

**Public Expenditure on School Education (Class I-XII) in Kerala
A Cost-Benefit Analysis**

Anjana Alex

Centre for Civil Society Summer Internship 2005

Introduction

Kerala—a tiny state on the southern tip of the Indian sub-continent, covering less than two percent of the overall national area and home to a little over three percent of the country's population. It is not without reason that Kerala has become synonymous with the popular nametag 'God's own Country'. This state has travelled leagues in terms of social development. So unique has been its growth experience, that Kerala has even carved a niche for itself in development studies and contributed a model by its name¹.

One of the hallmarks of Kerala's social development is its high literacy level and achievements in the sphere of education. The state lays claim to the highest literacy rate in the country—90.92 percent in 2001 as compared to the national rate of 65.38 percent. Female education has reached levels unheard of in the rest of India. There is almost universal enrolment in schools. Low drop out rates and optimal student-teacher ratios add to the veritable track record. However the quality of education still needs to be improved. Less than 60 percent of the students who take the SSLC examination actually pass before the results are moderated.

The reason for this is definitely not a dearth of public funding. A substantial chunk of the state government's expenditure is earmarked for the educational sector. Kerala's commitment towards education is unparalleled in the rest of the country—from the time of independence, till now.

Aim of the Paper

This Paper has three components.

1. To calculate total expenditure on elementary and secondary education by the Government of Kerala over the time span 2001-02 to 2005-06. The actual expenditures for the years 2001-02 to 2003-04 are to be determined from the expenditure data and the estimates for the years 2004-05 and 2005-06 need to be calculated from the Budget estimates.
2. To calculate expenditure per capita for
 - A student receiving elementary² education in a government school
 - A student receiving elementary education in a government-aided school
 - A student receiving secondary education in a government school
 - A student receiving secondary education in a government-aided school.

for the years 2001-02, 2002-03 and 2003-04.

3. Costs of education have been analysed. The benefits of the public outlay in this sphere are now studied. Trends in number of schools, enrolment, drop-out rates, student-teacher ratios, performance in examinations are studied.

¹ The Kerala Model of Development is highly controversial and has been criticised on several grounds. However, the high level of social development associated with it is undeniable.

² In Kerala, Elementary Education is from Class I – VII and Secondary Education from Class VIII-XII. This is slightly different from the practise followed in most other Indian states where Class I-VIII is considered as Elementary education.

Methodology

The data regarding expenditure on education can be obtained from the *Demand for Grants and Detailed Budget Estimates* of the Government of Kerala. The *Demand for Grants and Detailed Budget Estimates* of a particular year contains the budget estimates for that year, the revised estimates for the previous year and the actual expenditures for the year prior to that. (For example *Demand for Grants and Detailed Budget Estimates* for 2005-06 provides data regarding budget estimates for 2005-06, revised estimates for 2004-05 and actual expenditures for 2003-04.

The data regarding outlay to local bodies is provided in Appendix IV of the *Demand for Grants and Detailed Budget Estimates* titled *Details of Provisions earmarked to Panchayat Raj and Nagarpalika Institutions*. Other than this details regarding plan expenditure on education by these bodies have been obtained from the *Economic Review* published by the Kerala State Planning Board³.

Enrolment figures and other statistics have been obtained from the following sources.

- *Educational Statistics Since Independence* published by the Directorate of Public Instruction
- *Selected Educational Statistics* published by the Directorate of Public Instruction
- *Statistics for Planning* published by the Department of Economics and Statistics, Kerala
- *Economic Review 2004* published by the Kerala Planning Board
- *Economic Review 2003* published by the Kerala Planning Board
- *Economic Review 2002* published by the Kerala Planning Board
- Directorate of Public Instruction
- Directorate of Higher Secondary Education
- Directorate of Vocational Higher Secondary Education

Expenditure on School Education by the Government of Kerala (Class I-XII)

Government expenditure on education over the ages

The erstwhile states of Travancore and Cochin and the Malabar region of the Madras province constitute what is today known as Kerala. The advent of modern education in these states dates back to the early 19th century. It was the Christian missionaries who laid the foundation by opening schools and imparting education though it was mainly of a religious nature. The rulers of these states encouraged its development and spread. The Royal Declaration issued in 1917 by the ruler of Travancore which emphasized that "the state should defray the entire cost of the education of its people..." (Chandrasekhar, Ramachandran, and Ramakumar. 2001) captures the essence of the official attitude to the public financing of education.

In the former Cochin state the government came into the field of education in 1918 with a Royal Decree by which 33 vernacular schools were opened. The Malabar region saw the establishment of several schools under the Local Boards Act of 1834. Over time, several social organizations like the Nair Service Society and the Sri Narayana Dharma Paripalana Yogam came to the forefront and took the lead in starting new schools.

