

**Costs of Schooling in Kerala: A study of private and  
institutional costs under different types of management**

**Sambhu Nampoothiri. N**

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**Kerala Research Programme on Local Level Development  
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## **Contents**

1	Introduction	5
2	Objectives	9
3	Definitions and Concepts	10
4	Review of Literature	12
5	Selection of Sample and Method of Data Collection	14
6	Private Cost of School Education	18
7	Institutional Cost of School Education	26
8	Educational Performance	30
	Appendix	32
	References	34



# **Costs of Schooling in Kerala: A study of private and institutional costs under different types of management**

Sambhu Nampoothiri. N

## **1 Introduction**

The remarkable success that the State of Kerala has achieved in social development is reflected in the high physical quality index, high literacy rate and high life expectancy. Kerala has achieved a literacy rate of 90.92 percent as against the all-India average of 65.38 percent by 2001. Though Kerala ranks only ninth in the matter of per capita income, people in Kerala strive more than their counterparts anywhere else in India, to impart education to their children. Kerala has educational agencies under private, aided, and unaided government and management. Since education is considered a catalysing agent of growth and development of a society its costs, efficiency, and management aspects assume importance.

The unaided sector has been increasing steadily since the early 1980s though the number of annual entrants to standard I have been steadily on the decrease during the past three decades. For instance, while enrolments in schools (lower primary, higher primary, and high schools) declined in government schools from 22.83 lakh to 17.71 lakh and in private aided schools from 34.68 lakh to 30.68 lakh, during 1992 to 2002, in private unaided schools enrolment increased from 1.55 lakh to 2.63 lakh during the same period.

Schooling in the unaided sector is known to be much costlier than in the government and the aided sectors. Despite this fact, enrolment in the unaided sector is fast increasing, obviously by diverting enrolment away from the other two sectors. It is against this background that a study on the cost differences among them is taken up. These questions are examined on the basis of information collected from the Perumbavoor, Aluva, and Angamali sub-districts of the Ernakulam educational district.

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Sambhu Nampoothiri N is Senior Grade Lecturer, Department of Economics, Sree Sankara College, Kalady.

**Table 1.1 Progress of Educational Institutions from 1961-'62 to 1996-'97**

<b>Year</b>	<b>High Schools</b>	<b>U.P. Schools</b>	<b>L.P. Schools</b>	<b>Total</b>
1961-62	629	1985	6745	9359
1966-67	1278	2475	6033	10684
1971-72	1393	2551	6895	10839
1976-77	1666	2718	6995	11379
1981-82	2075	2779	5811	11665
1986-87	2430	2884	6828	12142
1991-92	2472	2935	6783	12190
1996-97	2580	2968	6726	12274
2001-2002	2618	2959	6754	12331

Source: Economic Reviews, 1997 and 2002

Among the 14 districts of Kerala, Ernakulam has the largest number of unaided schools (Economic Review, 1997). Of the 292 high schools in the district, 33 are unaided, of the 205 UP schools, 17 are unaided and of the 484 LP schools 22 are unaided. Nearly 14 percent of the unaided schools in the State are in the Ernakulam educational district.

**Table 1.2 District-wise/Management-wise Number of Schools in Kerala 2001-2002**

Sl. No.	Name of Rev. District	High Schools				UP	
		G	PA	PUA	T	G	PA
1	2	3	4	5	6	7	8
1	Thriuvananthapuram	121	94	27	242	98	101
2	Kollam	76	125	10	211	62	139
3	Pathanamthitta	47	111	7	165	43	84
4	Alappuzha	58	127	7	192	67	78
5	Kottayam	59	166	16	241	68	128
6	Idukki	52	72	10	134	40	64
7	Ernakulam	90	176	34	300	92	102
8	Thrissur	80	153	21	254	56	164
9	Palakkad	59	77	16	152	63	159
10	Malappuram	82	80	30	192	112	225
11	Kozhikode	67	100	17	184	76	242
12	Wayanad	40	23	4	67	34	39
13	Kannur	82	77	10	169	77	277
14	Kasaragod	74	33	8	115	72	72
	Total II	986	1415	217	2618	960	1874

G – Government, PA – Private aided

PU – Private unaided, T - Total

**Table 1.3 Enrolment of Students in Schools in Kerala – Stage-wise**

Year	LPS		UPS		
	Govt.	Aided	Un-aided	Total	Govt. Aided
1	2	3	4	5	6 7
1998	776481	1200654	101072	2078207	585994 1106831
1999	746711	1160898	102655	2010264	570736 1081927
2000	708596	1122379	101351	1932326	555040 1072879
2001	705929	1116593	110930	1933452	539367 1060575
2002	675132	1090663	114307	1880102	509316 1025193

Source: Economic Review, 1997 and 2002.

**Table 1.4 Number of Schools in Kerala – Unaided Schools**

<b>Year</b>	<b>L.P. Sector</b>		
	<b>L.P. Schools</b>	<b>L.P. Sections in U.P. Schools</b>	<b>L.P. Sect in Hig Schoo</b>
1991-92	151	46	63
1992-93	147	45	63
1993-94	137	44	63
1994-95	133	45	59
1995-96	167	43	85
1996-97	166	53	90
1997-98	160	44	97
1998-99	161	61	105
1999-2000	161	61	105
2000-2001	158	56	101
2001-2002	158	58	99

Source: Economic Review, 2002



## **2 Objectives**

The objectives of the study are the following:

1. To estimate the cost borne by the parents of students studying under private unaided schools on the one hand and under government and aided schools on the other at the various levels (LP, UP, and HS).
2. To estimate costs borne by the agencies in imparting education (Fixed, Recurring, and Managerial Cost).
3. To estimate the unit of cost of education at the various levels and under private cost and institutional cost.
4. To study the nature, size, and enrolment pattern of both the types of schooling.

To study the managerial practices and educational performance of schools under the two sectors.

