

CHAPTER V

SPECIAL STUDIES ON PUPIL TEACHER RATIOS

ENROLMENT BASED PUPIL TEACHER RATIO

The Importance

5.1.1. The bulk of education expenditure in Tamil Nadu is spent on salaries to teachers. 96 percent of the expenditure in 1975-76 budget is on salaries, grants-in-aid, contribution and subsidies. This includes salaries to non-teaching staff and a certain percent of subsidies and grants other than teaching grants. Even allowing 10 percent for such other items coming under non-teaching salary category, nearly 86 percent of expenditure goes for teachers' salaries. Therefore, teacher cost is the major item which needs our attention for effective cost control and meaningful cost reduction in the education

system. The next area for our indepth analysis will be the zone of actual teacher requirements for normal teaching under prescribed norms.

Pupil-teacher ratio

5.1.2. Pupil-teacher ratio is the index to measure the teacher provision in the education systems. It is normally computed as a ratio of the number of pupils on roll and the number of teachers employed. The pupil-teacher ratio varies with (a) the level of education, being large at the lower and small at the higher levels; (b) the effectiveness of the individual teacher (the average Japanese Primary School for instance has a class size of 50/60 and yet is one of the most efficient systems); (c) the level of development and financial resources of the States; and (d) the birth rate which usually determines the size of the class. The teacher-pupil ratio is the most important factor determining costs on primary education and consequently the budget provisions.

SPECIAL STUDY ON PUPILS ATTENDANCE AND TEACHER APPOINTMENT IN PANCHAYAT UNION SCHOOLS

Objective

5.2.1. Majority of primary schools (70 percent) are managed by Panchayat Unions. Therefore, any strategy to streamline the education system should first of all be adopted in the Panchayat Union schools. With this view a special study was conducted on pupils' attendance and teacher appointment in Panchayat Union schools. Government have issued orders in G.O. Miscellaneous No.250 as early as 1964 to appoint teachers on the basis of average attendance. The objective of the special study

was to find out whether the norms fixed by the Government in their order Miscellaneous No.250, dated 22nd February, 1964, governing the pupil-teacher ratio are strictly adhered to in the Panchayat Union schools without any deviation and to explore how far control and corrective measures to improve the efficiency of the primary education system can be taken up.

Sample size

5.2.2. Out of a total of 374 Panchayat Unions in the State, primary education has been entrusted to 364 Panchayat Unions. Out of these 364 Panchayat Unions, 2 each from Chingleput and North Arcot were selected for the study. From each Union, six schools were selected involving a field study of 24 schools.

The aspects covered

5.2.3. Care was taken to see that the necessary aspects of the question are covered in the study, viz., dropouts, monthly average attendance and pupil-teacher ratio as a mean of testing whether the norm referred to for the appointment of teacher in the primary schools have been complied with or not.

Tamil Nadu norms

5.2.4. For this State, the pupil-teacher ratios as fixed in Government Order No.250, Education, dated 29th February 1964 for different types/levels of schools and for division of sections are as follows :

TABLE V-1

TEACHERS AUTHORIZED BY G.O. Ms. No.250, Education Dept.,
dated 29th February, 1964 (Summarised)

S.No.	Category of schools	No. of teachers admissible.	Monthly average attendance required
1.	Single teacher school ..	1	20
2.	Other than Single Teacher schools with combination of two or more standards ..	2	30 and above
		3	55 and above
		4	75 and above
		5	95 and above
3.	If the standards are divided into two or more sections for each section ..	1	35
		2	Between 36 and 70
		3	71 105
		4	106 140
		5	141 175
4.	If the standards are not divided into two or more sections ..	1	20
		2	30 and above
		3	55 and above
		4	75 and above
		5	95 and above
5.	(a) Upper Primary standards of Upper Primary schools for each Std. (VI to VIII) ..	1	20
	(b) For each section ..	1	35
		2	36 and above
		3	61 and above
		4	81 and above
		(and so on afterwards in slabs of 20)	
6.	Combination of standard if there is no minimum average attendance of 20 in each of Upper Primary standards ..	1	20
		2	30 and above
		3	Exceeds 55
7.	Incomplete Upper Primary schools with standards VI or VII or the highest ..	2	30 and above
		3	55 and above
		4	75 and above
		5	95 and above

(If the average attendance is less than 20 even if Stds. VI and VII put together, the average attendance of Upper Primary standards may be combined with the overall average attendance of the primary standards which have not been divided into two or more sections)

Note : Upper primary = Higher primary

Application

5.2.5. It will be instructive to examine how far the norms fixed by the Government in their order No.250, Education, dated 29th February 1964 concerning the pupil-teacher ratio are adhered to in the Panchayat Union schools.

