in Kerala which comprises 54.14 lakh pupils at the school level, 5.25 lakh at higher levels, 2.04 lakh teachers, about 13,000 institutions at different levels and under different auspices, and with substantial involvement by the state government, is a massive operation.

There is no estimate of the total annual expenditure on the wide range of 8.2 educational activities in the state by the direct beneficiaries (or by their parents and relatives), by the different agencies involved and by the state. But there can be no doubt that it must be a sizeable amount considering the importance that individuals and society at large attach to education in Kerala. In this section attention will be paid primarily to government expenditure on education. It is well known that the social expenditure on education channelled through the government is the major component in the total expenditure on education.

The total state expenditure on education in the state in 1994-95 amounted 8.3 to Rs.1350 crore. Of this Rs.662 crore (49 per cent) was spent on primary education, Rs.406 crore on secondary education (30 per cent), and the rest (Rs.282 crore) on university and higher education, of which Rs.62 crore went into technical education. The expenditure on education was about 28 per cent of the total government expenditure of that year. What is striking is the manner in which expenditure on education has been rising. Table 8.1 shows that during the short period between 1990-91 and 1994-95, the total expenditure shot up from Rs.751 crore to Rs.1,350 crore, and increased to Rs.1,652 crore in 1996-97 and again increased to Rs.1810 crore according to the Revised Estimates of 1996-97.

These increases in absolute terms over time need not necessarily mean 8.4 that the expenditure on education as a percentage of the total budget of the state government or as a proportion of state domestic product (SDP) has been increasing as well. Yet, Kerala has a record of maintaining these shares also high. In international discussions on financing education, it is maintained that an allocation of 6 per cent of gross domestic product (GDP) and 20 per cent of the budget for Table 8.1

			(Rs. Cr	ores)				
No	Stage	1990-91	1991-92	1992-93	1 993-9 4	19 94-95	1995-96	1996-97
1	Primary Education	384.16	409.00	591.12	530.46	660.87	675.10	890.10
2	Secondary Education	229.51	242.00	273.41	339.10	406.83	675.64	547.38
3	University and Higher Education	95.14	122.00	156.62	214.82	212.80	227.02	278.19
4	Adult Education	0.87	0.32	0.43	1.60	1.03	0.60	0.10
5	Language Development	3.72	3.91	4.13	4.86	5.40	5.38	9.08
6	Technical education	38.08	38.00	32.61	59.25	62.23	68.53	85.51
	Total	751.48	815.23	1058.32	1150.09	1349.16	1652.27	1810.36

Kerala Government's Expenditure on Education 1990-91 to 1996-97

* Revised Estimate.

Source: A study on the Finances of Kerala, Calicut and Mahatma Gandhi Universities Occasional Paper, State Planning Board, Government of Kerala, May '96. Table 7 and Economic Review '97.

education is desirable. It is not quite proper to use these norms meant for whole countries, to a state within a country. Table 8.2 indicates the governmental expenditure of Kerala as a percentage of the total state budget (Column A) and of SDP (Column B) from 1960-61 to 1993-94.

Evnonditure on F	ducatiz	Tab	le 8.2	hne note	other
Departments(Reve	nue Ac (A)	count) a and SDP	s percentage of I ' (B) - Kerala	otal State	Budget
Year	A	B	Year	A	B
1960-61	35.1	3.7	1981-82	34.8	6.5
1965-66	34.7	4.0	1982-83	37.2	6.2
1970-71	36.7	4.8	1983-84	33.7	6.1
1971-72	35.0	5.1	1984-85	33.2	6.2
1972-73	34.5	4.8	1985-86	32.1	7.1
1973-74	34.7	4.5	1986-87	31.5	7.1
1974-75	35.9	5.0	1987-88	31.1	6.7
1975-76	28.3*	5.8	1988-89	29.1	6.5
1976-77	36.2	5.9	1989-90	30.2	6.5
1977-78	38.0	6.3	1990-91	29.9	7.0
1978-79	38.7	5.9	1991-92	28.6	n.a
1979-80	20.5*	6.5	1992-93	28.1	n.a
1980-81	34.9	6.1	1993-94	29.5	7.5

Educational Financing in Kerala

> * These two years show a sharp but unsustained increase in the state budget. Source: Budgetary Resources for Education 1951-52 to 1993-94. Ministry of Human Resources Development.

It can be seen that the entries under A have always been above 20 per cent, well over 30 per cent and closer to 40 per cent during the earlier part of the period; and though there has been a tendency for the figure to come down later, it hovers around 30. Column B on the other hand shows that the percentage was lower in the earlier years but well over 6 per cent since the 1980s. It may be noted that during the 1980s Kerala's SDP growth was rather low.

8.5 Table 8.3 compares Kerala's performance in this regard with those of the larger states of India. It may, therefore, be stated that the public expenditure on education in Kerala is of a high order and that among the major states in the country, Kerala has the highest position in this respect.

8.6 Table 8.1 showed how the total public expenditure on education is divided among the major segments within education. Further details are given in Table 8.4, and for a much longer period.

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S]		1970	0-71	1975	5-76	1980-	-81	1985-	86	1990-	91	199	3-94
No	States	A	В	A	В	A	В	A	в	A	в	A	B (Not available)
1	Andhra Pradesh	20.9	2.5	23.0	2.8	25.1	4.0	19.1	4.0	18.0	3.3	21.0	
2	Assam	20.8	3.3	24.5	3.4	28.2	3.7	22.6	4.2	22.9	5.1	24.1	
3	Bihar	18.7	2.1	26.6	2.6	23.8	3.4	24.4	4.1	24.5	5.3	20.1	
4	Gujarat	20.2	2.0	23.2	2.4	22.2	3.1	23.9	3.9	21.8	3.7	20.8	
5	Haryana	19.8	2.1	18.7	2.2	20.0	2.7	17.7	2.6	16.4	2.6	16.1	
6	Kamataka	21.3	2.9	21.5	3.0	21.7	3.5	17.7	3.6	19.7	3.8	21.4	
7	Kerala	36.7	4.7	28.3	5.8	34.9	6.1	28.4	6.3	27.7	6.3	26.3	
8	Madhya Pradesh	24.2	2.5	17.9	2.7	21.0	3.1	17.5	3.1	18.4	3.3	18.2	
9	Maharashtra	21.3	2.5	21.1	2.5	23.4	3.0	17.8	3.1	19.5	3.0	17.8	
10	Orissa	16.8	2.3	21.2	3.4	22.3	3.7	16.8	2.8	20.6	4.0	19.8	
11	Punjab	22.1	2.1	23.0	2.5	28.4	3.5	20.1	2.8	19.8	3.0	17.2	
12	Rajasthan	18.9	2.5	22.4	3.0	24.9	10.8	22.0	4.3	22.9	4.5	20.9	
13	Tamil Nadu	22.6	3.0	21.5	3.2	23.6	3.8	21.5	3.8	22.4	4.9	21.3	
14	Uttar Pradesh	18.2	1.8	24.9	2.8	21.6	2.7	20.8	3.1	21.8	4.3	18.8	
15	West Bengal	22.9	2.2	22.1	2.2	23.6	3.0	23.6	3.4	26.4	4.3	26.9	
							-				determine and		

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Source: Compiled from Budgetary Resources for Education 1951/2 1993/4, Government of India, Dept. of Education, MHRD, 1995.

As one would expect, elementary education has claimed the highest share 8.7 throughout, around 40 per cent in the 1950s, with a big jump to over 60 per cent in the early 1960s, remaining well over 55 per cent in the 1970s, declining somewhat in the 1980s, and turning out to be below 50 per cent in the 1990s. These variations have their counterpart in secondary education, where the share declined to below or just around 20 per cent in the 1960s, picked up gradually in the 1970s, hovered around 30 per cent in 1980s, and just crossed it in the 1990s. The share of technical education also shows some variations, but appears to have stabilised around 4.5 per cent in the 1980s and 1990 with, of course, annual variations.

University and higher education had a double digit share in the early 1950s 8.8 but came down to a single digit in the mid-1950s, touching the lowest share of just above 4 per cent in 1965-66, and continuing in single digits till the early 1970s. The return to two digits in 1972-73 with a sharp jump from 7.4 per cent in 1971-72 reflects the assumption by the state of payment of college teachers of all categories (that is, government colleges as well as private colleges) during that year. Since then the share has tended to increase, crossing 16 per cent in the 1990s.

The 'Others' column in the table includes heads like Adult Education and 8.9 Language Development. Their share was larger than university/higher education till the early 1970s (considerably higher in the second half of the 1950s), but since then there has been a drastic fall, coming down to around 1 per cent in recent years. It is possible that this pattern represents some reclassification of heads.