As a result of all this, the educational scenario in Kerala experienced rapid advancements and had reached new heights compared to the rest of the country by the time of Independence. In

³ Detailed Expenditure figures are not available. So estimates of expenditure have been calculated based on certain assumptions. An explanation of the methodology followed is given in Appendix 6

1947 there were 2305 government schools and 1403 private aided schools in the state with 7,37,388 and 3,02,717 students enrolled respectively.⁴

When the communist government came to power in the late 1950s it heralded a new revolution in the spread of education and public expenditure on education. Over the next few decades, real expenditure on school education rose dramatically increasing from about 3.2 percent of the state domestic product (SDP) in 1960-61 to a high of about 6 percent of SDP in 1986-87 and now hovers a little above 5 percent.

Expenditure on education today

The Government of Kerala has allotted a significant chunk of its resources for the educational sector to meet both revenue as well as capital expenditure. Funds are allotted through three streams: Department of General Education, Local Bodies (Panchayat and Nagarpalika institutions) and the Public Works Department.

A) Department of General Education

The Department of General Education has three directorates for the establishment and running of schools: the Directorate of Public Instruction (Class I to X), the Directorate of Higher Secondary Education (Class XI and XII) and the Directorate of Vocational Higher Secondary Education (Class XI and XII).

The Directorate of Public Instruction has district offices in each of the 14 revenue districts headed by Deputy directors. The District Educational Officers (DEOs) in the 36 educational districts and Assistant Educational Officers (AEOs) in the 161 educational sub-districts assist in the process of administration. The High School Section is under the control and administration of the DEOs and the Elementary sections are under the AEOs.

Directorate of Higher Secondary Education is in charge of higher secondary education and is aided by three Regional Deputy Directorates. Higher Secondary Education was introduced in Kerala in 1990 as part of the implementation of the National Education Policy of 1986. Under this, pre-degree courses were to be de-linked from colleges and 10+2 courses were to be started in secondary schools in a phased manner.

Vocational Higher Secondary Education was first introduced in Kerala in 1983-84 in 19 government high schools. At present there are vocational sections in 247 government schools and 128 government-aided schools. The Directorate of Vocational Higher Secondary Education oversees the running of these schools with the help of the Regional Deputy Directorates.

B) Funds Earmarked for Local Bodies

The Government of Kerala has transferred certain schemes and functions to Panchayat Raj and Nagarpalika institutions. Details regarding these are provided in Appendix IV of the *Demand for Grants and Detailed Budget Estimates*. The outlay to local bodies is meant for expenditure on government lower primary, upper primary and high schools. These grants are basically under four heads:

1) *Block Grant for Revenue Expenditure*: Specific block grants for revenue expenditure on education have been provided to the local bodies both at the primary level and at the

⁴ The statistics for number of schools as well as enrolment include Special Schools.

secondary level. This includes expenditure on a variety of items such as furniture for schools, scholarships, mid-day meals and so on.

2) *General Purpose Grant*: The General Purpose Grant is a non plan grant which is provided to local bodies based on the recommendation of the Second State Finance Commission. Provisions for this grant have been made under the Urban Development major head and the Other Rural Development Programmes major head. It is not possible to determine what proportion of the grant is utilized for expenditure on education due to unavailability of data. Sources within the Finance Department, Government of Kerala say that it is safe to assume that around 15 percent of the funds make its way to the educational sector and this estimate has been used in calculation.

3) *Maintenance Grant*: The Maintenance Grant is the second of the Non-Plan grants earmarked to local bodies consistent with the recommendation of the Second State Finance Commission. This grant is utilized for roads, schools, hospitals, agriculture and so on. The exact share of education in this grant is also not known and it is taken to be 20 percent of the maintenance grant based on finance department estimates.

4) *Plan Assistance to Local Bodies*: Plan assistance is devolved to local governments in two streams

- Assistance for specific Centrally Sponsored Schemes and State Plan Schemes.
- Plan Grant for local development

Provision for the former is given under various major heads and the component of education is clearly specified. Plan Grants for local development however, are given as a lump sum to be utilized by local bodies in whatever way they deem fit. Local Bodies have a free hand in determining the project to be undertaken with these grants.

C) Public Works Department

The Public Works Department undertakes all capital expenditure on education.

Schools in Kerala are of three types

- Government Schools which are established, owned and run by the state
- Government-aided schools which are established and managed by private organizations/individuals with the help of finances provided by the state to cover teaching expenses, maintenance costs etc
- Private unaided/self financing schools which are owned and run by private entities without any financial assistance from the government.

Therefore only students in the first two types of schools are relevant in our estimation of expenditure on education by the government. Private schools are excluded because they receive no funds whatsoever from the state.

Expenditure on education as provided in the *Demand for Grants and Detailed Budget Estimates* is recorded under the following Major Heads of Account.

- 2202 General Education
- 2204 Sports and Youth Services
- 4202 Capital Outlay on Education, Sports, Art and Culture
- 2217 Urban Development
- 2225 Welfare of Scheduled Caste/ Scheduled Tribes and other Backward Classes
- 2235 Social Security and Welfare
- 4225 Capital Outlay on Welfare of Scheduled Caste/ Scheduled Tribes and other Backward Classes

- 2515 Other Rural Development Programmes

Other than these heads, which account for the bulk of the expenditure on education there are a few other Major heads which include only an item or two but nevertheless items connected to education.