The Background

5.2.6. In accordance with Government Order No.250, Education, in practice, the Panchayat Unions are competent to appoint teachers for the schools under their control on the basis of the formula governed by the pupil-teacher ratio. Each year the District Educational Officer allocates the number of new teacher's posts based on the financial sanction available. For purpose of calculating the average attendance each school under any particular management is treated as a unit in the case of aided schools. In the case of Panchayat Unions, however, all the schools under the direct management of Panchayat Union are treated as a single unit. This practice seems to originate from para 7 of an instruction issued by the Director of School Education in clarification of Government Order, Miscellaneous No.793. The relevant para reads 'In the case of Panchayat Union schools, the net additional enrolment in all the schools put together may be taken into account for purpose of utilising the additional teacher's posts. If additional posts are required over and above the posts now allotted (one for each Panchayat Union) the Panchayat Union Commissioner may apply to the District Educational Officer, who will allot additional posts to the extent necessary after satisfying himself whether all the conditions regarding additional enrolment, pupil-teacher

ratio and other relevant rules in the matter are fulfilled. The grant due to the aided schools is sanctioned by the District Educational Officer every month. While sanctioning the grant any decrease in the average attendance in the month will be taken into account and the grant will be disallowed. In the case of Panchayat Unions, the grant is sanctioned by the Director of School Education in four equal instalments in the months of April, July, October and January on the basis of annual educational budget of each Panchayat Union as approved by the Director of Rural Development. The private management is eligible for 100 percent teaching grant plus a maintenance grant of 6 percent. The Panchayat Union as per Tamil Nadu Panchayat Act, 1950, is responsible for primary schools in its area and the Government shares the cost through the following system of grants :

Illustration as contained in Government Order, Miscellaneous No. 2077, Education, dated 29th September 1972

- (1) Total expenditure under Education Fund Account (ordinary)
- (2) Deduct: Per capita grant at Rs 6 with reference to 1971 census population
- (3) Balance
- (4) Deduct: New Education grant with reference to new classification and new percentage
- (5) Balance
- (6) 4/9th of local cess transfer
- (7) Balance to be met by the Panchayat Union from other sources

The practice

5.2.7. In practice, the inadequacy of average attendance in a Panchayat Union school is not an adequate reason to disallow the grant. It is enough if the monthly average attendance in all the schools of any Panchayat Union taken together is sufficient when comparing it with that of the total number of teachers working in the Union. Only if the monthly average attendance in all the Panchayat Union schools as taken together is not adequate to support the pupil-teacher ratio can the grant be disallowed. As to the junior-most teacher or teachers as the case may be provided in para 2(iii) of Government Order No.250, which reads 'the number of teachers fixed by the District Educational Officer should be continued until the next refixation and it would be the responsibility of the teachers and the managements ensure that the required attendance is maintained throughout. If the average attendance decreases in any month, the grant due to the junior-most teacher or teachers will be disallowed'.

Recommendation

5.2.8. As the need for a teacher has to be assessed only with regard to the attendance in each school and on that basis the proper deployment of teachers be effected, it is recommended that the practice as explained above should be dropped in future. Additional teachers may be sanctioned based on the attendance in each school and not on the basis of attendance in all the schools in a Panchayat Union put together.

Monthly average attendance and pupil-teacher ratio

5.2.9. The monthly average attendance for the different

schools covered in the study and the number of teachers that are admissible/sanctioned are shown in Table V-2.

5.2.10. The table shows that out of 24 schools covered by the sample, 7 schools have teachers according to the norms prescribed and all others have had deviation. In the case of 12 schools there is a deficit and in 5 schools there is a surplus. While deficiency goes upto 6 teachers, the surplus recorded is 3.

Random check and the staff position

5.2.11. This is the picture that emerges, if the position of monthly attendance recorded is accepted as true. And this picture shows surplus staff to be negligible. A random check made by the study team in the case of 24 schools by questioning the pupils however raises a question about the reliability of the reported attendance.

5.2.12. Table V-3 shows the average attendance in the month of July 1973 (which is the month for fixing the admissibility of teachers for the school) as compared to the actual attendance at the time of the visit.

5.2.13. It may be seen that when comparing the reported average attendance with the actual attendance, the actual attendance is lower in most of the schools. In certain schools the actual attendance is as low as 50 percent of the reported average attendance. Special reasons like local celebrations of festivals or rains were not there to justify such a big disparity between average attendance and actual attendance on the day of visit so that the actual attendance can be taken to be normal attendance.