Table 8.4

Percentage Ex	penditure on	each Sub-s	ector of E	lucation to	문습
Totol Dynamia	r www.com.Welsson	Non (Dovon		AL TODALA	
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Year	EE	SE	AE	TE	UNI.HE	OTHERS	TOTAL
1951-52	45.21	26. 4 4	1.33		13.25	13.77	100.00
1952-53	40.91	29.17	1.11		15.70	13.11	100.00
1953-54	41.00	31.22	1.19		11.54	15.04	100.00
1954-55	39.12	34.90	1.12		9.77	15.10	100.00
1955-56	32.57	36.68	0.81		6.67	23.26	100.00
1956-57	39.25	32.73	1.06		5.53	21.43	100.00
1957-58	48.77	29.36	3.28		5.39	13.20	100.00
1958-59	43.28	32.10	3.61		5.33	15.68	100.00
1959-60	62.75	21.12	2.75		5.50	7.88	100.00
1960-61	67.31	18.10	3.01		5.34	6.23	100.00
1961-62	62.06	16.77	3.56		6.57	11.04	100.00
1962-63	63.37	18.86	4.17		6.24	7.36	100.00
1963-64	59.96	18.97	5.61		6.26	9.20	100.00
1964-65	58.87	19.51	1.52	6.05	4.42	9.62	100.00
1965-66	60.47	19.59	1.33	5.08	4.18	9.35	100.00
1966-67	57.58	19.14	2.30	5.13	7.53	8.31	100.00
1967-68	59.46	20.93	2.32	4.34	5.66	7.29	100.00
1968-69	61.43	21.04	2.23	2.86	5.09	2.34	100.00
1969-70	59.75	21.16	2.15	4.05	5.00	7.89	100.00
1970-71	58.25	21.25	2.13	3.77	7.08	7.51	100.00
1971-72	57.77	21.50	2.11	2.80	7.40	8.42	100.00
1972-73	58.36	23.84	0.97	2.78	11.82	2.22	100.00
1973-74	55.92	25.39	1.24	2.78	13.12	1.56	100.00
1974-75	57.70	25.82	0.61	3.21	10.92	1.75	100.00
1975-76	57.15	24.80	0.95	3.50	12.16	1.44	100.00
19 76-77	57.40	25.36	0.74	3.57	11.55	1.37	100.00
1977-78	56.87	25.60	0.01	4.01	11.36	2.15	100.00
1978-79	56.87	25.60	0.01	4.01	11.36	2.15	100.00
1979-80	55.27	27.60	0.10	4.25	10.50	2.29	100.00
1980-81	54.48	28.37	0.04	4.22	10.63	2.28	100.00
1981-82	53.82	28.68	0.03	4.01	11.28	2.18	100.00
1982-83	53.25	29.22	0.04	3.51	12.07	1.92	100.00
1983-84	52.38	28.74	0.04	3.80	12.99	2.05	100.00
1984-85	51.70	29.07	0.04	3.98	13.20	2.00	100.00
1985-86	50.97	29.65	0.23	4.67	12.93	1.54	100.00
1986-87	51.20	28.87	0.26	4.78	12.79	2.11	100.00
1987-88	52.34	29.11	0.29	3.98	13.53	0.75	100.00
1988-89	52.77	28.46	0.23	3.79	13.41	1.34	100.00
1989-90	51.93	29.09	0.37	3.97	13.16	1.48	100.00
1990-91	52.40	29.92	0.11	4.08	12.23	1.25	100.00
1991-92	49.88	29.62	0.04	4.65	14.98	0.82	100.00
1992-93	47.80	30.83	0.07	4.24	16.16	0.90	100.00
1993-94	47.46	31.01	0.06	4.32	16.06	1.09	100.00

Educational Financing in Kerala

EE:- Elementary Education SE:- Secondary Education AE:- Adult Education

TE:-Technical Education UNI.HE:- University and Higher Education.

Source: Compiled from Budgetary Resources for Education 1951/2 to 1993/4, Government of India, Dept. of Education, MHRD, 1995.

In this connection, reference to an exercise conducted by the Ninth Finance 8.10 Commission may be useful, though it was for the year 1986-87. The Commission worked out for each state what is called ' normative expenditure' for education at the three major levels: primary, secondary and higher, and then compared the calculated figure with the actual non-plan expenditure for these three stages, both total and per capita. The 'normative expenditure' was based on such parameters as the proportion of enrolment in rural areas, the proportion of density of child population in specific age-groups, the proportion of private unaided schools to total number of school, etc. For Kerala, the normative expenditure for primary education was calculated at Rs. 135.61 crore while the actual was Rs. 232.62 crore; at the per capita level the norm was Rs. 48.22 while the actual was Rs.82.71. Both in terms of total and per capita expenditure, Kerala showed the highest positive difference on a percentage basis among the fourteen major states. At the secondary level, however, the actual expenditure, both total and per capita was less than the normative expenditure (total: actual Rs.134.74 crore and normative Rs.177.78 crore; per capita: actual Rs.31.95 and normative Rs.47.91). At the higher education level, Kerala's actual expenditure exceeded the normative expenditure, the figures being Rs.75.02 crore and Rs.58.36 crore, respectively, for total and Rs.26.67 and Rs.20.75, respectively, for per capita. Here Kerala stood second among the fourteen major states, next to Tamilnadu.

The per pupil cost of education has increased substantially over time. At 8.11 the primary stage, the cost per pupil increased from Rs.43.8 in 1965-66 to Rs.2,265 in 1996-97, an increase of over 51 times. At the secondary level it rose from Rs.90.37 to Rs.3,413 during the same period, an increase of over 37 times. The details are seen in Table 8.5.

	Cost pe	r Pupil (Rs.)		Cost p	er Pupil (Rs.)
Year	Primary	Secondary	Year	Primary	Secondary
	Stage	Stage		Stage	Stage
1965-66	43.80	90.37	1981-82	298.18	536.37
1966-67	54.17	103.81	1982-83	326.13	589.41
1967-68	65.07	130.07	1983-84	372.62	657.60
1968-69	73.23	139.71	1984-85	414.43	737.60
1969-70	82.38	164.08	1985-86	479.23	906.91
1970-71	85.91	176.25	1986-87	563.03	1043.00
1971-72	89.26	187.29	1987-88	596.03	1130.00
1972-73	94.51	194.15	1988-89	638.32	1137.00
1973-74	102.24	211.70	1989-90	804.93	1268.67
1974-75	117.52	217.90	1990-91	872.69	1600.00
1975-76	170.02	361.32	1991-92	953.40	1600.00
1976-77	186.16	386.02	1992-93	1074.41	1856.00
1977-78	193.61	363.02	1993-94	1239.68	2134.05
1978-79	206.21	356.34	1994-95	1576.88	2517.51
1979-80	238.27	369.34	1995-96	1965.14	3084.56
1980-81	265.24	454.25	1996-97	2265.00	3413.00
	1			1	

 Table 8.5

 Cost of Education Per Pupil Cost at Different Stages: 1965-1997.

Source: 'Population in 2001 A.D and its implications on Educational Policy and Planning', Report of the Expert Committee on School Age Group June 94 and Economic Review '97. State Planning Board. 8.12

While these figures deal with costs incurred by the government, the National Sample Survey Organisation has made available data on expenses incurred by individual pupils. The data pertain to July 1986-June 1987 and include tuition fee (where applicable), examination fee, other fees and payments, expenditure on books, stationery, appliances, uniform, transport, private coaching and other individual expenses. Though derived from a sample and pertaining to almost a decade ago, the data given in Tables 8.6, 8.7 and 8.8 deal with different levels of education, government and private institutions and have been classified by sex and fractile groups. If sex and fractile differences are ignored the bottom row ('all') of Table 8.8 gives the private per pupil/student annual expenditure on education at different levels.

Table 8.6

Average Amount (Rs.) of Annual Expenditure per Student in General Education and in Technical Education by Sex, Type of Institution, Level and Fractile Group.

					Male			KERA	LA		
Fractile			Stream	General			Stream	m Technical			
Group	go	vt. instn			pvt. inst	n.	go	vt. instn.	pvt. i	nstn.	n.r
	prim	secon.	others	prim.	secon	others	PS	post sec.	pre sec.	post sec.	
1	2	3	4	5	6	7	8	9	10	11	12
0 - 20	48	181	1705	51	256	542	-	500	752	3230	174
10 -20	76	163	628	123	219	807	-	-		-	-
0 -20	60	170	828	86	233	688	-	500	752	3230	174
20 -40	88	196	568	112	230	717	-	1097	-	844	25
40 -60	133	195	642	127	239	760	-	450	-	312	-
60-80	133	238	424	85	301	743	405	872	1110	1647	111
80-90	139	372	541	142	362	1151	-	1163	-	988	-
90-100	255	352	1112	581	750	905	-	1585	-	1420	242
80-100	170	367	936	365	598	981	-	1405	-	1249	242
Ali	103	224	724	125	302	821	405	1089	999	1329	129
	-	i saonna actava		.2020.00 0000000					-	-	-

Source: Sarvekshana, 55th issue, Vol XVI, No.4, April-June 1993, Table 12.

Table 8.7

Average Amount (Rs.) of Annual Expenditure per Student in General Education and in Technical Education by Sex, Type of Institution, Level and Fractile Group.

Female KERALA											
Fractile			Stream (General			Strea	m Technical	_		
Group	govt. instn.			pvt. instn.			go	vt. instn.	pvt. ir	n.r	
	prim	secon.	others	prim.	secon	others	PS	post sec.	pre sec.	post sec.	
0-10	61	136	807	73	223	687	-	530	-	-	-
10-20	86	166	635	91	214	577	-	-	-	475	51
0-20	71	153	727	82	219	620	-	530	-	475	51
20-40	75	237	523	70	237	671	-	456	-	628	-
40-60	106	249	639	130	259	621	-	770	786	-	-
60-80	91	355	585	143	302	832	-	1820	575		330
80-90	72	497	1086	324	392	788	-	529	-	484	380
90-100	201	536	-	545	625	912	•	310	-	498	-
80-100	132	514	1086	426	485	840	-	391	-	490	380
Ali	86	268	740	134	297	752	-	720	681	528	270

Source: Sarvekshana, 55th issue, Vol XVI, No.4, April-June 1993, Table 12.

Table 8.8

Average Amount (Rs.) of Annual Expenditure per Student in General Education and in Technical Education by Sex, Type of Institution, Level and Fractile Group.

]	Person			KERA	IA		
Fractile			Stream (General				Stream T	'echnical		
Group	go	ovt. instn			pvt. inst	n.	go	vt. instn.	pvt. ir	nstn.	n.r
	prim	secon.	others	prim.	secon	others	PS	post sec.	pre sec.	post sec.	
0-10	55	159	1157	62	236	640	-	517	752	3230	174
10-20	81	164	630	106	216	641		-	-	475	51
0-20	66	162	792	84	225	640	-	517	752	1903	93
20-40	82	213	556	91	233	691	-	836	-	711	25
40-60	119	221	641	129	247	673	-	607	786	312	-
60-80	112	280	519	110	302	790	405	1444	909	1647	213
80-90	118	412	899	247	382	880	-	957		689	380
90-100	228	438	1112	562	693	908	-	1101	-	1051	242
80-100	156	421	992	399	535	895	-	1042	-	872	327
A11	95	243	730	130	299	780	405	927	854	969	199

Source: Sarvekshana, 55th Issue, Vol XVI, No.4, April-June 1993, Table 12.