### **3 Definitions and Concepts**

Since the study focuses its attention on the cost, efficiency, and managerial aspects of schooling certain operational definitions and concepts are used in the study. The term public schooling used in the study refers to the schooling under educational institutions operated by the government and private managements aided by the government. Unaided schools are educational institutions, which operate autonomously and are entirely self-financed. The schooling offered by the unaided sector is termed as private schooling.

Cost of education is composed of private cost and institutional cost. It refers to the expenditure incurred by parents, the government, and the private institutions for educational purposes.

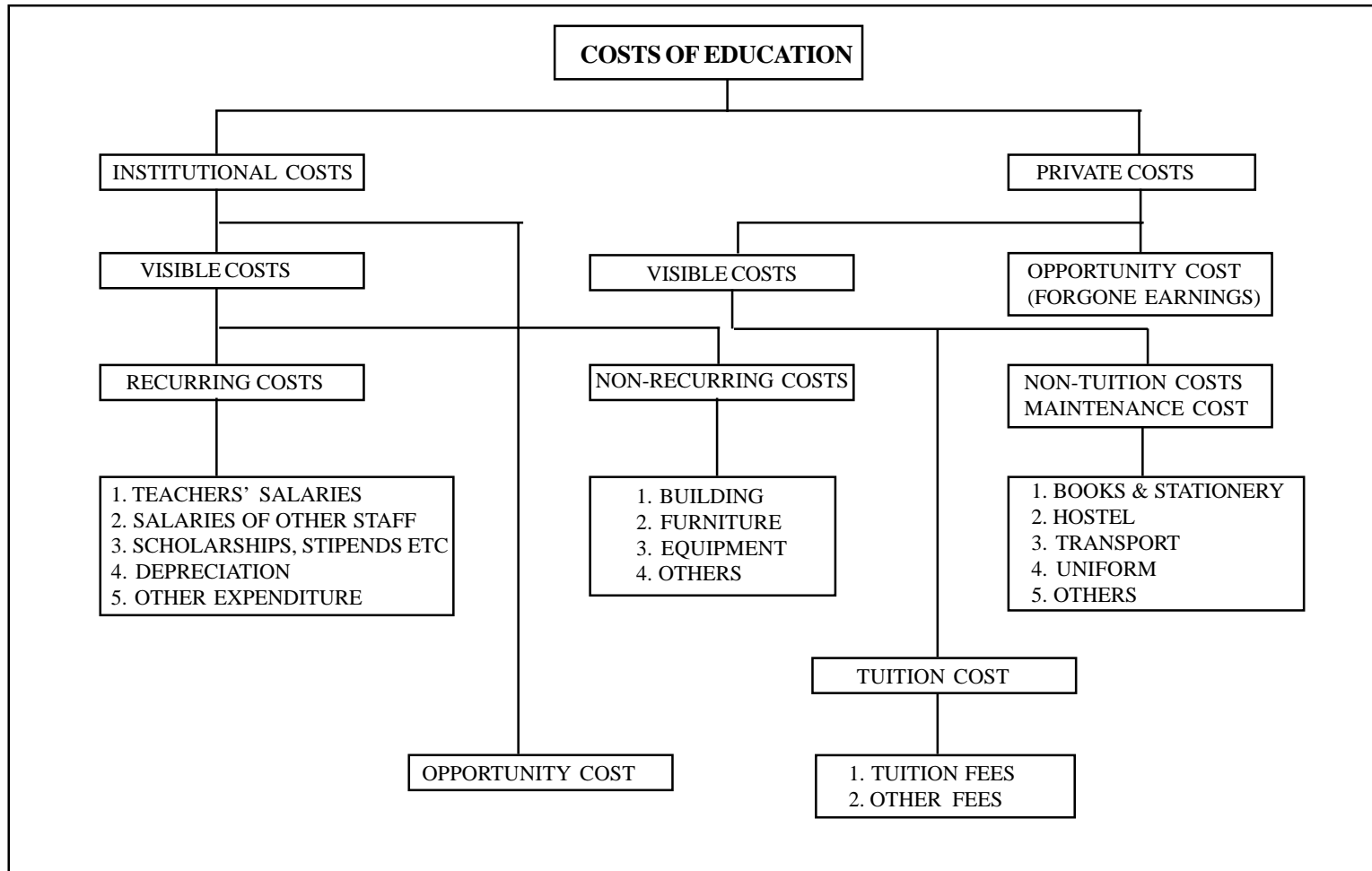
Private cost of education is defined as the part of investment in education, which is made either by the student or the parent or both. Institutional cost indicates the expenditure incurred by the government of the institutions imparting education. Private cost is composed of 13 elements whose definitions are given in the section explaining it. Institutional cost is composed of recurring and non-recurring costs. The former is incurred every year while the later occurs only once.

In the present study an attempt has been made to calculate the unit cost of education by levels and by components. By level is meant, Lower Primary, Upper Primary, and High School and by components private and institutional. Unit cost refers to cost per pupil. It is calculated separately for the different types of management.

Educational performance used in this study refers to the results produced by the schools, the co-operation extended by the management, and the efficiency of Parent-Teacher Associations. An attempt is made to evaluate performance by levels and management. The educational performance is conceived of as internal efficiency. The internal performance of the educational system refers to the capacity of the system to turn out students in the most effective way. For the general evaluation of the performance, the physical facilities, the quantity and quality of teaching, the services rendered, and the conveniences provided are taken into consideration.

The term managerial aspects means the various activities and practices followed by the management for fostering the growth of the educational institution concerned with the active co-operation of and co-ordination with teachers and parents. A schematic presentation of the various concepts used in the study is given in the following chart.

**Figure 3.1 Taxonomy of costs of education**



## 4. Review of Literature

The majority of studies relating to education in India are confined to the economic problems associated with higher education. The report of the Education Commission (Government of India, 1970) had also stressed the need for economy in expenditure in connection with higher education.