TABLE V-2

**REPORTED MONTHLY AVERAGE ATTENDANCE FROM MONTHLY RETURNS
OF 24 SCHOOLS**

Sl. No.	Panchayat Union School	Monthly average attendance during		Number of teachers		
		July 1973	Oct. 1973	Sanc- tion- ed	Eli- gible for July.	Eli- gible for Oct.
(1)	(2)	(3)	(4)	(5)	(6)	(7)
ACHARAPAKKAM						
1.	Perumbairkandigai	.. 178	166	9	9	8
2.	Kadamalaiputhur	.. 114	120	5	5	6
3.	Minnal Kilminnal	.. 35	33	2	2	2
4.	Kilathivakkam	.. 125	122	4	6	6
5.	Minal Chithemur	.. 76	79	4	4	4
6.	Gandhi Nagar	.. 118	121	5	6	6
KATTANKOLATHUR						
7.	Kelvoy	.. 97	97	5	5	4
8.	Ozhalur	.. 33	34	2	2	2
9.	Perumethanellur	.. 53	59	2	2	3
10.	Irugundampalli	.. 49	46	2	2	2
11.	Melkelvay	.. 37	33	1	2	2
12.	Kannivakkam	.. 48	53	2	2	2
CHENGAM						
13.	Thalaiyuthu	.. 133	106	5	6	5
14.	Arathavodi	.. 121	108	4	5	5
15.	Pinjur	.. 122	121	4	6	6
16.	Paramanandal	.. 238	179	12	9	9
17.	Kottavur	.. 109	121	4	5	6
18.	Kuppenatham	.. 138	133	9	7	6
KATPADI						
19.	Unnesalaismudram	.. 52	47	2	2	2
20.	Kilmothur	.. 81	82	2	4	4
21.	Karigeri	.. 138	133	5	6	6
22.	Senur	.. 64	72	3	3	3
23.	Kalinjur	.. 380	327	8	14	14
24.	Vatharanthengal	.. 262	233	12	13	11
TOTAL				113	127	124

TABLE V-3

ATTENDANCE AT THE TIME OF VISIT

S.No.	School	Ave- rage atten- dance in July '73	Actual stren- gth of staff	Actual atten- dance on the date of visit	Strength of staff support- ed by col.5	Staff rendered surplus/ deficit
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1.	Perumbaikondigai..	178	9	146	7	+2
2.	Kodumalaiyuthur ..	114	5	120	6	-1
3.	Minnal Kilminnal ..	35	2	26	2	-
4.	Kilathivakkam ..	125	4	87	4	-
5.	Minnalchithemur ..	76	4	39	2	+2
6.	Gandhi Nagar ..	118	5	90	4	+1
7.	Kelvoy ..	97	5	84	4	+1
8.	Ozhalur ..	33	2	23	1	+1
9.	Perumathanallur ..	53	2	45	2	-
10.	Irungundampalli ..	49	2	48	2	-
11.	Neikelvoy ..	37	1	33	2	-1
12.	Konnivakkam ..	48	2	44	2	-
13.	Thalaiyuthu ..	133	5	72	3	+2
14.	Arathavodi ..	121	4	102	5	-1
15.	Pinjur ..	122	4	59	3	+1
16.	Peramanandal ..	238	12	182	9	+3
17.	Kottavur ..	109	4	82	4	-
18.	Kuppanatham ..	138	9	117	6	+3
19.	Unnamalaisamudram..	52	2	36	2	-
20.	Kilmothur ..	81	2	65	3	-1
21.	Karigeri ..	128	5	115	6	-1
22.	Senur ..	64	3	62	3	-
23.	Kelinjur ..	380	8	231	10	-2
24.	Vetheranthangal ..	252	12	244	12	-
TOTAL		..	113		104	+9

On this basis, the staff rendered surplus is 9 in respect of the 24 schools spread over the 4 sample blocks which works out to 8 percent over the required staff strength.

Boosted attendance

5.2.14. The fact of boosted attendance is further corroborated by the Table V-4, which shows the disparity in attendance as recorded by the schools and the actual attendance for a particular day.

5.2.15. It can be seen from the Table V-4 that boosted attendance is shown for as many as 34 pupils (32 percent) in certain schools (in Minnal Chithamur and Thalaisyuthu) and it is not negligible in 5 other cases where it is 10 and above.