As the figures in Tables 8.6 to 8.8 stand for the private costs of education 8.13 and those in Table 8.5 for the public costs of education per pupil, it may be noted that in 1986-87 the private cost of primary education was Rs.95 and the public cost Rs.563 per pupil, and at the secondary level, the corresponding figures were Rs.243 and Rs.1,043, indicating how much social expenditure is involved at the school level.

Now, a few specific issues may be taken up. The first is related to the social 8.14 cost of education. Table 8.9 (taken from the Report of Justice K. Punnayya Committee, 1992-93, as reproduced in the State Planning Board's publication, A Study on the Finances of Kerala, Calicut and Mahatma Gandhi Universities, 1996) makes an international comparison of sources of income of higher education.

Institutions	year	General Public Funds	Fees	Other Income
France*	1975	93.00	9.20	4.20
All Institutions, Germany*	1984	89.50	4.70	5.30
All Higher Education, Japan	1986	68.50	0.00	31.50
Private 4 Year institutions	1971	9.00	75.90	15.10
Public Institutions	1985	15.00	65.80	19.10
	1970	83.10	2.00	14.90
All Institutions	1987	63.10	8.80	28.00
	1971	53.06	31.69	15.20
	1985	41.99	35.78	22.20
All Institutions, Netherlands*	1985	80.00	12.00	8.00
Norway*	1975	95.00	n.a.	5.00
Public Institutions	1987	90.00		10.00
Spain		80.00	20.00	n.a.
Universities	mid-1980s			
United Kingdom*		71.20	6.30	22.40
Universities	1970-71			
Polytechnics		55.00	13.70	31.30
(England only)	1986-87 1986.87	72.40	16.20	11.40
United States*		20.70	38.60	40.60
Private Institutions	1969-70			
	1984-85	18.40	38.70	42.90

France: Expenditure of the National Ministry of Education. Japan: 73 per cent of other income is revenue of hospitals attached to universities. Norway: Figures for fees not available but very small. UK: Almost all the fees of undergraduate students are paid out of public funds. This amounts to about half the fee income of universities and probably a greater proportion of the fee income of polytechnics. USA: Figures include all government expenditure at all levels. Loans and grants to students amounted to about 80 per cent of fees in 1969-70 and 95 per cent in 1984-85. Source: UGC Funding of Institutions of Higher Education, Report of Justice Dr. K. Punnayya Committee, 1992-93. 8.15 The table is self-explanatory, showing that nowhere is the cost of education,

even higher education, covered entirely by fees. The publication referred to above shows that the "internal receipts" (different kinds of fees) of Kerala University was 28 per cent of total income, of Calicut university 34 per cent and of M.G. University 35 per cent (figures relate to 1992-93).

Limits of Public Expenditure

It can be seen from the above discussion that public expenditure on education, that is, expenditure incurred through the state government, is of a very high order in Kerala, well above that in most other states. But now there are indications of something of a fiscal crisis in the state, both in terms of the total government budget and the share of it spent on education. It would appear that the state has reached the upper limit in regard to the mobilisation of resources for public expenditure, that the deficit of the government has reached alarming levels, and that one of the causes of the fiscal crisis is the high level of public expenditure on social services in general and education in particular.

8.17

8.16

State governments in India raise resources internally and also have a share of the revenues collected by the centre (such as income tax). There are also other kinds of transfers from the Centre to the states. What a state is able to raise internally may be considered as resulting from its own efforts at resource mobilisation. Kerala's own resources as a share of its total public expenditure is well above the average for all the states put together, as can be seen from Table 8.10.

Voor	Revenu	e Expenditure	Capital I	Expenditure	Total Expenditure	
ICAI	Kerala	All States	Kerala	All States	Kerala	All States
74-75	61.2	69.3	58.4	42.9	61.2	61.4
75-76	62.7	73.5	43.9	51.7	58.3	66.5
76-77	65.3	73.7	40.1	37.6	58.8	61.9
77-78	70.7	70.5	46.1	30.0	64.7	57.4
78-79	72.3	68.7	41.9	37.2	65.2	58.3
79-80	77.4	67.4	37.3	27.7	67.4	54.5
80-81	65.4	66.7	37.8	35.1	59.3	56.3
81-82	80.4	67.2	24.1	35.1	63.2	57.1
82-83	70.8	64.8	51.0	36.5	66.6	56.6
83-84	61.0	62.7	51.2	44.3	58.6	57.4
84-85	66.3	59.3	36.2	44.3	58.0	55.0
85-86	60.3	60.8	55.9	39.5	59.2	55.0
86-87	59.1	60.2	40.1	41.2	54.6	55.2
87-88	62.6	58.4	75.8	44.8	65.3	55.0
88-89	62.8	56.9	71.5	44.3	64.4	54.0
89-90	61.4	55.7	68.6	53.0	62.8	55.1
94-95	63.1	60.3	105.6	73.9	69.4	63.1
95-96	59.9	57.6	94.8	56.2	65.1	57.3
96-97	57.3	56.3	92.8	55.0	62.3	56.1
Source: K.K. Georg	e Timits to Keral	a Model of Devel	nment Table	III I Indated by	data supplied	by the autho

Table 8.10

Share of Own Funds in Financing State's Expenditure (1974-97). (in percentages)

to Kerala Model of Development, Table III. 1. Updated by da

8.18 It is so both in terms of revenue expenditure and capital expenditure. The ratio of own resources that Kerala raises to its state domestic product (SDP) is higher than the average for all states, as shown in Table 8.11.

		1	able 8.11					
Ratio of Ow	n Resour	ces to Stat	e Domes	tic Produc	t. (in per	centages)		
Vaar	Ta	x Revenue	Non-ta	ax Revenue	Total Revenue			
icai	Kerala	All States*	Kerala	All States	Kerala	All States		
74-75	5.9	5.4	2.7	2.3	8.6	7.7		
75-76	7.2	6.5	2.8	2.7	10.0	9.2		
76-77	7.8	6.7	2.8	2.9	10.6	9.6		
77-78	8.5	6.3	3.2	2.8	11.7	9.1		
78-79	9.2	6.8	3.4	3.0	12.6	9.8		
79-80	9.2	7.1	3.9	3.0	13.1	10.1		
80-81	9.4	7.0	2.8	2.9	12.2	9.9		
81-82	10.1	7.7	6.2	2.9	16.3	10.6		
82-83	9.3	7.7	2.5	2.9	11.8	10.6		
83-84	8.8	7.3	2.2	2.8	11.0	10.1		
84-85	9.7	7.6	2.1	2.8	11.8	10.4		
85-86	12.3		2.4		14.7			
86-87 P	12.0		2.5		14.5			
87-88 P	11.8		2.4		14.1			
88-89 Q	12.3		2.0		14.4			

* Relates to 14 major states only.

P: Provisional Estimates of SDP, Q: Quick Estimates of SDP.

Source: K.K.George, Limits to Kerala Model of Development, Table III - 2.

On a per capita basis as well, Kerala's efforts at internal resource mobilisation 8.19 stands out. These indicate that Kerala has been ahead of the all-India average in terms of internal resource mobilisation. In fact, taking the tax-income ratio as an index, Kerala had the first rank among all states in the 1980s, though in the early 1990s, Tamilnadu came to have a slight edge over Kerala. Even so, in recent years Kerala has been facing an acute problem of budgetary deficits. Most state governments have the problem of deficits but even in this respect, Kerala is ahead on the revenue account, as can be seen from Table 8.12.

Ratio of Revenue Su	Table 8.12 rplus/Deficits to Reve	nue Expenditure
(197	74-97) (in percentages)
Year	Kerala	22 States
1974-75	0.1	6.5
1975-76	-1.0	13.9
1976-77	-0.8	13.8
1977-78	7.0	11.4
1978-79	9.0	10.8
1979-80	10.9	12.8
1980-81	-4.1	10.8
1981-82	12.7	8.1
1982-83	3.4	4.4
1983-84	-5.9	0.9
1984-85	-1.2	-3.3
1985-86	-5.1	2.0
1986-87	-9.2	0.1
1987-88	-10.9	-2.4
1988-89	-6.9	-4.2
1989-90	-8.3	-7.5
1994-95	-7.9	-4.8
1995-96	-13.2	-5.8
1996-97	-16.0	-6.8

Source: K.K.George, Limits to Kerala Model of Development, Table II.2. Updated by data supplied by the author.

The fact that Kerala's deficit is primarily on the revenue account, again, is significant, for it is mostly a reflection of the state's high level of expenditure on social services, among which education has the largest share. When all these aspects are taken together it can be seen that in the coming years and decades it is unreasonable to expect that the growing needs for resources for education in the state will be or can be obtained from the government, though undoubtedly public expenditure will continue to be the largest component in financing education. It is therefore necessary to explore possibilities of non-governmental funding of education.

The present pattern of financing education

8.21

8.20

In terms of the financing of education, there are three broad sectors in the state, usually identified as the state sector, the aided private sector and the unaided private sector. The institutions in the state sector are managed and fully financed by the government. Among institutions managed by private agencies there are those that receive grants-in-aid from the government (aided private sector) and those that do not receive financial support of any kind from the government. The relative strength of these three sectors varies across the various levels of education. The latest position is as shown in Table 8.13.

Table 8.13 Classification of Educational Institutions 1996-97 (Year)										
Section Levels	State	Private								
		Aided	Unaided							
1. Primary	3481	5915	2 9 6							
2. Secondary	976	13 94	203							
3. Collegiate Education										
(a) General Arts & Science*	38	148	25							
(b) Professional**	25	18	-							
where any second second second second second second second second	In many many many many many many	and a second s								

* Including teachers' training colleges. ** Including self-financing engineering colleges.