Panchamukhi (1965) and Kothari (1966) calculated the unit costs associated with higher education. Kamat (1973) attempted at estimating the unit recurring cost at the degree and postgraduate levels in the University of Poona, during 1964-'65.

Mathur (1974) studies the cost of education in India during 1951-'61. The study concluded that a major part of the educational expenditure in India was on school education. Ruddar Datt (1969) and Mark Blaug, et al (1969) attempted an evaluation of the unit cost of education at the college level in India. The Institute of Applied Manpower Research, Ministry of Education, Government of India also made estimates of the unit cost of education. Sharma (1980) provided a comparative analysis of the unit cost of large number of universities in general and professional education in particular for the period 1974-'76.

K R Shaw (1987) and Gupta (1982) estimated the private costs of elementary education and college education. Shaw noticed larger differences in the non-tuition component of cost per pupil rather than in the tuition cost among the students belonging to the different income strata of society.

H. N. Pandit (1967) conducted a detailed project on calculation of cost of education concentrating on the school stage.

J. B. G. Tilak (1983, 1985, 1987, 1995, 1997) has given a detailed account of the variables to be included in the estimation of unit cost of education. He has touched on various aspects such as Resources for Education in India, Educational Finance and Cost Recovery Approaches and also enquired into whether pre-primary education in India is free as it is often claimed.

Shri Prakash (1967, 77, 1981, 1992) has developed a detailed methodology for the calculation of the unit cost of education. Moreover, he has developed Input-Output models of Education with applications to Indian data. He has made estimates of the cost of higher education in the country.

Geeta Kingdon (1994) has examined school management in urban India, by taking Uttar Pradesh as the sample. Chadda and Singh (1988) conducted a pilot study on private educational spending in North Delhi. Nautiyal (1993) has discussed several aspects of the basic education system in the slums of Delhi. In these studies, Geeta Kingdon, Chadda and Singh, and Nautiyal underscore the fact that the private unaided school sector is in an expansion path and discuss in detail the heterogeneous nature of the private unaided schooling sector. In another study Geeta Kingdon (1996) has made a detailed examination of the nature, size, and

equity effects of the private schooling sector in India by basing her study in Uttar Pradesh and come to the conclusion that the unaided sector is expanding rapidly.

## **Kerala**

In Kerala, studies on the economic aspects of school education are few. Cost of education is one of the most neglected areas so far as educational research is concerned. In this connection some of the available and relevant literature important to the proposed study is reviewed here. Pillai and Nair (1962) attempted to study the history and problems of Educational finance in Kerala. The scope of the study is restricted to school education in the State. It concentrated on the education expenditure of the State, which they found to be excessively high. The private cost (viz. cost incurred by the parents of students) was not looked into in this study.

P. R. G. Nair (1981, 1983) studied the inter-relationship among school education, demographic variables, employment, and emigration with special reference to Kerala. He has also looked into the growth of the educational system of Kerala with particular reference to the growth of the primary education sector. In discussing the unit cost of education and to measure the efficiency of education, Nair developed the concept “effective cost of education”, unit cost of producing students with ‘specific levels of schooling’.

Ramachandran (1987) deals with problems of higher education in India with special reference to Kerala. He attempted to analyse in the higher education system of Kerala, the aspects of enrolment, expenditure, financing and planning. He also estimated the component-wise and source-wise financing of higher education for the period 1957-‘75.

Mathew E. T (1991) analysed in detail the sources of funds of private colleges in Kerala for the period 1972-1986. The analysis was made on the basis of data collected from 25 Arts and Science Colleges spread over the State. The study called for strengthening of the finances of colleges in the private sector.

Abdul Salim in his work *The cost of higher education in India with special reference to Kerala* estimated the unit of education with respect to higher education. He has analysed cost separately for general and professional education in the government and the private aided sector.

The foregoing review reveals the fact the most of the studies conducted are concentrated on the various aspects associated with the higher education sector in Kerala. Even in this sector, the major attention has gone into educational financing. The estimation of the private cost of education is seen to be one of the areas most neglected in studies on costs of education.

The unit cost aspect of school education in Kerala has so far remained a neglected area. In addition, efficiency aspects in the private and the public schooling sector has not been the subject of research till now. Hence the present attempt.

## 5. Selection of Sample and Method of Data Collection

The present study has been conducted in the Ernakulam Revenue district. The district has four educational districts and 14 educational sub-districts. The three sub-districts viz. Perumbavoor, Angamaly, and Aluva are taken as the sample area. The schools in these sub-districts are categorised management-wise and level-wise. Management-wise the schools come under government, aided, and unaided categories. Level-wise the categories are lower primary, upper-primary, and high schools. Out of the 216 schools coming under these three educational sub-districts, 20 schools are taken for detailed study; six departmental schools, nine aided schools, and five unaided schools. Of these 20 schools, eight schools are under the Perumbavoor Sub-district, and three schools under the Aluva sub-district, and nine schools under the Angamaly Sub-district. Data for the year 1998-'99 were collected from the sample schools.

In the selection of the sample greater weight has been given to the UP and the High School Sections. However, analysis of LP sections/schools has also been undertaken.

Information regarding institutional costs was collected from the institutions themselves using an interview schedule. Information on private cost of education was collected from 400 parents, whose children were studying in the sample schools, using an interview schedule. The criterion adopted in the selection of parental information was in general, 30 informants from the schools having all levels, 20 informants from the school having two levels, and 10 informants from the schools having a single level only.

The names of schools selected according to educational sub-district level of school, type of management, and the number of parents interviewed are furnished in Table 5.1.

The criterion adopted for selecting schools was to give proper representation to schools from town areas, semi-urban, and village areas. Accordingly, the sample schools were selected; moreover, factors like spatial difference and concentration of schools were also taken into consideration.

In order to evaluate the private cost of education, concerned admission registers of the study period were verified and a random selection of pupils was carried out. The parents of the pupils selected were contacted and information regarding the private cost of schooling was obtained.