Average attendance during prescribed visits of inspectors

5.2.16. It is, however, strange to see that there is no notable disparity between the monthly average attendance as recorded by the school and the attendance as recorded by the Deputy Inspectors of Schools visiting the schools periodically as is brought out by Table V-5.

Practice contrary to Government norms

5.2.17. Government Order, Miscellaneous No.250, stipulates that the minimum average attendance for the continuance of any primary school shall be 20 and that no grant shall be calculated in a month for any teacher in a school if the average total attendance for the month is less than 20 pupils. The schools in Table V-6 are allowed to continue contrary to the instructions circulated in Government Order.

TABLE V-4

SCHOOL ATTENDANCE REPORTED AND VERIFIED

S.No. Panchayat Union School		Atten- dance marked on the date of study (visit)	Actual atten- dance after verifi- cation	False atten- dance
(1)	(2)	(3)	(4)	(5)
ACHANAPALLEM				
1.	Perumbairandigori ..	148	146	2
2.	Kilothivakkem ..	97	87	10
3.	Minnalchithamur ..	73	39	34
4.	Ganachi Nagar ..	114	90	24
CHENGAM				
5.	Thalaiyuthu ..	106	72	34
6.	Arathevodi ..	118	102	16
7.	Paramanandal ..	192	182	10
KATPADI				
8.	Kilmothur ..	68	65	3
9.	Karigeri ..	126	115	11
10.	Senur ..	66	62	4
11.	Kelinjur ..	235	231	4

Source : Study Report of the Director of Evaluation
and Applied Research, Madras

TABLE V-5

**SCHOOL ATTENDANCE REPORTED BY THE SCHOOLS AND
DEPUTY INSPECTORS OF SCHOOLS**

S.No.	School	Average atten- dance in July '73	Attendance at the time of Deputy Inspector's visit from June to October 1973		
			I Visit (4)	II Visit (5)	III Visit (6)
(1)	(2)	(3)	(4)	(5)	(6)
1.	Perumbairkandigai	178	-	-	-
2.	Kadambalapputhur	114	-	-	-
3.	Minnal Kilminnal	35	34	35	-
4.	Kilothivakkam	125	114	122	122
5.	Minnalchithamur	76	-	-	-
6.	Chanchi Nagar	118	104	106	-
7.	Kolvoy	97	93	-	-
8.	Ozhalur	33	30	-	34
9.	Perumathanallur	59	48	-	-
10.	Irungundampalli	49	50	49	52
11.	Melkolvoy	37	-	-	-
12.	Kannivakkam	48	54	-	-
13.	Thelaiyuthu	133	114	-	-
14.	Arathavodi	121	108	-	-
15.	Pinjur	122	114	98	-
16.	Paramanandal	238	181	-	-
17.	Kottavur	109	115	-	-
18.	Kuppenatham	138	144	106	-
19.	Unnamalaiyemudram	52	56	42	37
20.	Kilmottur	81	86	98	-
21.	Karigeri	128	123	101	-
22.	Senur	64	69	68	-
23.	Kalinjur	380	277	315	368
24.	Vetharunthangal	262	260	-	-

TABLE V-6

SCHOOLS CONTRAVENTING OF GOVERNMENT ORDER, MISCELLANEOUS,
No.250, EDUCATION

S.No.	Name of the school	Average attendance for October, 1973	Number of teachers working
1.	Bakurayanpettai ..	9	1
2.	Vadukkaputhur ..	9	1
3.	Mettunamalai ..	19	1
4.	Anandavaalai ..	9	1

5.2.18. In Government Order, Miscellaneous, No.251, Education, dated 29th June 1964, powers are given to the Director of Public Instruction in regard to opening of new schools as well as the allotment of additional teachers both in Panchayat Union areas and non-Panchayat Union areas. In pursuance of this order the annual budgetary and plan provisions for primary education is placed at the disposal of the Director and he is to allot the required provision to the District Educational Officers. In para 4 of the Government Order, Miscellaneous, No.1965, modifying the Order No.251, powers have been given to Panchayat Union Councils to open new schools without consulting the Education Department as follows :

"The Government direct that the Panchayat Union Councils be empowered to open new primary schools without consulting the Education Department subject to the fulfilment of the conditions that the population of the area is not less than 300

and that there is no primary school within a radius of one mile. The Panchayat Union Councils should, however, obtain recognition for the schools newly opened within three months from the date of opening of the schools. In all other cases, the Panchayat Union Councils should consult the Director of School Education before opening new schools."