- 2049 Interest Payments
- 2059 Public Works
- 2071 Pensions and Other Retirement Benefits

Actual expenditures are calculated for the years 2002-02, 2002-03 and 2003-04. Revised estimates are used for the year 2004-05 and budget estimates for 2005-06 are used to determine total expenditure on school education by the Government of Kerala for these years.

Expenditures estimated are classified under 2 heads: Expenditure (Direct) and Expenditure (Devolved). Expenditure (Direct) includes all expenditure on education which are determined by the state government and which can be obtained from the *Demand for Grants and Detailed Budget Estimates*. In addition to this, local bodies formulate projects with plan grants provided to them. Details regarding this expenditure are not readily available and only a rough estimate of expenditure has been obtained. This we call Expenditure (devolved). This classification has been made because the estimates of local body outlay vary significantly over the years and so makes meaningful comparisons difficult.

Appendix 1 contains the details of the calculation of total expenditure and the final figures are the following.

Total Expenditure on School Education			(Rs in lacs)
	<i>Expenditure (Direct)</i>	<i>Expenditure (Devolved)⁵</i>	<i>Total Expenditure</i>
2001-02 (actuals)	184541.08	1678.07	186219.15
2002-03 (actuals)	227337.54	5065.65	232403.19
2003-04 (actuals)	242650.72	2721.75	245372.47
2004-05(revised estimate)	342253.25	2301	344554.25
2005-06(budget estimate)	373243.83	5150.743	378394.573

Expenditure on education has increased steadily from 2001 onwards: 25 percent in 2002, 5 percent in 2003, 40 percent in the next year and finally 10 percent in 2005-06. What needs to be determined now is whether this is due to the government's decision to increase outlay on education or other factors.

It is obvious that the reason for the variation cannot be the unavailability of exact expenditure data regarding plan outlay by local bodies. Expenditure (Devolved) experiences large, random, divergent change which do affect total expenditure but never large enough to lead to a decrease in total expenditure. The fact that Expenditure(Direct) shows steady and sequential increases adds weight to this. Moreover large capital outlay in any particular year can also not be held accountable for the jump in expenditure. On the contrary, capital expenditure has in fact fallen periodically during these years. So the conclusion is that the government has increased outlay on education.

⁵ Expenditure Provisional for 2001-02 and Outlay (estimates) for all other years. Details regarding this can be found in Appendix 6.

Per Capita Expenditure

Estimation of Per Capita Expenditure: Method and Findings

This section of the project seeks to estimate the amount spent by the Government of Kerala for the education of any student in the state studying in any of the classes from I to XII. As noted earlier private unaided/ self-financing schools receive no financial aid from the state government and so are not included in our calculations. Per capita expenditure is estimated for the years 2001-02 to 2004-05

A very simple method of finding per capita expenditure would be to take the ratio of total expenditure on elementary and secondary education to the total number of schools enrolled. However, the amount spent on education varies significantly depending on the type of school-whether government or aided- and on the stage of education-whether elementary or secondary. Therefore to make meaningful estimates we need to determine the disaggregates of expenditure. An attempt is made to find out per capita expenditure on each type of school and at each level of education namely

- Elementary section in a government school
- Elementary section in a government-aided school
- Secondary section in a government school
- Secondary section in a government-aided school

A major challenge faced while computing the expenditure was to determine the division between expenditure on elementary and secondary sections and/or between government and aided schools. Though the General Education Major Head has two separate sub major heads titled Elementary education and Secondary education it is often difficult to clearly demarcate expenditure on a particular item. For Example the sub major head Secondary Education contains an item called Directorate of Public Instruction (DPI). However this body's function is not restricted to Secondary Schools. It also involves regulation and supervision of elementary Schools. Moreover the DPI's control also extends to government-aided schools (elementary and secondary) though to a much lesser extent. So while calculating expenditure per capita in each section the single figure given under the DPI head needs to be distributed between the various categories. This division is done based on the ratios of student enrolment in each of these sections in the corresponding year. A thorough explanation of the split of each item is given in Appendix 6.

It must be noted that certain items which have been included in the estimation of total expenditure on education have not been taken into account while calculating per capita expenditure. This is done due to unavailability of data in certain cases and/or due to the special nature of some of the schools/items for which expenditure is incurred. These exclusions have been made so as to get clearer estimates of per capita expenditure.

Enrolment data for all the years under study is unavailable for certain types of schools such as Anglo Indian Schools and Sainik Schools. Therefore while calculating per capita expenditure, amount spent on these schools is not included in the numerator (i.e. total expenditure).

Second, certain items like expenditure on education of scheduled castes and scheduled tribes, disabled students and so on are of a special nature. An "average" student does not incur these expenses. Therefore by excluding these items we get a clearer picture of per capita expenditure on a typical student. All the same, we will take a look at these later to get a complete picture.

The Directorate of Public Instruction in their publication *Educational Statistics since Independence* has provided information on expenditure on education and cost per pupil. However, on analysis, several flaws in their estimation are revealed.

First, only items in the Major Head 2202 General Education are taken into account.

Second, in the computation of per capita expenditure, enrolment figures of students in private unaided schools are also taken into account. This inclusion is uncalled for since the government spends no part of its funds in educating these students.