The present pattern of financing education at these different levels and in the three sectors is discussed below:

Primary Education

According to the 1994-95 accounts, the expenditure by the state on government and private aided schools can be rounded to Rs.619.75 crore of which Rs.239.87 crore was spent on government schools and Rs.379.88 crore was disbursed as assistance to private aided schools. No amount is collected as tuition fees, and receipts from elementary schools shows an unspecified 'other receipts', which amount to Rs.43.98 lakh. However this covers only a paltry 0.07% of the amount spent, which is insignificant. No information is available on the financing of private unaided schools in primary education. The assistance to aided primary schools included Rs.368.06 crore as teaching grant, which is spent on salaries, Rs.88.09 lakh as maintenance grant, and Rs.10.94 crore as grants-in-aid which included the appointment of Hindi teachers. The grants-in-aid and maintenance grant work out to 3.1% out of the total disbursement for aided primary schools.

Secondary Education

8.23

8.22

In the 1994-95 accounts, the government expenditure on secondary education amounted to Rs.360.50 crore. Rs.141.09 crore were spent on state

secondary schools, Rs.217.41 crore were disbursed as grants to aided secondary schools, and Rs.1.99 crore were given away as scholarships and other incentives. Rs.33.84 lakh were received as tuition fees, and various other fees. There is again a substantial 'other receipts' amount of Rs.1.02 crore. Even if we include this, the total receipts will account for only around 1% of the expenditure.

In the grants to schools Rs.201.18 crore were given as teaching grant, Rs.2.22 crore as maintenance grant, and Rs.14.02 crore as grant-in-aid. The maintenance grant and grant-in-aid came to around 7.4% of the total disbursement for secondary schools.

Higher Education

a) Arts and Science Colleges

The total government expenditure for arts and science colleges, according 8.24 to 1994-95 accounts, came to Rs.166.23 crore (which included expenditure on a few training institutes also). Besides these, there were some other expenses which may be included in that account like the Faculty Development Programme (Rs.17.20 lakh) and scholarships (Rs.45.50 lakh). So, the expenditure can be corrected to Rs.166.85 crore. Rs.31.06 crore were spent on government arts and science colleges, and Rs.135.17 crore were disbursed among private aided colleges. A total of Rs.4.74 crore were collected as tuition fees from the arts and science colleges, of which Rs.1.36 crore were collected from government colleges and Rs.3.38 crore from private colleges. Tuition fees thus cover about 4.4% of the expenditure on government colleges and 2.5% of the government grant to private aided colleges.

The assistance to aided colleges included a teaching grant of Rs.135.13 crore, which consumes nearly the entire disbursement to the colleges. There was a contingency and maintenance grant, which was Rs.3.83 lakh. Interestingly, there is an entry in the accounts under the item library and laboratory grant, the amount disbursed in 1994-95 was Rs.13,430! However, the Revised Estimates for 1995-96 provides for Rs 10 lakh as maintenance grant and Rs.5 lakh as laboratory and library grant, which is not a great improvement.

b) Professional Colleges

The expenditure pattern in professional colleges is somewhat more complex, 8.25 with funds coming from various sources, including centrally sponsored schemes and various technical assistance programmes of the state government itself. This is more apparent in the case of medical colleges which function under a different department, the Health Department, and also utilise the support system of the Medical College Hospital, besides getting assistance from various schemes.

The accounts of 1994-95 show that the total expenditure on 'Engineering Colleges, Technical Colleges and Institutes' (in fact, almost all the heads relate to engineering colleges) was Rs.9.52 crore. The assistance to private institutions came to Rs.9.72 crore. The actual expenditure in this area would be much more because several engineering colleges are run by the Institute of Human Resource Development (IHRD) and the Lal Bahadur Shastri Institute of Science and Technology (LBSIST), which are government undertakings, funded separately.

The accounts show that tuition fees and other fees in this area come to Rs.1.13 crore. The fees thus covered about 5.9% of the state expenditure. 'Other receipts'

from these institutions yielded another Rs.2.19 crore. It is not clear what these 'other receipts' are, but if we add them, then the receipts covered about 17% of the expenditure.

8.26

The above pattern clearly shows that the bulk of the state expenditure on educational institutions goes under the item 'teaching grant', read salaries for teaching staff. This is the case for government institutions also as the bulk of the provisions are under non-plan expenditure, and very little under the plan allotment, which is used mainly for repair and improvement of buildings. Aided schools and colleges get precious little as maintenance grant and practically nothing for the improvement of libraries and laboratories. Fees collected from students are too meagre to provide for the functioning of institutions.

8.27

It will be useful to study some other forms of expenditure which may have some importance in revealing the financing pattern. One is the state expenditure on textbooks. During 1994-95, government expenditure on textbooks for secondary education was Rs.14.97 crore and it received Rs.11.90 crore by selling textbooks, which are distributed through schools. Government also sold notebooks, from which it received Rs.1.50 crore. Another is the conduct of examinations. Again, in secondary education, government expenditure for the conduct of examinations was Rs.5.80 crore, and it received Rs.1.29 crore as examination fees, which is below 25% of the expenditure. It is clear that, apart from providing salaries, the government bears the major financial burden of providing textbooks and conducting examinations.

8.28

⁸Minor modifications may be possible in this financing pattern, but it is clear that the Government cannot withdraw from the bulk of the expenditure, such as providing salaries for teachers and conducting examinations, besides teachers' training, preparation and printing of textbooks. While ensuring these essential features, the government will be hard put to find resources for other equally important items of expenditure, such as grants-in-aid for aided colleges, capital expenditure on buildings and other facilities, grants for laboratories and libraries, etc. Given the argument on the fiscal state of Kerala, outlined earlier, the possibility of the government finding additional resources within the existing state of affairs is extremely slim.

Financing of Universities

8.29 gʻ

The sources of income for universities in Kerala consist of grants from the state government, internal receipts like fees, and assistance from the UGC and other technicalresearch bodies. The expenditure of the universities include staff salary, cost of laboratory equipment and books for library, and construction-maintenance expenses.

8.30 For the university of Kerala the total income in 1980-81 was Rs.465.67 lakh of which Rs.86 lakh (18.46%) came as state government grants, Rs.317.98 lakh (68.28%) from its own resources, and Rs.61.69 lakh (13.25%) as assistance from UGC, etc. In 1993-94 the corresponding figures were Rs.1389.16 lakh (62.22%), Rs.642.60 lakh (28.78%) and Rs.208.88 lakh (9.0%). For the University of Calicut the figures for 1980-81 were Rs.82.0 lakh (32.17%), Rs.133.83 lakh (52.50%) and Rs.39.09 lakh (57.17%), and for 1993-94, Rs.563.85 lakh (34.03%) and Rs.145.71 lakh (8.8%).

8.31 This shows that, over a period of twelve years, dependence on state government grants has more than trebled in the case of Kerala University and almost doubled in the case of Calicut University. The trend has become stronger since then.

Educational

Financing in Kerala

Internal mobilisation of resources has shrunk steadily, as also the assistance 8.32 from the UGC and other sources, even though in rupee terms, they have increased many times. The fees collected by the three universities (Kerala, Calicut and MG) in 1993-94 totalled Rs.298.47 lakh which amounted to 6.44% of their total income.

The total grant from the state government to the universities from 1993- 8.33 94 to 1996-97 was as in Table 8.14.

Dise and Non	Tabl	e 8.14	Valvorsitios
rian ana ivoli-	pian state cow (in	lakhs)	Dinversities.
Year	Plan	Non-plan	Total
1993-94	1425	5157.02	6582.02
1994-95	1725	5672.73	7397.73
1995-96	2375	5956.36	8331.36
1996-97	2975	6630.72	9605.72

Source: A study of the finances of Kerala, Calicut and Mahatma Gandhi Universities, State Planning Board, May 1996.

2652	2522	2752	2893	3379	14198
1992-93	1993-94	1994-95	1995-96(RE)	1996-97(BE)	Total
Ň	on-plan Ex	Tabl penditure f (i	e 8.15 or University n lakhs)	Education.	

Source: Ninth Five Year Plan Report of the Task Force in Higher Education, State Planning Board, June 1997.

The total expenditure of the Kerala, Calicut and Mahatma Gandhi 8.34 Universities increased from Rs.2521.75 lakh in 1988-89 to Rs.5169.70 lakh in 1992-93. The expenditure on staff salary of Kerala University increased from Rs.501 lakh in 1988-89 to Rs.1,231 lakh in 1993-94. The total salary cost of Calicut University increased from Rs.418 lakh in 1988-89 to Rs.1614 lakh in 1994.

Staff salary constituted 49% of the total expenditure in 1988-89. Even though 8.35 in rupee terms this item of expenditure more than doubled by 1993-94 (from Rs.5.61 crore to Rs.12.31 crore), in percentage term it remained the same (49%). The other major item of expenditure of the universities is examinations, which accounted for Rs.158.13 lakh (13%) in 1988-89 and Rs.358.88 lakh (14%) in 1993-94. The expenditure for library and laboratory was Rs.75.5 lakh (7%) in 1993-94.

The general trend in universities is to give prominence to establishment 8.36 expenditure like salary, examination, construction, etc., at the expense of the quality of education. This is clearly evident from the fact that the amount spent on library and laboratory, which used to be about 20% of the total expenditure in the early 1980s, declined to about 6% at the end of that decade, and further to around 3% in 1993-94 in the case of Kerala University and to about 1.3% in 1992-93 in the case of Calicut University. In the case of MG University the library and laboratory expenditure was 3.79% of the total expenditure in 1993-94.

8.37

A significant feature of the staff pattern in the universities is the large number of non-teaching staff. Kerala University had 243 teaching staff and 2,250 nonteaching staff in 1993-94. Calicut University which had 140 teaching staff and 809 non-teaching in 1980-81, had 174 and 1,808, respectively, in 1994. The ratio of teaching and non-teaching staff is around 1:10 in these two universities. In MG University the number of teaching and non-teaching staff were 10 and 237 in 1985-86, which went up to 88 and 1,436 in 1993-94. One reason for the large number of non-teaching staff in the universities is the pre-degree course, which accounts for more than 60% of the students in universities. With the delinking of the pre-degree course there may be a substantial change in the present staff pattern.