5.2.19. The power conferred on Panchayat Union Councils lays down two conditions for opening of schools. The norm mentioned in the third condition, namely, the minimum number of pupils, 20 in a school for the entitlement of a teacher was not stipulated. This however coupled with treating the entire Panchayat Union as a unit for allotment of teachers has led to the opening of schools well below the minimum student strength as noted earlier.

No judicious distribution of teachers

5.2.20. Even within a Union, the teachers are not judiciously distributed as can be seen from the Table V-7.

5.2.21. Many an anomaly as described above arise due to dual control and supervision of education at primary level especially in respect of Panchayat Union schools. Further, the quality of education also suffers because, the teacher's position is difficult in Panchayat Union schools. Iqbal Hameed¹ analyses the teacher's position in Panchayat Union schools of Rajasthan clearly in his article 'Rural Local

1. S.H. Rudolph and I.L. Rudolph (ed), Education and Politics in India, Oxford University Press, Delhi, 1972, p.155.

TABLE V-7

DISTRIBUTION OF TEACHERS

Name of school		Number of teachers working	Number of teachers admissi- ble	Excess or defici- ency
1		2	3	4
ACHARAFARUKAM PANCHAYAT UNION				
Methor	..	9	6	+3
Nedungal	..	7	4	+3
Keelamur	..	7	5	+2
Baburayanpettai Colony	..	1	2	-1
Anaikunnam	..	1	3	-2
Porgal	..	3	5	-2
CHENGAM PANCHAYAT UNION				
Paramanandal	..	12	9	+3
Kuppanathan	..	9	7	+2
Anwarebad	..	2	5	-3
Mepaturai	..	2	4	-2

Source : Study Report of the Director of Evaluation
and Applied Research, Madras

Politics and Primary School Management' as follows :

"The teacher's position is made more difficult because of the multiple control by the Block Development Officers and the Extension Officer, Education on the official side and the pradhan, the sarpanch and the panchas (elected members of the panchayat) on the unofficial side. When the official and non-official wings conspire or stand at daggers drawn, his plight becomes pathetic."

5.2.22. Further the Report of the Panchayat Education Finance Enquiry Committee² (1970) found out that like all other departments agriculture, public works etc., there should be technical personnel to assist the Block Development Officers and Chairmen of Panchayat Union Councils in the management aspect of primary schools. The study found out that out of 375 Social Education Organisers/Extension Officers (Education), only 73 were teachers. As many as 230 were Grama Sevaks possessing the minimum general educational qualification. The committee also recommended: "The future vacancies of the posts of Extension Officers (Education) will be filled up in the ratio of 1:1:3 Gramasevak, Grade-I Panchayat Union Headmaster and direct recruitment or transfer from Education Department to be done by the Director of School Education." Implementation of this recommendation will help to improve the existing situation.

SCHOOL ACCOMMODATION AS A LIMITING FACTOR

Certain case studies

5.3.1. There is also the question of the relation of the number of teachers' posts not only to the number of

2. E.C.P. Prabhakar was the chairman of the Committee, Government of Tamil Nadu, Madras, 1970.

students in attendance but also to the number for whom there is actual accommodation in the school. It may be seen from the following table that the number of teachers actually required with reference to the accommodation available in a school may be less than the number of teachers required as per the new ratio :

TABLE V-B
AVERAGE ATTENDANCE AND NUMBER OF EFFECTIVE SCHOOL PLACES
AVAILABLE (JULY 1974)

School	Average Atten- dance of the school	Number of effec- tive school places avai- lable	Number of school places defi- cient	Total number of tea- chers eligible as per G.O.No. 250, Edu- cation, 29-2-64	Total number of teachers employed
1	2	3	4	5	6
A	549	200	349	18	14
B	309	115	194	11	7
C	439	191	248	15	12
D	504	228	276	17	13
E	445	204	241	15	9
F	1161	534	627	33	24
G	292	227	65	11	7

5.3.2: The above examples³ are actual cases of schools being entitled to a certain number of teachers on the basis of the established pupil-teacher ratio but who should

3. From investigations conducted in Madurai and Madras for Tamil Nadu Education Finance Enquiry Committee, 1975.

be sanctioned a smaller number on the basis of actual accommodation available.

AVERAGE ATTENDANCE AND RESULTING PUPIL-TEACHER RATIO — QUICK SURVEY

5.4.1. Due to various exogenous and endogenous factors and constraints, the average attendance of pupils is always short of the enrolment figures. Shortage in attendance of pupils is closely linked with dropouts. In order to examine the relation between the number of pupils reportedly enrolled in each school and the actual average attendance of pupils, at the school a quick survey (1975) of primary schools in the following four select ranges was undertaken by us.