Another disparity arises because only revenue expenditure is accounted for in the government's estimation of education expenditure. Capital expenditure, though small, still needs to be taken into consideration.

Per capita expenditure on education at each stage of education for the years 2001-02, 2002-03, 2003-04 and 2004-05 are given below. Expenditure (Direct) is the expenditure by the government of Kerala. Expenditure (Devolved) is the plan outlay by local bodies on education.

PER CAPITA EXPENDITURE (PCE) (in Rs)

2001-02

	Govt Primary	Aided Primary	Govt Secondary	Aided Secondary
Expenditure (Direct)	4,25,77,52,889	6,45,02,70,194	3,14,33,58,603	4,24,84,07,324
Expenditure (Devolved)	11,46,90,699	-	5,31,89,801	-
No of students	11,84,448	21,15,816	6,67,934	10,75,038 ⁶
PCE Direct	3594.72	3,048.60	4706.09	3951.87
PCE Devolved	96.83	-	79.63	-
TOTAL PCE	3,691.55	3,048.60	4785.72	3951.87

2002-03

	Govt Primary	Aided Primary	Govt Secondary	Aided Secondary
Expenditure (Direct)	5,25,40,83,509	7,53,47,62,762	3,68,24,57,296	5,78,06,14,867
Expenditure (Devolved)	34,56,76,759	-	16,08,88,241	-
No of students	11,39,501	20,80,803	6,63,101	10,84,139
PCE Direct	4,610.86	3,621.08	5553.39	5331.99
PCE Devolved	303.36	-	242.63	-
TOTAL PCE	4,914.22	3,621.08	5796.02	5331.99

2003-04

	Govt Primary	Aided Primary	Govt Secondary	Aided Secondary
Expenditure (Direct)	5,37,01,25,437	7,90,63,58,795	3,88,64,30,373	6,60,86,82,255
Expenditure (Devolved)	17,27,51,912		9,94,23,088	
No of students	10,83,617	20,52,926	6,53,303	10,80,134
PCE Direct	4,955.74	3,851.26	5948.89	6,118.39
PCE Devolved	159.42		152.19	
TOTAL PCE	5,115.16	5,117.39	6,101.08	6,118.39

⁶ Number of students in Vocational Higher Secondary Schools in 2001-02 is not known. However the number of students enrolled in Class XI in 2000 and 2001 is known and an estimate drop-out rate is obtained from a study done by the Kerala Planning Board on Vocational Higher Secondary Education. Details in Appendix 6.

Per Capita Expenditure has shown a marked increase over the years. This is due to both increase in public spending on education as well as fall in enrolment in schools. The Government spent almost 33 percent more on each student in an elementary class in a government school in 2002-03 compared to the previous year and this was followed by a 4 percent increase the following year. Spending on students in secondary sections of government schools also went up significantly: 21 percent in 2002-03 and 5 percent in 2003-04.

Impressive as this is, the increase in expenditure on government-aided schools is more staggering. Per Capita expenditure on elementary government-aided schools went up by 19 percent in 2002-03 and a significant 41 percent in 2003-04. Government-aided secondary schools also got a notable chunk of the expenditure pie. In 2003-04 the state spent an average of Rs 6118.39 on students in these schools—much more than it spent per student at any other stage/school.

These results are interesting. It suggests that government schools whose only source of aid is government funding receive less financial assistance than government-aided schools that have other sources of funding as well.

Other Items

It has been noted earlier that expenditure on certain types of schools and certain sections of students have not been included in the estimation of per capita income. All the same, a general study of these kinds of schools has been done to complete the analysis.

1) Disabled Students

The Government of Kerala started a scheme called The Integrated Education of Disabled Children in 1974-75 with the objective of providing educational opportunities to all children with disabilities under the general schools system. Other than this there are also special schools for these children. The government spends a significant amount of money for the welfare of disabled children and the running of special schools.

2202-80-800-93 (Plan) Improvement of facilities in the existing special schools

2202-80-800-89 Financial Assistance to the Kerala Blind Association to run Braille Printing Presses

2235-02-101-99 Schools for the Deaf, Dumb and Blind

2235-02-101-95 (Plan) Integrated Education of the Handicapped (Centrally Sponsored Scheme)

The expenditure on these items over the years from 2001-02 to 2003-04 is

Expenditure on education of Disabled children (in Rs)

Head of Account	2001-02	2002-03	2003-04
2202-80-800-93	20,64,324	19,19,897	53,24,507
2202-80-800-89	2,20,000	2,20,000	2,30,000
2235-02-101-99	1,70,45,950	1,85,88,396	1,98,95,914
2235-02-101-95	2,66,33,640	2,86,46,252	3,15,63,472

In 2002-03 the number of disabled students enrolled in primary and upper primary schools in the general school system was 54,874 out of which 32,037 were boys and 22,837 were girls. In 2004-05 there were 43 Schools for the Handicapped in Kerala of which 7 were Government Schools, 23 were Government-aided Schools and 13 were Private self-financing schools.