8.38

Examinations entail increasing expenditure in the universities, in spite of which they are sluggish and attract a lot of criticism from all concerned sections. Thoroughgoing examination reform with stress on internal assessment is urgently needed.

8.39 Of late, there has been undue stress on introducing new courses and starting new departments in universities without ensuring the funds for effectively running them. This stress on quantity has caused serious erosion in the quality of university departments, leading to a fall in the standards of higher education in Kerala.

8.40 While some streamlining of expenditure leading to some reduction is possible, it will not be sufficient to meet the increasing budgetary demands of the universities. The state government grants to university and higher education has increased from Rs.93.21 crore in 1989-90 to Rs.278.19 crore in 1996-97. This threefold increase keeps pace with the total grants to education, which increased from Rs.603.69 crore in 1989-90 to Rs.1,810.36 crore in 1996-97. In these circumstances the demand of the universities for higher devolution from the state government may not be completely met.

8.41 With the assistance from UGC and such all-India sources dwindling down the years, the only way left for the universities to augment their resources is to increase the internal revenue. The results of a survey conducted in 1992 by the Department of Economics and Statistics on the expenditure pattern of college students are revealing. The study covered 500 students in different colleges in Thiruvananthapuram. The total expenditure of these students split up under different categories was as follows: clothing: 22%, private tuition: 18%, books: 8%, college fee: 4%. About 90% of pre-degree science students rely on private tuition, while a majority of degree students, especially girls, go in for tuition. It was estimated that the total annual expenditure by all students was of the order of Rs.150 crore then, which was more than the expenditure incurred by the state government in higher education.

8.42 It will be useful to have in-built arrangements in universities for effective financial management and a proper fusion between academic and financial management. A state-level apex body to monitor and guide the universities and centres of excellence in education is recommended in the context of the complex problems that are confronted by them.

Table 8.16

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Name of University	8th plan outlay	1992-93 accounts	1993-94 accounts	1994-95 accounts	1995-96 RE	1996-97 Budget Estimate	Total (anticipated expenditure)
Kerala	500.00	100.00	120.30	150.00	200.00	250.00	820.30
Calicut	400.00	80.00	100.00	150.00	200.00	200.00	730.00
M.G	800.00	50.00	250.00	300.00	400.00	525.00	1525.00
Sanskrit	50.00	230.28	100.00	410.00	200.00	100.00	1040.28

Source: Ninth Five Year Plan Report of the Task Force in Higher Education, State Planning Board, June 1997.

State plan assistance to universities has been broadly earmarked for 8.43 matching assistance for UGC-assisted construction programmes, improvement and development of laboratories of science departments and library facilities, development of new departments and strengthening of already existing departments.

Although it is declared that universities should become self-supporting, in 8.44 actual fact universities are run substantially on the basis of financial assistance by the government. Even such a university as Sanskrit University, which was expected to be funded by agencies like the Government of India, other state governments, UGC, UNESCO, various *Devaswoms*, *Sringeri Madom*, etc., has come to be dependent almost entirely on state support. It is estimated that the Kerala, Calicut and M.G Universities generated own resources amounting to about Rs.45 crore, which does not cover even half the total expenditure for the period.

It is also seen that even the earmarked funds for various development 8.45 schemes in the universities have not been fully spent on the activities they were meant for. Crucial academic activities such as library and laboratory development and quality improvement programmes are neglected in the actual utilisation of funds within universities. Universities also do not attempt to acquire finances from different funding agencies such as the UGC, various research agencies, foundations and other agencies sponsoring research, which in turn seriously affects research and development. Even the construction work started by universities generally remain incomplete.

The government cannot obviously withdraw from its responsibility of 8.46 maintaining universities, particularly in the area of infrastructural development. Hence, the present call for making the universities fully self-supporting with immediate effect is not a welcome idea. At the same time, every effort should be made by the universities to acquire funding from all possible sources, particularly for quality improvement, research and development, library and laboratory. Universities such as Mahatma Gandhi and CUSAT are at present using the short cut of starting self-financing courses and even colleges on a large scale, which may not be a possible solution from the perspective of quality improvement in higher education. Universities may have to enhance their fees, but the major effort should be to approach philanthropic institutions, industrial establishments interested in a particular form of educational accomplishment, and funding agencies for research and extension services. The universities may also have to rationalise their recruitment of teaching and non-teaching staff, with measures to contain the

substantial increase in non-teaching staff. The universities will also have to undertake systematic examination reforms, an area which takes up a large part of university expenditure. All this has become possible with the delinking of the Pre-Degree course from the university system. A detailed programme will have to be worked out for each university, which lists every possible avenue for funding. Universities may appoint their own commissions to develop such a master plan which could be approved by the respective senates and then implemented.

Recommendations on financing

8.47

The above discussion shows that some major changes in the pattern of funding of education in the state are unavoidable. We are not in a position to make detailed recommendations in this regard. But the following guidelines may be considered.

8.48

Educational Financing in Kerala **General Fees**: Education up to the collegiate level is free in the state, though at all levels there are fee-levying private institutions and it is clear that there is a section of the population that is quite willing to pay such fees. We are of the view that the decision to make education free up to the school-leaving stage is commendable, indicating the great significance that Kerala society attaches to education for all up to a fairly high level. Indeed we would urge that society as a whole should accept the responsibility to cover other expenses of education (such as expenses on books and travel) for children who cannot afford them so that all children in the state, irrespective of their economic conditions, are able to complete school education.

8.49 But it is our view that beyond that level, the beneficiaries of education must share in the cost of education, though even at this level, education must not be allowed to become a commodity to be purchased only by those who can afford to do so. This is because at all levels education provides a general, though often imperceptible, social benefit. At present fees at the collegiate level constitute an extremely low proportion of the costs of education. What is perhaps more striking is that while college fees have moved up in absolute terms during the past forty years (perhaps doubled), in relation to per capita income they have fallen steeply; from about 50 per cent of the per capita incomes in 1950-51 to less than 10 per cent currently. We are of the view that there is a strong case for raising the level of collegiate fees. In a phased manner, but at the earliest possible, at the B.A, B.Sc, B.Com levels they should be made to equal about 20 per cent of the state's per capita income. At the master's level, the fees could be twice that at the undergraduate level.

At the same time we recommend that scholarships should be substantially increased to enable deserving students to complete collegiate studies without it becoming an excessive burden to their families. A system of loans could also be worked out, mainly at the master's level.

8.50

Special Fees: In our discussion with representatives of private aided colleges, a constant refrain was that grants for libraries, laboratories and general maintenance were extremely meagre and slow to be released. This is in fact borne out by the state expenditure pattern given above. It is well known also that to meet the requirements of development, colleges raise funds through legitimate and illegitimate means. To avoid these problems and improve the working of private aided colleges we recommend the setting up of district-level Finance Commissions

to which each college will make representations regarding its specific requirements. These can be quantified fairly objectively and the Commissions can then prescribe the modalities for meeting these needs. Parent-teacher associations and other public bodies associated with any given institution may be in a position to raise some funds especially for maintenance and development. Apart from raising funds, such interaction will help the institutions to be constantly in touch with the local community and the community to take an interest in the institution. For libraries and laboratories the Commissions will be in a position to decide on special fees, again taking into account the requirements of each institution. Audited statements of accounts and utilisation certificates relating to permitted collections and fees should be submitted to the Commissions. The Commissions should also be authorised to enquire into complaints of ' donations' asked for or paid at the time of admissions.

We believe that this procedure will enhance the financial responsibility of 8.51 colleges, give them greater freedom in financial matters and yet subject them to social approval and audit. Once the procedure recommended is implemented, the state government's responsibility will be only to meet the salaries of teachers and non-teaching staff in all aided colleges (and the colleges will continue to remit to the treasury all tuition fees collected) with each college and its neighbouring community accepting the responsibility for all its other financial requirements.

We do not wish to go into the details of the composition of the District 8.52 College Finance Commissions. But each could be chaired by a retired judge, and could include an official representing the Director of Collegiate Education and nonofficials from the district.

Chapter IX On the Threshold of a New Era

Decentralisation

eralites, particularly in the countryside, are now on the threshold of a new era. A process of planning for transferance of power to the people by energising the successive rungs of the panchayat institutions is going on. It has received support cutting across different shades of political opinion. It is, thus, one of the most important democratic and democratising movements the state has ever witnessed. The drafting of the state's Ninth Five Year Plan, starting from the local level and moving upwards, has been its concrete manifestation and has generated considerable popular enthusiasm.

9.**2**

9.1

As a corollary of this development, the system of education too, it stands to reason, will be decentralised. Indeed, panchayat bodies, reaching down to the lowest echelons, are in the process of assuming administrative responsibility for school education as well as certain other areas.

9.3 Universalisation of education, a task in which Kerala has made outstanding progress, has invested the people of the state with a measure of dignity and selfassurance that one does not readily come across in other parts of the country. Major problems remain nonetheless. One of the most glaring is the hiatus between the educational process and the requirements of society, best illustrated by the bulging of the category of young people described as 'educated unemployed'. Not that the phenomenon is new to Kerala. But in the recent past availing of opportunities for gainful work in the Gulf countries had partially taken care of the problem of worklessness. A reverse flow has, however, now been set in motion; thousands of young men and women are flocking back every year from the Gulf countries. Irrespective of whether they return with a quantum of savings or not, the challenge lies in absorbing them in activities that are financially worthwhile and socially meaningful. Most of these returning migrants will need to be introduced to a specific profession or professions. The training and education necessary to facilitate their redeployment and rehabilitation will call for particular kinds of supply arrangements which will be in harmony with the rest of the social coordinates.