The major items constituting the private cost of school education considered in the present study consist of academic expenses and incidental expenses. The major components of the academic expenses are the following (a) fees paid to schools (AC-AT); (b) private tuition fee (AC-BT); (c) cost of books (AC-CT); (d) cost of stationery (AC-DT); (e) cost of uniforms (AC-ET); and (f) question paper charges (AC-FT). Incidental expenses include (a) travel expenses (I.E. AT); (b) subscriptions to periodicals associated with the study (IE-BT); (c) clothing (IECT); (d) donations to PTA fund (IE-DT); (e) special fee for computer education, moral science education, etc. (IE-ET) and (f) hostel fee and (g) expenses on study tour.

**Table 5.1 Schools and Parents Selected for Study Management and Level-wise**

Sl. No.	Name of School	Educational Sub-district	Levels	Manag-ement	No. of Parents
1	Govt. VHSS Odakkali	PBVR	All	Govt.	30
2.	Govt. Girls H.S. Perumbavoor	PBVR	U.P & HS	Govt.	20
3.	Govt. L.P.S. Okkal	PBVR	L P	Govt.	10
4.	Ganapathy Vilasam School Koovappady	PBVR	UP & HS	Unaided	30
5.	Jayakeralam HSS Pulluvazhi	PBVR	U P & H S	Aided	20
6.	SN HSS Okkal	PBVR	U P & H S	Aided	20
7.	Anitha Vidhyalaya Thannippuzha	PBVR	U P & H S	Un-aided	20
8.	St. Mary's H S. Aluva	Aluva	UP & HS	Aided	20
9.	MA HS Thuravoor	Angamaly	HS	Aided	10
10.	Akavoor HS, Sreemoolanagram	Aluva	U P & HS	Aided	20
11.	St. Thomas HS Malayattor	Angamaly	UP & HS	Aided	20
12.	MA HS Nedumbassery	Angamaly	UP & HS	Aided	20
13.	SNDP HS Neeleeswaram	Angamaly	UP	Aided	10
14.	Govt. UPS Illithodu	Angamaly	UP	Govt.	10
15.	Govt. LPS Neeleeswaram	Angamaly	LP	Govt.	10
16.	Brahmanandodayam High School, Kalady	Angamaly	All	Aided	30
17.	Viswa Jyothi Public School, Angamaly	Angamaly	All	Un-aided	30
18.	Islamic HS Aluva	Aluva	UP & HS	Un-aided	20
19.	Govt. HSS Nayathodu	Angamaly	All	Govt.	30
20.	Queen Mary's UP School Mudical	PBVR	L P and UP	Un-aided	20

The academic and the incidental expenses are calculated for the whole academic year (June to March). The item-wise criteria of calculating cost are given in the Table 5.2.

**Table 5.2 Criteria for calculation of academic and incidental costs**

S. No.	Item	Calculation Base
1	Free in the school	Total for the academic year
2.	Private tuition	10 months
3	Texts & Books	10 months
4.	Stationery	10 months
5.	Uniform	Actuals
6.	Examination fee, question paper charges	Actuals for three terms
	<b>Incidental Expenses</b>	
7.	Travel expenses	10 months
8.	Subscription to periodicals	10 months
9.	Clothing (other than uniform)	Actuals
10.	Special fee for computer education and moral science	Yearly
11.	Donations to PTA	Yearly
12.	Hostel	Actuals
13.	Study tour	Yearly

For collection of information on institutional costs, an interview schedule was used. With the help of the Heads of schools, office staff, managers, officials, former staff and knowledgeable local persons, the schedules were filled.

The calculation of institutional cost is approached from two different angles. One from the side of fixed costs (non-recurring costs) and the other from the side of recurring costs. In non-recurring cost, value of land, buildings of the schools, library, equipments in laboratory and furniture have been taken into account. Recurring costs include salaries of teaching, non-teaching and other staff, scholarships, stipends and administrative and maintenance costs.

### **Socio-economic status of the sample parents**

The 400 parents selected for interview consisted of 207 Hindus, 122 Christians, and 71 Muslims.

Data were also collected to obtain an idea about the number of persons employed in the sample. In the households of the 400 parents, 309 had only one income earner each; in 88 households there were two earning members each; more than two earning members were reported only in three households.



In almost one-half the households, there was only one child each obtaining school education. In more than one-third of the households there were two school-going children each; only less than one-sixth of them had three children each attending school.

The incomes status of the parents of the students is given in Table 5.3.

**Table 5.3 Income Status of the Household**

<b>Income</b>	<b>No. of Persons</b>	<b>Percent</b>	<b>Cumulative %</b>
Below 10000	-	-	-
10000-20000	90	22.5	22.5
20000-30000	134	33.5	56.0
30000-above	176	44.0	100.0
Total	400	100	

From the above Table it may be well understood that 44 percent of the parents belonged to the category whose annual income is greater than Rs 30000. The corresponding figures for annual income between Rs 1000, 20000, and 20000-30000 are 22.5 percent and 33.5 percent respectively.

## 6. Private Cost of School Education

Information on parental cost (private cost) was collected from 400 parents; of these 120 parents send their children to unaided schools, 120 parents to government schools, and the rest 160 aided schools.

Of these 400 children, 67 belonged to the LP section, 151 to the UP section, and 182 to HS section.

### Average Total Private Cost

As already pointed out, the private cost of education includes the various items of expenses associated with schooling borne by parents. They comprise academic expenses and incidental expenses. Academic expenses are tuition and other fees paid to the school, fees for private tuition, cost of books and stationery uniform, and payments for question papers, etc.

Incidental expenses, on the other hand are those expenses incurred by the parents to increase the facility of learning for promoting the overall development and increasing the efficiency of the child. The major items falling under incidental expenses are travel, subscriptions to weeklies and journals, clothing, special fee for moral science education, donations to PTA, hostel charges, and charges for study tours.