2) Anglo Indian Schools

There are 8 Anglo Indian High Schools in Kerala of which 5 are in the Government-aided Sector and the remaining 3 are private unaided schools. The government provides teaching grant to the Aided Anglo Indian Schools. The following table shows the amount spent /set aside for this in various years.

2202-02-110-96 Teaching Grant for Aided Anglo Indian Schools (in Rs)					
Year	2001-02	2002-03	2003-04	2004-05	2005-06
Expenditure	2,00,20,400	2,42,58,237	2,48,29,913	3,28,20,000	3,50,21,000

3) Sainik School

Sainik School, Kazhakoottam is the only one of its kind in Kerala. It aims at providing students with a kind of education which will prepare them for a life in the armed forces. It has classes from VI to XII and follows the CBSE pattern.

The government's expenditure on Sainik School falls under the following heads:

2202-02-107-95: Scholarships to Sainik Schools

2202-02-800-78: Special Grant to Sainik School, Kazhakoottam

2059-60-053-95: Maintenance and Repairs of Sainik School Kazhakoottam.

The expenditure (actual and estimates) in various years is given in the following table

Expenditure on Sainik Schools by Government of Kerala (in Rs)

	2001-02 (A.E.)	2002-03 (A.E.)	2003-04 (A.E.)	2004-05 (R.E)	2005-06 (B.E.)
2202-02-107-95	62,37,635	65,05,848	72,08,637	77,00,000	50,00,000
2202-02-800-78	12,58,000		14,33,610		
2059-60-053-95	30,70,324	73,32,570	31,29,677	76,00,000	76,00,000
Total	1,05,65,959	1,38,38,418	1,17,71,924	1,53,00,000	1,26,00,000

A.E.: Actual Expenditure

R.E. Revised Estimates

B.E.: Budget Estimates

In 2004-05 there were approximately 630 students in this school. So the per capita expenditure is approximately Rs 24,285.

Schemes in the field of Education

Over the last decade several schemes have been introduced to improve infrastructure, enrolment, retention and the quality of education in schools. The most important among them are the District Primary Education Programme and Sarva Shiksha Abhiyan

1) District Primary Education Programme (DPEP)

The District Primary Education Programme was an education development programme launched by the Government of India as centrally sponsored scheme with external funding provided by the World Bank and other financial agencies. It was to cover 132 districts in 14 states and was introduced in Kerala in 1994-95. It aimed at universalising primary education, increasing enrolment and retention and improving the quality of education. The total estimated cost of the project was Rs 186.87 crore, 85 percent of which had to be financed by the centre

and 15 percent by the state government. Due to the remarkable level of enrolment and access to schools already prevalent in Kerala, the state was able to use the DPEP funds for crucial quality improvement programmes such as text book revision, teacher training and upgradation of facilities in schools.

2) Sarva Shiksha Abhiyan

The Sarva Shiksha Abhiyan was started in 2002-03 to bring about the universalisation of elementary education and to improve the quality of education. The Goals of Sarva Shiksha Abhiyan are

- all children in the 6-14 age group in school by 2003.
- All children in the 6-14 age group complete five year primary education by 2007
- All children in the 6-14 age group complete eight years of schooling by 2010
- Focus on elementary education of satisfactory quality
- Bridge all gender and social category gaps at primary stage by 2007 and at elementary education level by 2010
- Universal retention by 2010

It basically has two components. First is the Education Guarantee Scheme which addresses students in the 6-14 age group who live in inaccessible areas where there is no formal school within a radius of 1 km. The other is the Alternative and Innovative Education Scheme which targets special category children like those involved in child labour, street children etc.

Trends in the Educational sector

Expenditure on education in Kerala by the state government over the years has been analysed. The question that arises now concerns the benefits brought about by this increased commitment of the state in the realm of school education. The effect of the rise in expenditure by the government can be captured by various indicators: number of schools, facilities in schools, enrolment, drop-out rates, examination results and so on. The trends exhibited by these indicators over the last five years is examined to determine correlations if any with expenditure patterns.

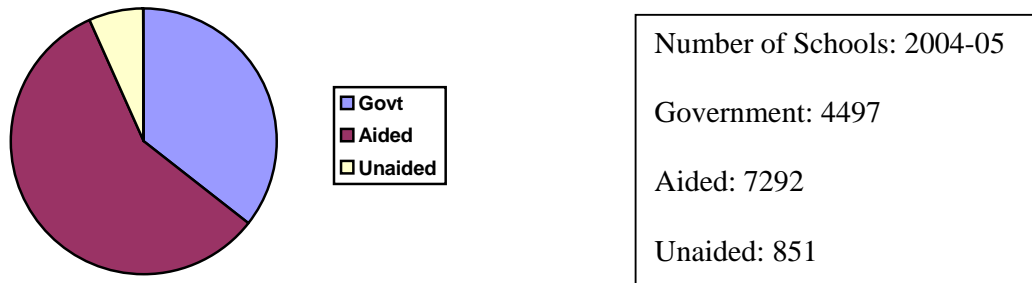
Number of Schools

Over the last five years there has been only a marginal change in the number of government and government-aided schools, except for Higher Secondary schools, despite increased expenditure on all types of schools. Divergent trends are seen depending upon the stage of education. The number of lower primary and upper primary schools has fallen slightly while the number of high schools has gone up marginally. The number of aided higher secondary schools has also seen a small increase. The number of vocational higher secondary schools however has remained the same from 2000 till 2005.