9.4 Even while this problem is beginning to be tackled, fresh batches of young persons enter the labour market every year. They are in the age-group of fourteen years onwards, most of them with qualifications above SSLC. As can be seen from Table 9.1, the number of work-seekers and the share among them of those with qualifications above SSLC have been increasing rapidly in recent years.

9.5 Hardly any ready avenue of livelihood awaits them. The educational structure is not geared to cope with their problems. Many of the young people in this age-group, in the past, moved to other parts of the country, trained themselves in a skill and succeeded in entering a profession. A considerable number of Keralites, thus, are engaged in gainful employment elsewhere in India. The requirements at this level are however undergoing change. The present school education system is not geared to impart new skills, particularly in productive activities. New types of training have to be imparted to students and the youth in Kerala if they are to find gainful employment inside the state as well as outside it. Laying the firm foundations of literacy and productive skills on the one hand, and preparing students for various

kinds of professional and technical education so that they can find suitable employment on the other, are the two challenges that Kerala's education structure has to cope with in the immediate future.

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Distr	ibution of	Work-seeker	s in Kerala by	Educational Levels.
Year	Total work	Below SSLC (in lakhs)	SSLC & above (in lakhs)	Percentage seekers with SSLC & above (in lakhs)
1985	25.74	12.09	13.65	53.05
1986	27.05	12.09	14.96	55.30
1987	29.91	12.71	17.20	57.50
1988	29.01	11.85	17.16	59.10
1989	30.92	12.05	18.87	61.04
1990	33.20	12.27	20.93	63.03
1991	36.39	13.19	23.20	63.76
1992	38.47	13.45	25.02	65.00
1993	41.57	14.13	27.44	66.00
1994	41.69	13.78	27.91	67.00
1995	32.26	9.29	22.97	71.00
1996	32.98	8.26	24.72	75.00

(upto 31.08.96) Source: Directorate of Employment and Training.

On a rough reckoning, about 2.5-3.0 lakh individuals in the age-group 14-24 9.6 are off-loaded each year into the state's labour market. At present, most of them arrive at the market as raw material to be exported out of the state straightaway. The development needs of Kerala require the services of a substantial number of persons with skills, particularly in productive economic activities. That apart, in the years to come the segment of the population now in the unemployed group, will keep pressing their demand for gainful work within the boundaries of the state.

The onus will be on the decision-makers in the state to create a social 9.7 framework which ensures such gainful employment opportunities. The present trend of transforming Kerala into a gigantic marketplace for only commercial transactions will have to be reversed. The stress needs to be on expansion of production, particularly in agriculture and industry, with labour-intensive technology being given pride of place. The so-called traditional sectors, including agro-based industries, marine industries and various forms of crafts and handicrafts will have to be rejuvenated. All this will call for developing a range of creative skills inspired by local traditions and developed through the utilization of local materials. The objective should be to evolve an arrangement whereby assurance of gainful work each year for more than a quarter of a million, for whose welfare society has not shown a full sense of commitment till now, will fill a large space of the educational agenda. Capital resources that can be earmarked for creating such new opportunities will be severely restricted. A large segment of the educational network will therefore have to fall back on capital-saving processes.

Once the imperative need of formulating modality of linking education to 9.8 the productive needs of the society as a whole, which can make do with low investment, gains acceptance, attention will inevitably turn to the possibilities opened up by the decentralised administrative structure currently being put together across the length and breadth of the state. Vesting panchayat institutions with the responsibility for school education will simultaneously serve many purposes. On the Threshold of a New Era 134

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Education has to link the means of production with the skills potential workers acquire. School education therefore will not merely imply studying language. mathematics and science. Given the specific problems confronting the state, it should aim at integrating the content of the educational curriculum with the requirements in different kinds and levels of productive activities. The learning process for a young child is greatly influenced by the extent to which he or she is offered the opportunity to reconcile the course content with the concrete data pertaining to everyday experience that he or she is in a position to accumulate. If the curriculum is such as to persuade the child to be aware of the physical, biological, and social environment surrounding her and the specific uses which the resources available in the immediate environment can be put to, a convergence can be expected to take place between demand and supply. The process will encourage the child to learn by doing, and doing on the basis of the resources that nature offers and the requirements thrown up by the social milieu. Getting integrated in this manner with the magic and mysteries of the general environment and its biodiversity is in itself a significant step forward toward improving the level of awareness of the child. The standard contents of the school syllabus will of course remain. But a decentralised structure will, in addition, permit a child to get acquainted with the production possibilities latent in the environment, and to develop a favourable disposition for physical labour. The social significance of this must not be missed. The lowest echelon of the panchayat administration, with large-scale representation of people at the grassroots, will be under continuous pressure to arrange the linkages between the technology of production based on local craft and local resources and the human power needed for such creative activity. This, in other words, will be a kind of an opening gambit to harmonise the supply of locally available labour with both the use of local resources and the community's needs. All this will be in addition to the several other advantages likely to flow from decentralised education within the format of the panchayat system, including economising on expenditure on capital works such as elaborate office buildings. The savings of resources effected in this manner may be freshly allocated for financing other pressing needs of the panchayats.

9.9

In the proposed schools of decentralised education, primary education will be handled by the grama panchayats and secondary education by the district panchayats. It is possible to visualise a three-tier system, with the block panchayats assuming direct responsibility for secondary schools and the district panchayats involved in overall supervision. It is advisable to introduce a syllabus for vocational training at the secondary stage, which can be brought under the jurisdiction of the panchayat system. Vocational training should aim at enlarging the pool of skills for productive work with emphasis on improving the quality of performance of traditional local vocations. This will be largely facilitated once administrative programmatic decisions are decentralised, including decisions pertaining to construction of educational buildings, finalisation of course content, enrolment of students and recruitment of teaching faculty.

9.10 Decentralisation involves local arrangements for decision-making not only in administration and content; there has to be sufficient space for effective people's participation in education. People's participation is essential in representing the nature of the social demand and assessing the quality of supply. It therefore calls for a structured monitoring and auditing process from below. Channels of interaction should be opened with the local community, and schools should keep the people in the neighbourhood informed about the nature of the changes taking place in the teaching-learning process. Responses from the people, including their suggestions and advice, will be valuable inputs for finalising the syllabi. People's participation is also essential for maximising the efficiency of schools in terms of enrolment and deployment of facilities and resources. Bodies ensuring people's participation should function at different rungs of the decentralised system so that interactive and democratic decision-making develops at all levels.

A particular problem is likely to rear its head at this point. Parallel entities 9.11 currently dominate the educational scene in Kerala. There are government schools, denominational institutions, and, finally, institutions run mainly on commercial considerations. Not much resistance is likely to be offered to the suggestion that the responsibility for administration of primary education, especially in the rural areas, should be entirely transferred to the care of panchayat bodies, with immediate effect. Some reservations may perhaps still be expressed in urban areas over such a decision. A section of the denominational schools and commercial institutions could express the fear that their autonomy will be severely curtailed under the aegis of the panchayat bodies. This problem can be largely tackled by statutory provisions, accommodating some of these concerns without affecting the perspective of decentralisation.

The state government will nonetheless have to ensure that the obligations 9.12 of decentralisation are complied with at different levels by each of the parties involved. This compliance will have to be preceded by a process of negotiation where the views of different interested sections are taken into consideration and accommodated as far as possible, without compromising the principles of decentralisation. For instance, extra zeal may be demonstrated by a denominational body or a commercial outfit to introduce English as the medium of instruction at the primary stage in the institutions they operate. The authorities will have to resolve such issues with both tact and firmness. Decentralisation itself will in due course unleash forces which will exercise a degree of moral persuasion that will restrain the activities of agencies which may be motivated by sectarian or commercial considerations.

Democratic Process in Education

Decentralisation of power is, of course, an integral part of the democratic 9.13 process, indeed an extension of it. We have, at the very outset, indicated a major attribute of democratic education — it must be open to all without restrictions of caste, class, religion, sex or economic status. An implication of this is that a strong message will be passed around: decision-making in the different spheres of life is not the exclusive privilege of those who are at the top of any social category; others have to be drawn in. If this democratic ethos is to be honoured in the sphere of education, each educational institution will have to establish appropriate bodies involving the teaching faculty, administrative personnel, students, parents and the public at large to deliberate and decide on all major issues. The head of the institution — a principal or headmaster — will have to come to a cooperative arrangement with the members of the faculty and members of the administration. Teachers will not only have to accommodate one another's point of view, they will at the same time have to accord the generosity of interchange and negotiation with

On the Threshold of a New Era students on many matters of administrative procedure, course contents, class discipline, and so on; they should not mind if occasionally they are at the receiving end of open criticism posted by the students. Given the democratic ferment that is spreading far and wide, it will be idle to assume that educational institutions can be run and managed as in the years of yore. Teachers will form a collective body and approach the institutions with their own problems and suggestions. Teachers will also, up to a point, express strongly-felt views on specific issues both to the academic head and to the governing body. Similarly, students of higher education institutions will make representations to the teaching community as well as to the governing body. They will also be perfectly within their rights, in case they wish to express their views on the quality of teaching and the assessment of teachers.

9.14

Will all this lead to confusion and anarchy? Much depends upon the ambience of particular academic institutions. Where the governing body, the head of the institution, the teaching faculty, the non-teaching employees and the students, in the case of higher education institutions, are each trustful of the motives and intentions of the others, the problem of harmonising disparate approaches and points of view is unlikely to prove difficult. The strength of internal democracy will be an adequate check for disparate tendencies. Difficulty will arise only if from the very beginning, the spirit of mutual regard and mutual accommodation is not displayed by one or several of the parties.

9.15 To discuss one specifically awkward issue, the mode of selection of teachers in schools can be expected to be increasingly decentralised, to come under district-level bodies, from now on. So will be the administrative rules and procedures for institutions at the primary and secondary levels. This will, of course, pose no difficulty for that segment of education over which the government presides. The denominational and commercial schools, which agree to pursue the course of primary education and vocational training approved by the state authorities, have to be persuaded to accept, apart from the syllabi followed in the state system, the mode of selection of teachers and the wage scales for employees.