- (1) Villupuram range (Urban)
- (2) Anniyur (Rural)
- (3) Krishnagiri (General) (Rural)
- (4) Krishnagiri (Block range) (Semi-urban)

5.4.2. Table V-9 shows the percentages of monthly average attendance as marked by the staff of the institutions and the average attendance as found during surprise visit.

Findings

5.4.3. It is observed from the table that the percentage of the average attendance to enrolment in Panchayat Union schools which are in rural areas ranges from 35.1 percent to 36.4 percent. Girls' attendance is less than

TABLE V-9

COMPARATIVE STATEMENT OF THE PERCENTAGE OF AVERAGE
ATTENDANCE (P_1) AND VISIT ATTENDANCE (P_2) (1973-74)

S.No.	Management	Location	Boys		Girls		Total	
			P_1	P_2	P_1	P_2	P_1	P_2
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1.	Panchayat Union	Rural (A)	64.44	59.5	53.9	48.2	60.6	55.5
2.	Panchayat Union	Rural (KG)	50.8	45.9	48.2	35.1	52.3	41.7
3.	Aided	Rural (A)	81.9	78.6	72.3	68.9	77.6	73.9
4.	Aided	Urban (KB)	89.7	81.5	93.2	79.5	90.8	80.6
5.	Aided	Urban (V)	81.6	81.6	81.6	84.2	81.6	82.8
6.	Municipal	Urban (KB)	71.5	71.9	74.5	76.3	73.0	73.7
7.	Municipal	Urban (V)	77.8	77.5	74.2	79.8	76.2	78.5
8.	Government	Urban (V)	73.2	75.3	63.2	71.1	68.8	73.6

Note : (A) = Anniyur; (KG) = Krishnagiri General;
(V) = Villupuram; (KB) = Krishnagiri Block.

Basis : Quick survey conducted in Villupuram and Krishnagiri Districts

that of the boys in general. The table establishes the following important facts :

(a) In general the average attendance is nearly falls short of enrolment from 10 to 50 percent;

(b) The percentage of average attendance in Panchayat Union schools in rural areas is comparatively less than the percentage of average attendance in urban schools;

(c) There is marked difference between the percentage of average attendance taken at the time of visit and the percentage of average attendance as marked by the teachers. The shortage during the visit is upto 13 percent.

(d) The variation in attendance as marked by the teachers during visit is not much in respect of other management schools, municipal, private and government.

STATE SURVEY ON AVERAGE ATTENDANCE AND RESULTING PUPIL-TEACHER RATIO

Objectives of the Survey

5.5.1. With a view to arrive at the average attendance at different levels of education and at different management a special survey was conducted. Based on the average attendance the respective pupil-teacher ratios were also computed which serve as a good indicator for basing our educational planning with economic background.

Percentage of average attendance at lower primary level

5.5.2. For the State as a whole the percentage of average

attendance of pupils at primary level is as follows :

TABLE V-10
STATE PERCENTAGE OF AVERAGE ATTENDANCE
(LOWER PRIMARY LEVEL) -- 1972-'73

Type	Government	Panchayat Union	Municipal	Private	For all managements
1	2	3	4	5	6
Lower Primary ..	81.6	70.9	84.0	83.7	76.1
Higher Primary ..	81.3	69.6	81.9	87.2	79.0
High School (Boys) ..	88.6	-	87.3	92.2	90.8
Weighted average ..	83.7	70.3	84.3	85.2	81.9

Source : From the Report of the Special Study by the Statistical Officer, School Education Department, Madras

5.5.3. The above table shows a more optimistic picture of average attendance in respect of Panchayat Union schools than the results of the study of four ranges, viz., the Panchayat Union schools have an average attendance of 70.3 percent in the above table while in the four ranges studied the average attendance varied from 42 to 61 percent of enrolment. The private aided schools have an average attendance of 85.2 percent in the above table while the four ranges show an average attendance of 81 to 91 percent of enrolment.

5.5.4. The following table indicates the average attendance of pupils to the enrolment at higher primary level for the State as a whole :

TABLE V-11
STATE PERCENTAGE OF AVERAGE ATTENDANCE
(HIGHER PRIMARY LEVEL) --1972-73

Type	Government	Panchayat Union	Municipal	Private	For all managements
1	2	3	4	5	6
Higher Primary ..	81.7	72.0	81.0	85.9	79.5
High Schools (Boys) ..	88.2	-	85.4	90.6	88.7
.. (Girls) ..	90.0	-	88.2	91.7	89.6

Source : From the Report of the Special Study by the Statistical Officer, School Education Department, Madras

5.5.5. Here also the percentage in respect of Panchayat Union schools is less than that of the other management schools. In Government and private institutions the percentage is nearly 90 percent whereas in Panchayat Union schools it is 72 percent only. It may be due to the fact that all the Panchayat Union schools are located in rural areas.