The private cost of education management-wise and level-wise is estimated here for the three sub-districts together (Table 6.1). It is observed that while there exist only small differences in cost as between the government and the aided schools, costs in unaided school come to more than four times of that in government schools at the lower primary level, more than three times at the upper primary level, and more than double at the high school level. The unaided agencies collect huge donations from students at the time of entry. These agencies themselves provide the stationery items and uniform articles to students at exorbitant prices. Children studying in unaided schools spend large amounts for transportation, special fee for moral science and computer education, clothing, donations to PTA, and study tour.

**Table 6.1 Average Total Private Cost of Education Level-wise and Management-wise (in Rs.)**

Levels	Management		
	Government	Aided	Un-aided
L.P. (I-IV)	2313	3019	9100
U.P. (V-VII)	2992	3357	9281
H.S. (VIII-X)	4676	4421	10608

The expenses associated with schooling in the case of government and aided schooling is comparatively small. No tuition fees are levied in these schools. The other items of fees – admission fees, games fees, library fees, examination fees, etc – are also low. At the lower

primary level, private costs are higher in aided schools than in government schools mainly because parents of the former spend more on providing facilities to their children in autorickshaws and other vehicles. At the upper primary level, not much difference is observed between the two.

But at the high school level a difference of Rs 1100 annually is observed. Costs are found higher in government schools, due mainly to higher expenses incurred under private tuition fees.

### **Constituents of Average Total Private Cost – An Overview**

**Academic Costs:** Academic costs are the highest in unaided schools at all levels of school. The differences are small between the government and the aided schools (Table 6.2).

**Table 6.2 Academic Costs Levels of School and Type of Management (in Rs)**

Levels	Management		
	Government	Aided	Un-aided
L.P.	922	1489	5473
U.P	1399	1347	5599
H.S.	2159	1657	6530

Incidental expenses also show the same pattern (Table 6.3).

**Table 6.3 Non-Academic Expenses (in Rs)**

Levels	Management		
	Government	Aided	Un-aided
L.P.	1391	1530	3627
U.P	1593	2010	3682
H.S.	2517	2764	4078

It is seen that academic costs constituted between 40 percent and 47 percent in government schools, 38 percent and 50 percent in aided schools, and more than 60 percent in unaided schools (Table 6.4).

**Table 6.4 Proportions of Academic Costs and Non-academic Costs in Total Private Costs: Level-wise and Management-wise (in percentage)**

Level	Management					
	Government		Aided		Unaided	
	Academic cost	Non academic cost	Academic cost	Non academic cost	Academic cost	Non academic cost
LP	39.9	60.1	49.3	50.7	60.1	39.9
UP	46.8	53.2	40.1	59.9	60.3	39.7
HS	46.2	53.8	37.5	62.5	61.6	38.4

Besides, Private costs in unaided sector were 393.4 percent of that in the government schools at the lower primary level, 310.2 percent at the upper primary level, and 26.9 percent at the high school level. The cost differences as between government schools and aided schools are small at all the three levels (Table 6.5).

**Table 6.5 Proportions of Private Costs in Aided Schools and Unaided Schools as Percentage of Costs in Government Schools**

Levels	Management		
	Government	Aided	Un-aided
LP	100.0	130.5	393.4
UP	100.0	112.2	310.2
HS	100.0	94.5	226.9

### Academic Expenses – Item-wise analysis

#### *Fees in the School (AC-AT)*

Tuition fees are not levied in the departmental and the aided schools at the lower and upper primary and the high school levels. But in the case of unaided schools, heavy tuition fees are levied at all levels. The rates of fees vary from school to school. In the sample schools, the rate ranged monthly between Rs 900 and Rs 120. The table below shows the average fees, average annual tuition fees levied in the sample schools.

**Table 6.6 Average Fee Rate per Year (Rs)**

Levels	Management			
	Government	Aided	Unaided	Proportion of Total Academic Costs
L.P.	-	-	3138	57.3
U.P	-	-	2761	48.1
H.S.	-	-	3490	63.8

#### *Private Tuition Fee (AC-BT)*

Expenditure on private tuition fees (AC-BT) incurred by parents for their children at the three levels of school, studying in institutions under the different types of management is shown in Table 6.7.

**Table 6.7 Average Private Tuition Cost to Total Cost (in Rs)**

Levels	Management		
	Government	Aided	Un-aided
L.P.	124	460	675
U.P	343	420	952
H.S.	677	580	1041

Though the proportions of expenses under private tuition fees are low in the unaided sector in absolute amounts, the expenditure is far higher than in government schools and the aided schools.

#### ***Expenses on Text and other books (AC-CT)***

The expenses on textbooks and other reading material form a sizeable proportion of academic costs (Table 6.8).

**Table 6.8 Expenses on Text and Other Books (in Rs)**

Levels	Management		
	Government	Aided	Un-aided
L.P.	179	280	552
U.P.	305	275	586
H.S.	467	370	603

Under this item also, expenses are far higher in the unaided schools, though in terms of proportions they look smaller.

#### ***Stationery Expenses (AC-DT)***

Similar is the case with the other items of academic costs such as stationery and uniforms (Tables 6.9 and 6.10).

**Table 6.9 Average Total Cost on Stationery (in Rs)**

Levels	Management		
	Government	Aided	Un-aided
L.P.	190	285 (10%)	347 (4%)
U.P.	237	216 (9%)	400 (4%)
H.S.	305	251 (8%)	351 (3%)

#### ***Expense on Uniforms (AC-ET)***

**Table 6.10 Expenses on Uniforms (in Rs)**

Levels	Management		
	Government	Aided	Un-aided
L.P.	410 (22%)	440 (15%)	630 (8%)
U.P.	493 (19%)	410 (16%)	775 (9%)
H.S.	693 (16%)	415 (14%)	930 (9%)

#### ***Expenses on Examination Fee, Question Paper Charges***

Examination fees and question paper charges levied from pupils under the three types of management also vary widely (Table 6.11).