9.16 It will be foolish to ignore the hurdles on the way. To reconcile the currently prevalent different procedures for recruiting teachers and deciding upon the remuneration offered to them as well as to other employees will be no easy task. One point deserves to be stressed. Democratisation does not imply abandonment of the principle of merit. Education aims at spreading the message of democracy, but it is also meant to cultivate excellence in various fields of knowledge and skills. Whatever the other details of the decentralised educational structure and its relationship with the panchayat hierarchy, in all matters which involve selection and choice of personnel, the aspect of merit must be kept to the fore.

9.17 Higher education is not envisaged to fall within the structure developed under the panchayat system. However, it cannot be excluded altogether from the decentralised arrangement, particularly in the case of those institutions where skills and knowledge might be developed to answer local needs and requirements. Strengthening of internal democracy in an institution and the continuous process of interaction with parents and people's representatives, will be of considerable social significance.

9.18 There is a vast area within the sphere of education where the furtherance of merit itself calls for a deep and wide democratic discourse. No man is an island,

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certainly not the chairman of the governing body, or the principal or headmaster of an educational institution. They are a part of society. It is their social obligation to listen to others even in matters which otherwise are supposed to be their exclusive arena of concern. Teachers must not feel that they are imposed upon in case students proffer a point of view on an academic issue, just as the head of the governing body of the institution must not conclude that he or she is being subjected to social pressure when a group of teachers approaches him with a charter of demands. It is equally important that teachers do not get alienated from the student community. Within the broad contour of a syllabus, there should always be scope for experimentation with teaching, training methods and course contents, as much in the sphere of primary education as in the vocational field. These experiments should be the joint work of teaching and student communities; the higher authorities, whoever they are, should give formal permission for such creative ventures. Experiments of this nature are of supreme importance in the sphere of higher education where close interaction is possible between teachers, students and local communities; theories and formulations can be brought down to earth, and their merits and weaknesses analysed. Even in areas considered best served by didactic instruction, it is conceivable that a student familiar with the flora and fauna of the neighborhood is in a position to offer concrete suggestions for new production possibilities based on the use of locally available material.

In essence, democracy is as democracy does. At one phase of social 9.19 existence, where fundamental issues involving the nature of the polity or society are involved, it may be difficult for individuals to compromise on their principles. But where it is a question of experimenting with educational methods and educational content, the issues are often much less complicated and listening to the point of view of others does not endanger one's basic code. Even when there is a sharp disagreement on aspects of curricula, instruction and management, it is possible to find common grounds, without which educational institutions cannot possibly be run effectively.

Role of Politics

Questions have been raised about the role of politics in the educational 9.20 sphere. It has been pointed out that educational institutions have become operational areas for student organisations directly led by political parties, who use the students for their partisan ends. The approaches of such organisations have allegedly vitiated the academic atmosphere of campuses and set the stage for factional rivalries, and at times physical clashes. It is sometimes further argued that with schoolchildren, who are not mature enough to understand the differences between various political parties and philosophies, the intrusion of political discussions affects their studies and impairs their development as discerning citizens.

These arguments have to be examined from the perspective outlined in the 9.21 earlier pages. Democratisation of education is on the agenda, which does not simply mean that the institutions are democratised. It also means that children develop a democratic consciousness and understanding of the functioning of democracy. They will have to develop a critical outlook regarding different perspectives and positions on the basic issues that are being discussed and debated in society. This cannot be developed in an atmosphere which is totally insulated from social environment. After all, an educational institution, along with its teachers and students, is a segment

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of the polity. Hence, a level of exposure to politics is inevitable in a democratised set-up. In any case, a society nurtured on adult suffrage, which has granted suffrage to citizens who have attained the age of eighteen, many of whom are students, will be committing an absurdity if it were to ban politics from educational institutions.

9.22 The question, therefore, is not whether politics should be banned and institutions rendered 'politics-free', but to determine the ways and means for developing a genuinely democratic consciousness and practice which would facilitate the development of a just society. Institutional democratisation as outlined earlier is the first step. The second step will be to familiarise the student with the actual working of democratic institutions; the learning process involves actually working within some of these institutions.

From Here to There

9.23

In the preceding chapters and sections, a critical analysis has been attempted of the educational scene in Kerala as it exists now and suggestions have been offered on the kind of educational pattern that should emerge in the state in the future. The major question pertains to how we move from where we are, to where we should be. There are no easy answers to this question. What is clear, however, is that in a democratic society changes are brought about by the initiative and achievements of the people at large. True, many of the changes that we have indicated call for decisive action by the government. In a democratic polity, however, people have the right and the obligation to draw the government into action. They can also demonstrate, through their own action, what can be achieved.

We conclude this Report full of hope that, in tune with the magnificent strides Kerala has made over the past century in the arena of education, educational progress in the state in the next few decades will succeed in breaking new ground and, as in the past, provide a sterling example for the rest of the nation.

On the Threshold of a New Era

Chapter X For a New Education System in Kerala

he general education in Kerala is relatively widespread, compared to the other 10.1 parts of India and even to the many thirdworld countries. Despite this highly creditable achievement, it is facing a serious crisis; in content, organisation and in management. Critically reviewing the existing structure and practice the Commission suggests a system of peoples' education which combines equity with excellence.

The Commission is of the opinion that the future of Kerala's education 10.2 system lies in developing a model around the common schools that cater to the majority of students. This model, *inter alia*, should combine equity with excellence, inculcate secular and democratic sensibilities, and uphold dignity of labour by integrating mental and manual works in the curriculum. At present the quality of education imparted in the common schools leaves much to be desired, which has led to the proliferation of English medium 'schools of excellence'. Kerala seems to promote two cultures in education, one for the affluent and the other for the poor. This situation can be remedied only by improving the common school system.

The education system has necessarily to be sensitive to the human power 10.3 requirements essential for the development of Kerala's economy and society. The development of the productive sectors largely depends upon the nature of available human power resources. At present there is hardly any co-relation between the nature of education and human power needs of the society. The lack of this co-relation, which is not envisaged in absolute terms, leads to avoidable wastage of human power. The Commission proposes the streamlining of the system in such a way that it enables the students to realise their potential and to acquire knowledge and skills for constructive productive work, both mental and manual, in the larger common interest of the society.

The plurality of educational management, the government and private 10.4 agencies playing important roles, is a reality in Kerala. An understandable tension exists between the government and the private agencies on the question of management as well as on the content of education. This has to be resolved on the basis of the overall objectives and priorities of the society as expressed through the will of the people. In doing so the needs and interests of minorities, socially deprived groups and women deserve special attention.

The ongoing process of administrative decentralisation can be used further 10.5 to the secularisation and democratisation of education. The social participation and monitoring of educational institutions at the local level through neighbourhood councils and school committees are likely to be of help in this matter. The democratisation, however, has to go beyond the administrative and managerial structures to embrace the academic practices and procedures.

In the light of these general considerations, some important suggestions and recommendations may be indicated below:

Curriculum

The curriculum is not seen as a policy document or a set of instructions on 10.6 education given by the state. Instead, it is conceived as a social document closely linked with the societal needs. There is no permanent curriculum, it keeps on

evolving to meet the challenges arising out of social transformation. However, in our society characterised by diversity of interests, it is the responsibility of the state to strive towards the formulation of a curriculum that would meet the aspirations of the people. The curriculum so formulated will aim at the social development of the majority including the entire deprived classes. Such a curriculum will aim at

- a. Using mother tongue as the medium of learning.
- b. Starting the learning process from the immediate environment with which every child interacts and begins learning.
- c. Emphasising the importance of both mental and manual work and integrating them in the curriculum.
- d. Using curricular framework as a means to realise the creative potential of the child.
- e. Enabling the child to understand his/her role in a secular and democratic society and to use his/her ability for creative and critical intervention in social process.

The inculcation of the above perspectives requires the restructuring of the current curriculum, the directions for which are detailed in the report.

Evaluation

10.7

The evaluation has increasingly become a mode of filtering the achievers and eliminating the non-achievers and under-achievers. The testing procedures are evolved with this perspective. The Commission suggests a radical departure from the existing practice by adopting a continuous and comprehensive evaluation. As a part of this, the present practice of passing or failing a student in a class may be revised. A student may go to the higher class regardless of the marks he/she obtains in a particular subject, provided a prescribed minimum level of overall proficiency is achieved. A course can be considered completed, even if a student gets low grades in some papers. In this context it may be advisable to consider the feasibility of awarding grades in place of numerical marks.

Role of the Teacher and Teacher's Training

10.8

The role of the teacher needs to be reoriented to promote the learning process in which the students and teachers creatively participate. Towards that end the teacher should not be only a source of knowledge and skills but also relate himself/herself in a meaningful manner with the activities of the student. In other words, he/she should be more than a class room instructor.

Such a change in the role of teachers calls for a different concept of teacher's training than the existing one. Apart from professionalising teachers' education, the training should inculcate sensitivity to the social aspirations of the new generation and to the complex social reality in which they are placed.

In-service training for teachers at all levels — schools and colleges — is an urgent necessity. Such training should be imparted at least once in five years.

Language and Medium of Instruction

10.9

The Commission is of the opinion that mother tongue is the ideal medium of instruction at all levels. however, provision may be made to acquire proficiency in three languages, the choice of which, apart from the mother tongue, may be left to the student.

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The teaching of languages may be confined to the school stage. It should be conducted in a rigorous manner to enable the students to acquire sufficient competence in them.

The 'language' may, however, be taught at the higher level as a cultural resource or for the study of literature.

Inculcation of Values

Education necessarily imparts certain values. What these values should 10.10 consist of needs careful consideration in a multi-religious and multi-cultural society like ours. It is important that these values are not identified with any particular religion. The ideas of democracy, secularism, gender equity, work culture and social justice are some of the universal values which deserve to be integrated in the curriculum.