Pupil-teacher ratio

5.5.6. Another relevant indicator is the pupil-teacher ratio. The following table shows the Statewise average pupil-teacher ratio for higher primary level (I to V standards):

TABLE V-12

PUPIL-TEACHER RATIO (LOWER PRIMARY LEVEL) -- 1972-73

Type	Government	Pan-cha-yat Union	Muni-cipal	Pri-vate	For all man-agement
1	2	3	4	5	6
Lower Primary ..	27	26	28	31	28
Higher Primary ..	28	27	32	35	31
High School (Boys) ..	35	-	29	39	36
High School (Girls) ..	34	-	-	43	40
Weighted average ..	31	27	30	39	34

Source : From the Report of the Special Study by the Statistical Officer, Directorate of School Education, Madras

5.5.7. The ratio is 31 in respect of primary schools under private management but it is less than 30 in other managements. It is 26 in respect of Panchayat Union primary schools. It is 27 for Panchayat Union higher primary schools compared to 35 for private management higher primary schools. Government high schools for Boys and Girls range from 34 to 35 while private ones from 39 to 43.

5.5.8. Pupil-teacher ratio for higher primary level (VI to VIII standards) is shown in table below :

TABLE V-13

PUPIL-TEACHER RATIO (HIGHER PRIMARY LEVEL) -- 1972-73

Type		Government	Panchayat Union	Municipal	Private	For all managements
1		2	3	4	5	6
Higher primary	..	23	19	25	29	24
High School (Boys)	..	31	-	35	39	35
High School (Girls)	..	33	-	38	34	34
Weighted average	..	32	19	33	38	34

Source : From the Report of a Special Study by the Statistical Officer, Directorate of School Education, Madras

5.5.9. The pupil-teacher ratio is very low except in private and municipal schools. It is very low in Panchayat Union higher primary schools at 1:19.

Suggested remedial measure

5.5.10. Taking into account that the average attendance of Panchayat Union schools is 70 percent of the reported enrolment and that its pupil-teacher ratio is the lowest at 27 in lower primary schools and 19 in higher primary schools, the future vacancies in schools should be filled up on the basis of the following factors as applied to each school :

- the attendance in the school in the past year
- the likely increase in the attendance in the coming year

- the number of teachers employed in the past year
- the adequacy or otherwise of the remaining teaching staff for the coming year
- whether the enrolment made or proposed is in keeping with the number of school places and the identification of the excess of strength above the school places

INTER STATE COMPARISON

5.6.1. The pupil-teacher ratio in this State and other States in India at primary level of education is shown in the table :

TABLE V-14

PUPIL-TEACHER RATIO AT PRIMARY LEVEL OF EDUCATION IN INDIA

State		Lower primary	Higher primary
1		2	3
Tamil Nadu	..	35	33
Maharashtra	..	36	35
Gujarat	..	38	36
Andhra Pradesh	..	39	20
Kerala	..	39	35
Karnataka	..	44	40
Uttar Pradesh	..	44	25
West Bengal	..	36	28
Punjab	..	39	33
ALL INDIA	..	36	31

Source : 'Educational Statistics At a Glance 1973'
Statistics and Information Division, Ministry
of Education and Social Welfare, New Delhi

5.6.2. It is seen from the above table that the pupil-teacher ratio in Tamil Nadu at lower primary level is the least among the States in India. At higher primary level, the teacher-pupil ratio is least in Andhra Pradesh and the greatest in Karnataka. It may be noted here that the pupil-teacher ratio of Tamil Nadu has been worked out excluding the specialist teachers such as craft masters etc. When these specialist teachers also are taken into account the ratio will be still less at higher primary level.

5.6.3. The pupil-teacher ratio at first level of education in some of the countries are shown in the table below :

TABLE V-15

PUPIL-TEACHER RATIO AT FIRST LEVEL OF EDUCATION
IN DIFFERENT COUNTRIES

Country	Lower primary	Higher primary
1	2	3
Japan ..	26	19
France ..	23	16
UK ..	24	14
USA ..	24	19
USSR ..	17	9
First level		
Pakistan* ..	44(1969)	
Sri Lanka* ..	29(1964)	

Source: *Statistical Year Book 1972, UNESCO

*Progress of Education in the Asian Region,
Unesco Regional Officer for Education,
1969, Bangkok

5.6.4. The above table shows that in the developed countries the pupil-teacher ratio is far less than that of the developing countries. In Pakistan the ratio is more or less on par with Indian States.