**Table 6.11 Expenses on Examination Fee, Question Paper Charges (in Rs.)**

Levels	Management		
	Government	Aided	Un-aided
L.P.	19 (1%)	24 (.8%)	131 (1.5%)
U.P	21 (.8%)	26 (1.0%)	125 (1.4%)
H.S.	47 (1.6%)	41 (1.3%)	115 (1.1%)

The average academic expenses by components between levels and types are presented in detail in Table 6.12.

**Table 6.12 Average Academic Expenses by Components: Level-wise and Management-wise (Rs)**

Components	Govt.			Aided			Unaided		
	LP	UP	HS	LP	UP	HS	LP	UP	HS
Fee in the School	-	-	-	-	-	-	3138	2761	3490
Private tuition	124	343	677	460	420	580	675	952	1041
Text & Books	179	305	437	280	275	370	552	586	603
Stationery	190	237	305	285	216	251	347	400	351
Uniform	410	493	693	440	410	415	630	775	930
Exam fee & Question paper charges	19	21	47	24	26	41	131	125	115
Total	922	1399	2159	1489	1347	1657	5473	5599	6530

### **Incidental expenses**

Item-wise data on average incidental expenses (non-academic private costs) per pupil are furnished in Tables 6.13 to 6.18.

#### ***Travel Expenses (IE-AT)***

Of the 20 sample schools, all the four unaided schools and two of the aided schools provide vehicle services. Students in the other schools use other means of transportation such as autoriskshaw and line buses.

The costs incurred per pupil in connection with travel are given in Table 6.13. The travel charges for using the vehicle services of the schools are fixed by the concerned education agencies themselves. In the case of one aided school (BHS, Kalady), a concession is granted to those parents who send more than one child to that school.

#### ***Subscriptions to Weeklies, Journals etc. (IE-BT)***

Subscriptions to weeklies, journals, and other publications associated with schooling are

another major component of incidental expense. In all the three levels of school under the different types of management, the parents incur expenditure on this item (Table 6.14).

**Table 6.13 Average Travel Expenses (IE-AT) (in Rs)**

Levels	Management		
	Government	Aided	Un-aided
L.P.	342	642	1990
U.P.	368	597	1628
H.S.	505	425	1739

**Table 6.14 Expenses Relating to Weeklies, Journals and Other Publications**

Levels	Management		
	Government	Aided	Un-aided
L.P.	500	100	516
U.P.	178	337	460
H.S.	382	1133	450

Under this item also, expenditure is the highest in the unaided sector. The parents of the students of high school section, both government and aided schools are spending large amounts on this account. This may be due to the fact that while providing the information, they included the expenses on guides and printed notes.

#### ***Expenses on Clothing (IE - CT)***

Expenditure on school uniforms and other clothing for pupils constitutes a major item for private non-academic costs. Under this item differences between the unaided and the other two sectors are much lower than under other items (Table 6.15).

**Table 6.15 Average Clothing Expense per Student (in Rs)**

Levels	Management		
	Government	Aided	Un-aided
L.P.	459	595	715
U.P.	720	577	991
H.S.	1036	559	979

#### ***Donations to PTA (IE – DT)***

Donations to PTA fund are compulsory in unaided schools, while in the government and aided schools it is optional. Moreover, the SC/ST students are exempted from the payment of the PTA fund and other donations in these schools. The average PTA fund expenses incurred per pupil are shown in Table 6.16.

**Table 6.16 Average Parental Expenses on PTA Fund and Other Donations**

Levels	Management		
	Government	Aided	Un-aided
L.P.	20	36	108
U.P	27	24	100
H.S.	53	25	130

***Expenses on Moral Science and Computer Education (IE-Et)***

Some schools in the sample charge a fee for moral science and computer education. This type of expense is incurred for all pupils in unaided schools and pupils in the Unaided and the high school sections in aided schools. In government schools, expenditure under this item is found to be confined to the high school level (Table 6.17).

**Table 6.17 Average Expenses Expense on Moral and Computer Education (in Rs)**

Levels	Management		
	Government	Aided	Un-aided
L.P.	112	-	7
U.P	218	-	250
H.S.	192	41	260

**Tour Charges (IE-FT)**

Though participation in study tours (excursion) is optional for pupils, expenditure on this item is not, on the average, insignificant (Table 6.18). Pupils in un-aided school come often under pressure from the school authorities to take part in study tours and other similar activities.

**Table 6.18 Average Expenses on Study Tour (in Rs)**

Levels	Management		
	Government	Aided	Un-aided
L.P.	70	150	186
U.P	300	225	285
H.S.	500	362	588

Table 6.19 shows the different components of incidental expenses. It is found that travel costs are the single major item under this category of expenses. Clothing and subscription to periodical come next in that order.



**Table 6.19 Incidental Cost Components and Its Effect on Average Private Total Cost**

<b>Components</b>	<b>Govt.</b>			<b>Aided</b>			<b>Unaided</b>		
	<b>LP</b>	<b>UP</b>	<b>HS</b>	<b>LP</b>	<b>UP</b>	<b>HS</b>	<b>LP</b>	<b>UP</b>	<b>HS</b>
Travel	1990	1628	1739	342	368	505	642	597	425
Subscriptions	516	460	450	500	178	382	100	337	1133
Clothing	715	991	979	459	720	1036	595	577	559
Donations to PTA	108	100	130	20	27	53	36	24	25
Special for Moral science Education and Computer education	112	218	192	-	-	41	7	250	260
Study tour	186	285	588	70	300	500	150	225	362
Total	3627	3682	4078	1391	1593	2517	1530	2010	2764

## 7. Institutional Costs of School Education

Having discussed the private (parental) cost of education, we examine in this section, institutional costs and their components. Institutional costs comprise costs borne by the educational agencies. Institutional costs consist of fixed costs (non-recurring) and recurring costs.