Equity and Excellence

An important aspect of universal education is the relationship between 10.11 social equity and academic excellence. The doubt about their mutual compatibility is often expressed. The Commission holds that excellence can not be achieve without equity. The major objective of any transformative education system has to be the maximisation of achievement by the maximum of the population. Therefore, the universalisation of education is conceived as a necessary step towards excellence in acquisition and production of knowledge.

Academic and Vocational Education

The Commission recommends the integration of knowledge and skills in 10.12 the school curriculum. All students will be required to acquire vocational skills, at least till the eighth class. This is intended to change the existing attitude towards manual labour and to eliminate the isolation of the mental from the manual work.

It is not envisaged that all students go for higher education. The higher education leads to the acquisition and production of knowledge in a chosen field. A great deal of diversification is necessary in both academic and vocational courses to realise this objective, so that students have enough opportunities to make their choices. The process of filtration should not be imposed by the system but independently chosen by the students.

Educational Management

The Commission recognises and respects the existing plurality of the 10.13 management system. Yet the Commission would like to suggest a uniform pattern of management based on social accountability. This is not meant to impinge upon the independent identity of different streams within the system. On the contrary the Commission advocates greater autonomy to educational institutions, within the parameters of social evaluation and monitoring, the provision for which needs to be evolved through consultation with different agencies.

The Role of the State

The importance of the state in the education system needs no emphasis. 10.14 However, in the context of liberalsied economy, the state tends to withdraw from education, allowing greater freedom to private agencies. Since the private agencies are mainly interested in investment with assured returns, the cost of such education

For a New Education System in Kerala will be so prohibitive that it will be inaccessible to the common people. The withdrawal of the state will therefore amount to the progressive marginalisation of common schools.

The Commission, therefore, suggests that the responsibility of organising and conducting the education system be vested with the state, without prejudice to private initiatives within the parameters of the overall structure.

Finance

10.15

The Commission underlines the role of the state in financing education. However, it does not discount the importance and need to mobilise funds from other sources. Yet, the Commission does not favour the introduction of self-financing or cost-sharing courses. Such courses are best discontinued.

The commission is not averse to the revision of fees. On the contrary, it recommends a hierarchial fee structure from different classes in society. Such fee structures as well as the mobilisation of resources are to be completely delinked from admission of students and appointment of teachers.

The provision may be made for monitoring the financial management of all institutions by a publicly constituted authority at the district level.

Decentralisation

10.16

6 The decentralisation of educational management is essential for promoting social participation. The decentralisaton is not simple devolution of powers or localisation of authority, but a creative participation of the neighbourhoods in the affairs of institution. It would involve the debureaucratisation of educational apparatuses, promotion of teachers' training and academic coordination at the local level. This will allow a great deal of diversification of pedagogic techniques on the basis of social requirements and academic initiatives in the light of local experience.

The above suggestion and recommendations, it is hoped, would initiate a serious debate from which a new system of education would evolve. Many issues underlined in the body of the report require further discussion. Some of them may be indicated below:

- a) While the connection between social equity and academic excellence in the context of universal education has been proposed, the realisation of it in practice poses several problems. All children learn at the same pace, some learn faster than others. There is also the problem of consistently low performance by students from certain social groups, particularly those belonging to the underprivileged casts and tribes. Bridging the gap between the 'deprived' and 'gifted' is a difficult problem. At present the generally accepted solution appears to be the 'centres of excellence' for the gifted and general institutions for the deprived. Is there an alternative?
- b) The integration of the academic and vocational education at school level, as suggested by the Commission, is not easy to realise. Such a system has been successfully experimented in some schools. Yet, its universal implementation poses several problems. It is felt by many that vocational education except as a short term training is not feasible. Moreover, academically better student tends to look down upon vocational training. Therefore the modalities of implementing such a system calls for detailed consideration.

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- c) The Commission has recommended a radical departure in the evaluation and promotion procedures. Since they have very serious social implications a wider discussion is in order.
- d) How the liberalisation and globalization would affect the education system is not fully clear. Yet, some tendencies are already manifest. Several institutions are mushrooming with the express purposes of making profit. This had led to the devaluation of academic content and the undermining of the principles of secularism, democracy and social equity. The quality of education is also compromised in the process of orienting educational strategies to the needs of the market. The proliferation of such institutions also threatens to undermine the common education system. The response to this newly emerging situation can be conceived only through an open debate.
- e) The revision of the existing curriculum is a necessary per-requisite for strengthening the common school system. The Commission has suggested a general framework of the curriculum, the details are to be worked out by drawing upon the experience of teachers and students. This is a stupendous task, which deserves immediate attention.
- f) An equally important question is that of educational management. While the plurality of management in itself is not an unwelcome situation, it is necessary to ensure their commitment to certain common ideals in both the organisational and managemental function of institutions. It is necessary to initiate dialogues to evolve such a perspective.
- g) It is necessary to locate the educational institutions within the social environs, linking them with the knowledge and skills available in the area. The modalities of developing such linkages at local level are both organisational and pedagogical, the details of which deserve careful consideration.

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APPENDIX

People's Initiative in Education

By way of conclusion we would like to draw attention to some of the 1 initiatives now underway in Kerala, undertaken by different agencies and at different levels, to change the educational profile of the state. The cases we refer to are certainly not exhaustive: many more such efforts must be going on in all parts of the state. The instances we give below are just illustrative, on the basis of information that have been available to us. They show what can be done and achieved where there is a will to do.

The Library Movement

It may be recalled that the Library Movement in Kerala which is now 2 widespread throughout the state started with the setting up of a single public library in Thiruvananthapuram in 1829 by Swathi Tirunal, monarch and musician. But gradually public libraries started appearing in other parts of the state, in towns and villages alike, becoming a veritable movement leading to the formation of the *Kerala Granthasala Sangham*. The Kerala Public Libraries Act came into being in 1989 and the Kerala State Library Council was established in 1994, to execute the mandate of libraries at the level of *Granthasala*, taluk, district and state. The Ninth Plan has a section on the further expansion of libraries with special attention to *Balakalari*: the scheme for books and media for children.

Experiments in School Education

A number of experiments in school education have been initiated in recent 3 times by various people's organisations and individuals, for example, the Kerala Sastra Sahitya Parishath. From the 1960s, science clubs have been introduced in schools. The Eureka Talent Test for primary school children and *Shastra Keralam* Quiz for high school children were organised from the seventies, and later modified as *Vignanothsavam*. Organisations for children, *Eureka Balavedi* and *Shastrakeralam* Club were first to set up in schools, but after a few years, they were taken out of the school system and into the community.

Following the new education policy of 1986 the KSSP took the lead in formulating new approaches to learning. 'Padanam Rasakaram' (Joy of Learning) campaigns, Balotsavam (children's science festivals) and Balotsava Jathas (children's science jathas) were part of this effort. KSSP also conducted remedial camps called 'living with science' during the summer vacation.

During the nineties, some of the ideas generated by these efforts and also 5 by the Total Literacy Campaigns of Ernakulam (1989-90) and later Kerala (1990-91) were experimented with in the actual school environment. The most important was the campaign to remove illiteracy among schoolgoing children, started as 'Akshara Vedi' in Thiruvananthapuram district and later developed as 'Aksharapulari' in Kasargod district. Later this programme was adopted by the state government.

Another important experiment was the campaign to improve primary 6 education with people's involvement, with the panchayat school complex as the local unit. The campaign involved selection of a local high school as the lead school, associating 10-15 LP and UP schools with it and evolving a common

programme for quality improvement. This model was experimented in Madikkai in Kasargod district, Sivapuram, Dharmadam, Kallyassery in Kannur district and Perinjanam in Thrissur district with impressive results.

- 7 Perhaps the most important intervention is the preparation of a new lower primary curriculum and textbooks under the auspices of the District Primary Education Programme. The work, commissioned by the state government, was carried out by a set of dedicated teachers who used all the available material and expertise for producing a set of books which correspond to the modern concepts of child-centred, activitybased, process-oriented teaching/learning process. The books, although controversial, have introduced a trend in primary education which looks irreversible.
- ⁸ Certain individual initiatives are worth mentioning. One is a school named 'Sarang' in Chittoor which offers environment-based, vocation-oriented education for tribal children. The school has been running successfully for more than a decade. Another is a tribal school named 'Kanavu' in Wayanad, which provides education on a residential basis.

Experiments in Higher Education

- 9 The All Kerala Private College Teachers' Association (AKPCTA) has prepared a policy document on the academic restructuring of higher education. The document presents a clear view on the philosophy of education and emphasises the central role of higher education in the transmission of culture and in the initiation of social change. The perspective is that the university is not an ivory tower removed from ordinary life, but an integral part of life, responsible for establishing a just society, conserving nature and creating knowledge.
- 10 The initiative by the AKPCTA has been followed up by the authorities of Mahatma Gandhi University who have constituted teachers' committees in all subjects to restructure the curriculum and syllabus in different disciplines. This effort is significant as a teachers' initiative to make higher education more meaningful and responsive to social needs.

Mitraniketan

- 11 *Mitraniketan*, established in Vellanad near Thiruvananthapuram, a vast complex of programmes for children of the rural poor, is a landmark in the history of Kerala's voluntary work. It is an institution where education, craft, art, technology, agriculture and development are not isolated from each other, but together constitute a whole approach to life and work.
- 12 Initiatives and innovations of the kind described above and there must be many more in different parts of the state — reveal the genuine interest of the people of Kerala to reshape the educational system at all levels. It is important to encourage them and to provide an overall perspective to guide their efforts. For, in the final analysis, it is only the conviction and commitment of the people at large that will succeed in leading the state to the new era that most of the people long for.
- 13 While large-scale popular participation is unavoidable to achieve a system of people's education, those who are directly involved in education, particularly teachers, have a special responsibility in this regard. After all, they are the ones with a commitment to the pursuit and propagation of knowledge. That commitment, which frequently tends to be distracted, must be reaffirmed and strengthened. When that is done, they will be able to enthuse the students and the larger public and spur them to action.
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