On the other hand, government higher secondary schools offer a completely different picture with a substantial increase of almost 67% in time span of just one year. This is part of the implementation of the tenth Five-year plan. A corresponding increase in expenditure on higher secondary schools is also seen. The Directorate of Higher Secondary Education which incurred no expenditure whatsoever in 2001-02, incurred Rs 3.93 crore worth of expenses in 2002-03 and Rs 2.81 crore in 2003-04. Expenditure on both government and aided higher secondary schools also went up considerably.

Unaided Schools on the other hand, have increased considerably in all the above sections. Over the years from 2000-01 to 2004-05, lower primary schools have seen a rise of about 66% while upper primary schools and high schools have gone up by 88% and 63% respectively. The number of higher secondary schools has skyrocketed from 8 in 2000-01 to 340 in 2004-05. Tables 1,2 and 3 in Appendix 7 give an overall picture. Details regarding schools which do not follow the state syllabus are given in table 4 of the same appendix

The distribution of schools according to management for the year 2004-05 is showed in the following chart.



A section wise classification of schools for the year 2002-03 is given in table 5 of Appendix 7.

Accessibility of Schools and Distribution

The Economic Review 1997 of the Planning Board published data regarding accessibility of schools. 94.39% of the rural population was served by a primary school within a radius of 1 km and 97.96 percent within a radius of 2 km. Upper primary education was available for 96.2 percent people within a distance of 3km and secondary education within a radius of 6 to 8 km. The average area served by a lower primary section is about 4 sq.km, while it is 7.74 sq.km and 14.97 sq. km for upper primary sections and a high school respectively.

Infrastructure and facilities in Schools

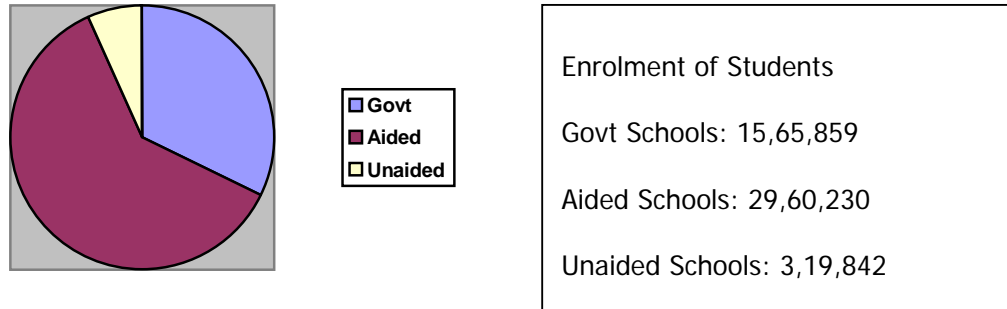
Infrastructure and basic facilities in schools have improved considerably since the introduction of schemes like the District Primary Education Programme and the Sarva Shiksha Abhiyan. The involvement of local bodies in education has also helped significantly. It is in this sphere that the benefits of increased public spending on education are seen most clearly. About 95 percent of government schools now have pucca buildings. The number of schools functioning in thatched sheds and in rented buildings has come down significantly. Almost 90 percent of the government schools have drinking water facilities and 88 percent have urinals/latrines. Tables 6 and 7 in Appendix 7 give a clear picture about the improvement of facilities in government schools over the last few years.

Enrolment

The overall enrolment of students in classes I to X have been declining steadily since 1992. This is mainly due to the decline in the rate of growth of population since the late 1970's which reduced the numbers in the school going age group. However an interesting trend is the increase in number of students in private unaided schools. Their numbers increased from 2.58 lakhs in 2000-01 to 3.20 lakhs in 2004-05—a 24% increase. But enrolment in both government and government-aided schools declined significantly resulting in the overall negative trend. This

clearly shows an inclination towards private unaided schools despite the government's efforts to improve facilities and quality of teaching in government schools. This shift towards the private sector is either due to increase in incomes or change in quality of education in government schools and/or in private unaided schools or a combination of factors. So it is obvious that the benefits of increased expenditure has not yet percolated into the system as far as enrolment is concerned. Enrolment data for all types of schools is given in tables 8, 9, 10 and 11 in Appendix 7.

The management wise enrolment of students in 2004-05 in classes I to X is shown in the following chart.



Enrolment of Girls

Gender disparities are virtually non-existent in schools in Kerala. Female literacy has been one of the cardinal features of social development in Kerala and is responsible for the state's enviable demographic pattern—low birth rates, low death rates, low infant mortality rates, optimal sex ratios and excellent health standards. An important feature in Kerala is that the percentage of girls in total enrolment is high and remains almost the same at all levels of education right from class I to X as compared to the rest of India which sees a declining trend as we move higher up the school ladder. Table 12 in Appendix 7 shows the proportion of girls in total enrolment in different levels of schooling in 2004. Due to the absence of gender inequalities the Kerala government finds no need to implement policies aimed specifically at girl students as is the case in other Indian states. So the effect of increased government expenditure is not seen in this sphere.