The items included in the estimation of fixed costs are (1) value of land (2) building (3) furniture items (4) equipment and library books. The major components taken into consideration in the evaluation of non-recurring costs are (1) salaries of teaching and non-teaching staff (2) scholarships and stipend (3) assistance given to weaker sections, and (4) administrative and maintenance charges.

The method used in estimating the components of the institutional costs is discussed in the following paragraphs.

In calculating fixed costs (non-recurring costs) associated with land, the values are obtained from the sub-registrar offices and from the records of the *Taluk* offices concerned. The corresponding figures representing the respective areas in which the sample schools are situated are collected from the official records of sub-registrar offices. In calculating the land value, annual rental value of the land is taken into consideration. In fixing the annual rental value, the calculation of Public Works Department (PWD) is followed. Since land value is highly fluctuating from period to period, eight percent of the land value reported by the offices of the concerned Sub-registrars and Tahsildars are taken into account in estimating land values. The justification for taking eight percent of the land value is that land being a fixed factor, its services is spread over many years.

After computation of the land value based on annual rental value, the next problem is the calculation of the cost of buildings of the schools. In computing the cost of the building too the plinth area approach followed by State PWD is followed. In estimating the cost of building the total plinth area, the year of establishment, the type of building, roofing materials used for construction, etc are taken into account. The standard rule of depreciation concept is used in calculating the cost of buildings.

As regards the estimation of the cost of furniture in the school the values reported for each item by the school authorities based on their official records are taken into account. The items of furniture utilised by the schools include benches, desks, blackboards, tables, almirahs, and chairs.

The estimation of the cost associated with equipment (teaching aids) and library books is done based on the information supplied by the concerned educational institutions.

For calculating the recurring cost component of institutional costs, the following method has been adopted.

The Kerala Education Act 1958 and the Chapter 24 of Kerala Educational Rules of 1959 prescribes the qualification mode of selection and payment of salaries to the teachers and other staff in the educational institutions run by government and aided agencies. Chapter 24 (AA) of KER defines the salary structure of the teaching and non-teaching staff of the schools under the unaided category. [GO (MS) NO. 82/2000 Gen. Edn. Dt. 03.03.2000]. Basing on the above rules and regulations contained in the KER and the relevant records available in schools the salary component, which forms the most important item of the recurring cost have been calculated. For this purpose, the average salary of the teachers and the non-teaching staff for a year was taken into consideration. The reference period of calculation was 1998-'99. A major problem involved in the calculation cost on this time is that there are certain, salary costs, which cannot be separately calculated, for LP, UP, and HS sections because in our present study there are certain sample schools having all the three levels. So in the case of the salary component of the non-teaching staff, the apportionment of the expenditure among the three levels was a problem.

The other major component is the scholarship amount given to students, like the Lower Secondary Scholarship given to the students under lower primary section and the Upper Secondary Scholarship given to the upper primary sections. In addition to this, the amounts given as scholarships and stipends, lump sum grant, assistance to Muslim students (Muslim scholarship), and the assistance given by the school management to selected students are taken into consideration.

Another item constituting cost is maintenance and administrative cost. A major part of the maintenance cost is met by grants given by the government to departmental and aided schools. The PTA and the *Mathrusangamam* (Mothers' Association) also contribute to the conduct of maintenance of school buildings. In the case of un-aided schools there are security guards and watchmen. For giving their salaries, the management incur some cost.

All schools taken for the present study had own buildings. The buildings had roofs of tile, reinforced concrete, or with a combination of both. Four schools had buildings with tiled roof, four schools had reinforced concrete for roofing, and the rest 12 schools had buildings with both tiled roofs and concrete roofs.

With regard to the roofing of the schools, all of them taken for the study, comply with the obligation laid down in the chapter IV Rule 5 A of the Kerala Educational Rules (KER) of 1959. In the provision of classroom furniture items too, the schools followed the rules and regulations prescribed in KER.

### **Non-recurring costs**

In calculating the value of land, eight percent of the land price reported in the sub-registrar offices and information received from the *taluk* offices are used.

The value of buildings is calculated based on the standard rules followed by the Public Works Department of the government in the calculation of value of buildings (based on plinth areas and nature and type of building). For furniture items, the average price of each

item quoted by the four suppliers is taken. For estimating the value of equipment, the book values of the items recorded in the respective registers of the school are taken.

The analysis is relating to the non-recurring cost showed the fact that it comes to a mean value of Rs 122339 for the six government-managed schools in the sample. In the case of the aided school sector comprising 10 sample schools, the corresponding figures are about two-fold, Rs 235030. In the case of unaided schools in the sample, the value is much higher; it comes to Rs 585311. These schools have been started only recently, have more land area than government schools or unaided schools have, are located in urban centres, and the buildings are large and modern with all of them having reinforced concrete for roofing.

On the contrary, of the six departmental schools in the sample, four are located in the *panchayat* areas. Moreover, the majority of these schools were started much earlier, during the 1960s.

In the case of the schools in the aided sector also, all of them are located in *panchayat* areas, and had started functioning in the early 1950s.

The per unit non-recurring cost (per student) came to Rs 194 in departmental schools, Rs 239 in aided schools, and Rs 431 in unaided schools.

### **Recurring Cost – An analysis**

Recurring costs constitute the major component of the institutional costs. Institutional costs show huge differences among schools, and between different types of management due to differences in their size, apart from differences in salary structures and administrative costs. They are the lowest per government school (Rs 2938975) and the highest in aided schools (Rs 4594855); in the unaided schools, the corresponding figure comes in between, Rs 4298976. Among the items of recurring costs, salaries (teaching & non-teaching), is the most important.

A more dependable comparison would be in terms of recurring cost per pupil. Table 7.1 shows the total recurring cost per pupil under the three types of management.