ALTERNATIVES IN PUPIL-TEACHER RATIO

Education Commission's recommendation

5.7.1. The Education Commission (1964-66) recommended the financing of education on the basis of the following pupil-teacher ratios :

TABLE V-16

PUPIL-TEACHER RATIO AS PER THE EDUCATION COMMISSION

Level		1975-76	1985-86
1		2	3
Lower primary	..	50	45
Higher primary	..	35	35

Immediate future needs

5.7.2. In view of the fact that due to the population increase which has taken place, lower primary school enrolment will increase in Tamil Nadu by 20 percent by the end of the Sixth Plan (from 55 lakhs to 65 lakhs), higher primary enrolment by 150 percent (from 15 lakhs to 35 lakhs), the establishment of an appropriate pupil-teacher norm is important from the point of view of the extent of State sources and share of the annual budget that will have to be allocated to Education.

Alternative pupil-teacher ratio

5.7.3. Taking into account all these factors, the following alternative pupil-teacher ratios recommended by the National and State Commissions can be considered.

TABLE V-17
ALTERNATIVE PUPIL-TEACHER RATIO

Level	⁺ Current in Tamil Nadu 1-8-'74	Education Commis- sion (*)	State Planning Commission (**)
1	2	3	4
Lower primary	35	50	37
Higher primary	33	35	33

Source : (*) D.S.Kothari, Chairman, Education Commission (1964-66), Education and National Development, Ministry of Education, Government of India, 1966

(**) Malcolm S.Adisesiah, Member, State Planning Commission, Tamil Nadu and Chairman of the Task Force on Education, Science and Technology, prepared 'Towards A Learning Society' --The Perspective Plan for Tamil Nadu' 72-74

⁺ Educational Statistics, Directorate of School Education, Madras

The Implication

5.7.4. If these ratios are applied to the school system in the State as at first August 1974 the number of teachers needed against approved posts will be :

TABLE V-18
IMPLICATIONS FOR TEACHER POSTS

Level	Sanctioned posts of teachers on 1-8-'74	Number of total posts required as per	
		Education Commission	State Planning Commission
1	2	3	4
Lower primary	1,96,172	1,11,200	1,50,300
Higher primary		41,590	44,120
Total	1,96,172	1,52,790	1,94,420

5.7.5. Considering the minimum salary of a secondary grade teacher as Rs 330 per mensem, there will be a saving of Rs 69.38 lakhs per annum, if the State Planning Commission norms are adopted.

RECOMMENDATIONS

5.8. In the light of the above analysis concerning the general problems of establishing a reasonable pupil-teacher ratio and the specific problems faced in this State in applying any such norm, it is recommended that :

(a) the pupil-teacher ratio recommended in the Perspective Plan for Tamil Nadu (1972-84) be adopted namely,

Lower primary	..	1 : 37
Higher primary	..	1 : 33

(b) the recommended ratios be applied effectively, rigorously and fully through

- (i) translating these ratios into the slabs fixed in Government Order (Miscellaneous) No.250;
- (ii) introducing the recommended ratio and a minimum strength of 20 as a third condition with regard to the powers given to the Panchayat Union Councils to open new primary schools;
- (iii) using the average attendance in each school personally checked by the Deputy Inspector of schools as the basis of estimating its teacher entitlements;
- (iv) additionally the number of teachers to be sanctioned for each school being based on the effective school places available in each institution and
- (v) the special treatment of schools in tribal areas in matter of the population requirement be continued.

(c) the number of excess teachers and retiring teachers in the Panchayat Union should be calculated by the District Educational Officers in July or October of each year.

- (1) Any excess teachers should be set off by the requirement of additional teachers resulting from additional enrolment of pupils in each school subject to school places being available in each school.

- (ii) If there is a surplus of teachers even after the adjustment, they should be set off against retirement vacancies arising at the end of academic year and vacancies caused by death, resignation, etc. This process should be continued every year until the surplus is liquidated.
 - (iii) During the implementation of this recommendations, the surplus teachers will be identified specifically and will be shown as supernumerary teachers in all the accounts.
 - (iv) Only after absorbing the surplus by this process, additional teachers required for each school because of additional enrolment may be released by the educational authorities.
-