Scheduled Castes and Scheduled Tribes Enrolment

In 2004, 10.71 percent of the total students were from the scheduled caste category and 1.23 percent were from the scheduled tribe category. The percentage of scheduled caste and scheduled tribe students in total enrolment is higher in the elementary sections compared to the high school sections. In 2001-02 the total percentage was 10.5 which increased only marginally to 10.7 percent in 2003-04 despite an almost 130 percent increase in revenue expenditure and a six times increase in capital expenditure on scheduled caste students.

The percentage of scheduled tribe students in total enrolment also went up only marginally from 1.15 percent in 2001-02 to 1.23 percent in 2003-04. But the absolute number of scheduled tribe students enrolled went up from 58859 in 2000-01 to 60339 in 2003-04. During these years revenue expenditure rose by 23 percent and capital expenditure fell by 8 percent.

Also, the vast majority of these students are in government schools and government-aided schools. In 2004, 42.08 percent of the SC/ST students were enrolled in government schools,

56.39 percent in government-aided schools and a tiny 1.53 percent in private unaided schools. Detailed enrolment data is given in table 13 of Appendix 7.

Drop-out Rates

Over the last decade or so, focus in Kerala has been focusing on retention of students compared to the other states which are still grappling with issues of universalisation of education. As a result, dropout rates have seen a declining trend in the past few years. Table 14 of Appendix 7 shows drop-out rates at each level of schooling for the years 1998-99 to 2002-03.

Student- Teacher Ratios.

Kerala has always had excellent student-teacher ratios. Over the last few years it has hovered at around 30 which is considered ideal. Details regarding this are provided in table 15 in Appendix 7.

Performance in Examinations

The excellent enrolment rates, low drop out rates, optimal student –teachers and the huge amount of money which the government of Kerala spends on education reflect the government's commitment to education as well as people's consciousness about the need for education and their resolve not only to put their children in school but also to keep them there.

However these indicators do not give us any idea about the quality of education actually implemented or about the knowledge gained by a pupil. For this we need to take a look at performance in examinations and this is a very dismal picture.

A major flaw of the examination system in Kerala is the process of “moderation” which is adopted. Performance in examination began to deteriorate in the 1970s and 1980s. Unofficial estimates say that only about 10 percent of the students who appeared for the SSLC examinations passed. (Nair. N. Gopalakrishnan 2004, 6) Faced with this situation which not only reflected badly on teaching in Government schools, but also spelled doom for the huge chunk of students who failed, the authorities began to “moderate” the marks thus pulling up pass percentages to a more respectable 40 or 50 percent. Over the years with advancements in the field of education and due to a combination of factors, performance in examinations has improved. However the Government still finds the need to moderate results. Table 16 in Appendix 7 captures the variance in pass percentages in SSLC examinations before and after moderation in the last few years. Higher Secondary and Vocational Higher Secondary examination results are shown in tables 17 and 18 respectively in Appendix 6.

It is a general trend that students in unaided schools outperform those in government and government-aided schools. This does not reflect in any way on the lack of qualification on the part of teachers in these schools. On the contrary teachers in government and government-aided schools are in fact, better qualified compared to their counterparts in private schools. The problem is the quality of teaching being imparted. Higher wages and job security seem to have resulted in deterioration in the standard of education.

The government's outlay on teacher training has increased by around 33 percent in the years from 2001-02 to 2005-06. But this seems to have gone to waste. Unless teachers are held more accountable, the quality of education will remain in the doldrums.

Uneconomical Schools

The Kerala Education Rules stipulates that the number of students per standard in a lower primary, upper primary or high school should not be less than 25. In schools where Arabic or Sanskrit is taught as Part I and II of the first language, the minimum permitted strength per standard is 15. Schools which do not meet this criterion are called Uneconomic Schools. The number of such schools has risen dramatically from 170 in 1992 to 2622 in 2004. Of these 48.97 percent are government schools and 51.03 percent are aided schools. Table 19 in Appendix 7 shows the number of uneconomic schools at each level in 2003 and 2004.

Protected Teachers

Enrolment in class I started to decline from 1973 onwards and there was a gradual sequential spread in successive classes as well. As a result several schools had more number of teachers than what was required. The declining trends in birth rates aggravated this issue. When the problem was first noticed in 1983, the government made the decision to declare them as "protected" teachers, to retain them in the same schools and provide them with service benefits. However, things got worse over the next few years and the government was forced to adopt a more realistic approach to deal with these teachers – redeployment in other schools. As a result the situation has improved marginally in the last couple of years. Details regarding this can be found in table 20 in Appendix 7.

Conclusion

The Government of Kerala has been increasing its outlay on education over the past five years. Having embarked on a process of financial decentralisation Kerala has also systematically begun to transfer certain components of funding of education to local bodies. As a result public spending on education has reached unprecedented levels and is still rising. Per capita expenditures have increased several folds especially in the government-aided schools. It does seem like a rosy picture from the expenditure point of view.