**Table 7.1 Recurring Cost and Per Unit (student) Recurring Cost by Type (in Rs)**

Type of Management	Per Unit Recurring Cost			
	L PS	UPS	HS	Total
Govt.	2421	2875	3904	4129
Aided	1806	2523	3565	3565
Un-aided	804	733	2706	3715

### **Analysis of the Unit Cost of School Education**

The unit of school education is composed of two elements i.e., the institutional and private cost. This section deals with an analysis of the unit cost of school education with respect to

the schools taken as samples in the study area by types. Table 7.2 gives a description regarding the behavioural pattern of the unit cost of school by type.

**Table 7.2 Unit Cost of School Education**

<b>Types</b>	<b>Private Cost</b>			<b>Institutional Cost</b>			<b>Total Cost</b>		
	<b>LPS</b>	<b>UPS</b>	<b>HS</b>	<b>LPS</b>	<b>UPS</b>	<b>HS</b>	<b>LPS</b>	<b>UPS</b>	<b>HS</b>
Govt.	2313	2992	4676	2615	3069	4098	4928	6061	8774
Aided	3019	3357	4421	2045	2762	972	5064	6119	5393
Un-aided	9100	9281	10608	1235	1164	3137	10335	10445	13745

The unit cost behaviour shows that the cost of schooling in unaided sector is much higher than that in the other two sectors. This is due primarily to the fact that the private cost component of unit cost of education is very high in the case of unaided schools. In contrast, the institutional cost component is high in the case of the government and the aided schools. The salary scales of the teaching and the non-teaching staff in government schools and schools in the aided private sector are much higher than in the unaided schools.

## **8. Educational Performance**

The managerial practice of the schooling in Kerala is based on the Kerala Education Rules of 1959. The government schools come under the administration of the Director of Public Instruction. The 14 Deputy Directors carry out the administration with the help of District Educational Officers and Assistant Educational Officers.

The High School Sections are under the direct control and supervision of the District Educational Officers (DEOs); the heads of school carry out the administration under instructions from DEOs. The lower primary and upper primary sections of the government-managed schools are managed by Headmasters under directions by Assistant Educational Officers.

The funds for administration of these institutions are given by the General Education Department as per the budgetary allocations. Receipts from students by way of admission fees, examination fees etc, form only an infinitesimally small proportion of the expenditure incurred by the government by way of recurring cost. The government schools are starved of funds for acquiring teaching aids, and for maintenance and repairs to buildings, furniture, and equipment. To compensate for these deficiencies, PTAs perform a valuable service.

Parent-Teacher Associations of a couple of government schools in the sample are found to be active and committed to the development of the schools concerned. They have installed facilities for supply for the pupils. They also take active interest in promoting the sports, games and cultural programmes in the schools. They have instituted prizes and awards for the successful candidates in sports and games, cultural events and academic competitions.

The management and management practices of the aided schools are found to be better and more effective than in government schools. The instructions from officialdom are strictly and effectively followed by aided schools. Since the management of these schools receive large sums by way of donations, they are in a better position than government schools to spend on activities for the general welfare of schools. The managements, heads of the schools, and the teaching and non-teaching staff are observed to be keenly interested in improving the status of their schools. In recent years, they have become more concerned in the face of falling enrolment due to demographic factors and the growing competition from the unaided schools.

The management of schools in the unaided sector is keen in providing increasingly large facilities for the students. These managements charge hefty tuition fees and a variety of other levies and collect special contributions from the parents, throughout the academic year. All the unaided schools in the sample are the institutions supported and managed by rich religious groups. In the provision of conveniences to students, the unaided schools therefore stand way ahead of government schools and aided schools. In these institutions too PTAs are functioning actively. The teaching and non-teaching extend their full support to the management despite the fact that their service conditions are poor and their salary scales are much lower than in government and private aided schools.

In terms of academic performance also the unaided schools are far ahead. The difference in examination results is not due to excellence in coaching but to the strict discipline and extra care given to children in the form of special tuitions given by the schools themselves. They present pupils to public examinations only if they perform adequately well in the termly examinations.

The difference in the educational performance cannot be and should not be attributed to low quality of teaching in government and aided schools. The low performance is attributed primarily to factors like poor financial background of students, lack of availability of study materials such as textbooks, notebooks, and stationery for the pupils. Paradoxically, teachers in government schools and private aided schools are in general better qualified and more experienced than teachers in unaided schools.

## Appendix 1 Cost of Buildings of Schools

Sl. NO.	Name of School	No. Of Storeys	Plinth Area (Sq. Ft.)	Nat Bu
1	M G M H S, Nayahtodu	2	26400	Tile
2	Queen Mary's Mudical		500	Concr
3	Govt. L P S, Illithodu		800	Tile
			3250	Concr
4	B J B S, Kalady		1840	Tile
	B S U P S, Kalady		6000	Tile
	B H S, Kalady	3	8400	Concr
5	St. Mary's H S, Aluva		19250	Tile
6	Islamic H S, Aluva		5199	Concr
7	M A H S, Nedumbassery		9738	Concr
8	S N D P H S, Neeleeswaram		16979	Concr
9	S N H S, Okkal		16800	Tile
10	Jayakeralam – Pulluvazhy		13988	Tile
11	Ganapathy Vilasam – Koovappady		14250	Tile



**Appendix 1 Contd.**

12	Govt. H S, Odakkali	2	11250	Tile
13	M A H S, Thuravoor	2	9250	Tile
14	Akavoor H S		8000	Tile
15	Govt. L P S, Okkal		2500	Tile
16	Govt. L P S Neeleeswaram		17030	Concre
				Tile
17	Govt. Girls H S Perumbavoor		9117	Concre
			13675	Tile
18	St. Thomas H S Malayattoor	1	13,945	Tile
19	Viswajyothi Public School	3	86,080	Concre
20	Anita Vidhyalaya	2	12000	Concre

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