However the question of concern is whether benefits of this have seeped into the system; and it is a very mixed picture which emerges. Infrastructure facilities in schools have improved considerably in terms of both types of school buildings as well as facilities offered. Higher Secondary Education has crossed milestones in terms of both number of schools and students enrolled. Absolute enrolment of minority groups like Scheduled Tribes has increased. Drop-out rates have fallen significantly over the years.

But all is not fine. Enrolment in government and government-aided schools has been falling. But the blame can no longer be placed on the shoulders of a declining population trend without second thoughts. Despite the decrease in the school-going age population, the number of students in unaided schools has been increasing steadily over the past few years. Performance in examinations is still not up to the mark and the practise of moderation is still as prevalent as ever. Though the situation has considerably improved, Uneconomical schools and Protected Teachers still drain the finances of the exchequer.

It is indeed heartening to know that the state government has not let the recurrent fiscal deficits stand in the way of its commitment to provide education to the masses. Kerala has always had an advantage over other Indian states due to its superior educational scenario. It needs to retain this edge and make the best use of it. Education can help this state move mountains while grappling with its problems of unemployment and slow economic growth.

Appendices

Appendix 1: Total Expenditure on Education by the Government of Kerala

Appendix 2: Per Capita Expenditure on Elementary Education in a Government School

Appendix 3: Per Capita Expenditure on Elementary Education in a Government-aided School

Appendix 4: Per Capita Expenditure on Secondary Education in a Government School

Appendix 5: Per Capita Expenditure on Secondary Education in a Government-aided School

Appendix 6: Estimation of Per Capita Expenditure: An Explanation of the Methodology

Appendix 7: Trends in the Educational Sector: Statistics

References

Chandrasekhar, C. P., V. K. Ramachandran, and R. Ramakumar. 2001. *Issues in School Education in Contemporary Kerala*. [paper online] A paper prepared for UNICEF, New Delhi. Accessed on 8 July 2005 at http://www.macroscan.com/anl/jun03/anl070603Education_Kerala_Paper.html.

Department of Economics and Statistics. 2005. *Statistics for Planning 2005*. Government of Kerala.

Department of General Education. 2005. *Demand for Grants XVII 2005-06: Notes for Subject Committee VI*. [text in Malayalam]. Government of Kerala

Department of General Education. 2000. *Demand for Grants XVII 2000-01: Notes for Subject Committee VI*. [text in Malayalam]. Government of Kerala

Department of Higher Secondary Education. 2005. *Notes for Subject Committee of Legislative Assembly*. [text in Malayalam]. Government of Kerala

Directorate of Public Instruction. 2005. *Selected Educational Statistics: 2004-05*. Department of General Education, Government of Kerala.

Directorate of Public Instruction. 2004. *Educational Statistics Since Independence*. Department of General Education, Government of Kerala.

Finance Department. 2005. *Demand for Grants and Detailed Budget Estimates 2005-06: Volume 1*. Government of Kerala.

Finance Department. 2005. *Demand for Grants and Detailed Budget Estimates 2005-06: Volume 2*. Government of Kerala.

Finance Department. 2005. *Demand for Grants and Detailed Budget Estimates 2005-06: Volume 3*. Government of Kerala.

Finance Department. 2005. *Demand for Grants and Detailed Budget Estimates 2005-06: Appendix IV- Details of Provisions Earmarked to Panchayat Raj/ Nagarpalika Institutions*. Government of Kerala.

Finance Department. 2004. *Demand for Grants and Detailed Budget Estimates 2004-05: Volume 1*. Government of Kerala.

Finance Department. 2004. *Demand for Grants and Detailed Budget Estimates 2004-05: Volume 2*. Government of Kerala.

Finance Department. 2004. *Demand for Grants and Detailed Budget Estimates 2004-05: Volume 3*. Government of Kerala.

Finance Department. 2003. *Demand for Grants and Detailed Budget Estimates 2003-04: Volume 1*. Government of Kerala.

Finance Department. 2003. *Demand for Grants and Detailed Budget Estimates 2003-04: Volume 2*. Government of Kerala.

Finance Department. 2003. *Demand for Grants and Detailed Budget Estimates: 2003-04: Volume 3*. Government of Kerala.

Kerala Planning Board. 2005. *Economic Review 2004*. [online] Government of Kerala. Accessed on 19 June 2005 at <http://www.keralaplanningboard.org/html/EconomicReview2004/index.html>

Kerala Planning Board. 2004. *Economic Review 2003*. [online] Government of Kerala. Accessed on 19 June 2005 at <http://www.keralaplanningboard.org/html/EconomicReview2003/index.html>

Kerala Planning Board. 2003. *Economic Review 2002*. [online] Government of Kerala. Accessed on 19 June 2005 at <http://www.keralaplanningboard.org/html/EconomicReview2002/index.html>

Kerala Planning Board. 2003. Report on Vocational Higher Secondary Education. [online]. Government of Kerala. Accessed on 22 July 2005 at www.keralaplanningboard.org/html/Reports/vhse/index.html 2003

Nair, N. Gopalakrishnan. 2004. *Household Cost of School Education*. Discussion Paper No.64. Thiruvananthapuram: Kerala Research Programme on Local Level Development