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WASTAGE, STAGNATION AND INEQUALITY OF OPPORTUNITY IN RURAL PRIMARY EDUCATION

A CASE STUDY OF ANDHRA PRADESH



GOVERNMENT OF INDIA
MINISTRY OF HUMAN RESOURCE DEVELOPMENT
DEPARTMENT OF EDUCATION
NEW DELHI
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Date.....

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PREFACE

According to the 4th All India Educational Survey, for every three children enrolled in primary and middle school, one eligible child is missed out. Of these 58 per cent are from the Scheduled Castes indicating extreme inequality of educational opportunity that pervades the system. And what happens to the three enrolled? Two drop-out before reaching class V, a greater percentage of this being girls and only one out of four who go beyond the primary stage reach up to class VII. This is shocking enough but indeed ironical in a country where almost two thirds or more of the adults do not know to read and write.

What is taught in the schools and the general examination orientation have been the curse of the system. However, the reasons for the dismal performances of primary education lie elsewhere: the Survey points out that of the 4.74 lakhs primary schools in the country 41,286 are without buildings, many without even the shade of a tree; 3000 schools are without teachers and 1.5 lakhs are 'single teacher affairs'. Just 9 per cent have 5 teachers each.

Even in the so called aided schools not all students are equally fortunate; many cannot afford a slate and chalk let alone books. This is so despite the efforts to provide free or nearly subsidized books and dresses. Where they are provided they never reach the children on time. This in short is the background in which one needs to look at the educational situation in Andhra Pradesh.

This study attempts to highlight the problems of wastage and inequality of opportunity in primary education in a framework that includes among other factors the social background of the children and the quality of educational inputs. Having conducted field work in several villages to understand how development programmes are implemented at the district/block/village levels, how education is organised there and having observed the implementation of educational policies at the block level and finally studying the working world of school teachers, extension officers education, and others in the educational bureaucracy on the one hand and interacting with the rural households on the other, I had already felt the necessity to revise my framework on the causal factors behind these two aspects of educational backwardness in Andhra Pradesh.

What emerged through this experience was a greater awareness of the issue, namely the role of the State in education, not adequately captured in the framework of this study. Initial attempts to understand this issue resulted in random notes on village society and educational backwardness which remain yet unpublished.

I have now endeavoured to focus on the issue of the State and limits to educational reform as afterthoughts and included here. Otherwise no revision has been made to the manuscript completed a few years ago.

Over the years, I have had the benefit of discussing my field experiences with many friends. The initial impetus to write came from Nasir and Mina Tyabji. Discussions with Prof. A.M. Nalla Gounden, Dr. S. Subbiah, Dr. S.Y. Shah and with my colleagues at the National Labour Institute have helped me clarify many points. I am grateful to all of them.

Finally, I would like to dedicate this book to Nattu. He made the field work and writing a lot easier by his patience and understanding.

Dharni P. Sinha
Director

September 21, 1982

The Secretary to the
Government of India
Ministry of Education & Culture
Department of Education
Shastri Bhavan
New Delhi-110 001

Dear Sir,

Kindly refer to the Government of India Order No. F.1.33/81-Schools, II dated 29th July, 1981, granting a sum of Rs. 50,000 for Research on Wastage, Stagnation and Inequality of Opportunity in Rural Primary Education—A study of Andhra Pradesh. I am now glad to forward the study report which has been undertaken by two of my colleagues, Shri K.V. Eswara Prasad and Dr. Ramesh Chandra Sharma. The study is based on intensive research in four districts of Andhra Pradesh, two from Rayalaseema and Coastal region and two from Telangana region. Of these four districts, two were identified as developed districts and two were economically backward districts. The survey included 10 villages in each of the four districts. The picture that has emerged from the study reflects the status of wastage and stagnation and inequality of opportunity in primary education in rural Andhra Pradesh.

You will find in the report that in spite of non-detention policy of the Government, Andhra Pradesh has the lowest retention ratio in any of the States in the country; for boys the detention ratio is 25% as against the All India figures of 34.8%, for girls it is 19.57% as against the All India figure of 25.58%.

Andhra Pradesh is one of the few states in the country which introduced the non-detention policy in School system about 10 years ago. One of its objectives was to reduce wastage and stagnation and increase equality of opportunity in rural primary education. However, this study shows that the above educational policy has hardly any impact on holding children to school. It appears that the real reason for wastage and stagnation is not necessarily the quality of education, educational facilities or educational policy; the reasons are beyond education in the socio-economic environment of the children. The study also shows that, in relatively developed districts, children participate in primary education and then withdrew from the school; in the backward districts, there is non-participation as well as withdrawal. It also confirms the research earlier conducted by educationists in the country that highest drop-out rates are in the first two years of school education; it then tapers off. The inequality of opportunity in rural primary education is primarily based on socio-economic conditions of the families and the extent of backwardness of the region.

This research undertaken with the support of the Government of India not only reinforces the assumptions about wastage and stagnation; in primary education; it also shows that wastage and stagnation, while partly a function of educational facilities and opportunities is also dependent upon the socio-economic environment of the child.

We trust this study will be useful to the Government in formulating educational plans and policies. On behalf of the Administrative Staff College of India, let me express our deep appreciation to the Government of India for their generous support.

Yours faithfully,

DHARNI P. SINHA

ACKNOWLEDGEMENTS

We should like to thank Messrs S. Gopi, B. Ramayya, K.P.V. Prasad, Anji Reddy and S.K. Mohan Rao and Sivarama Prasad who as field investigators did an excellent job of data collection.

Mrs. Krishna Kumari was superb with her typing and we have received valuable short-term help from Mrs. Edna John and Mr. Kamal Nath. We should like to thank Mr. Francis Anthony for computer programming assistance, Mr. M.A.Z. Khan, Dr. Narayana, Mr. P. Rajeshwar and especially Dr. L. De Golbery for their advice on field data collection. We would also like to thank in particular Mr. A.K. Das Gupta and his staff for giving valuable bibliographic assistance.

We are grateful to Mr. Muniratnam, Collector, Kurnool for generous hospitality during our field work at Kurnool District. In particular we should like to thank Mr. Narsayya, Tahsildar and Mr. Satyanarayana, E.O. Education at Adoni, Mr. J. Vedanayagam, Tahsildar and Mr. J. Venugopal Rao, E.O. Education at Alur and the E.O. Education at Tadikonda and Ipur for the cooperation during our visit. The data collection would have been an uphill task but for their very timely help.

We would also like to thank Drs. Balwanth Reddy and Dharni P. Sinha for their interest, encouragement and critical comments on aspects of this work.

Finally, we are most indebted to the rural households, school teachers, village headmen and others who come forward so willingly with very possible help to make the field survey a remarkable experience.

SEPTEMBER, 1982

K.V. ESWARA PRASAD
RAMESH C. SHARMA

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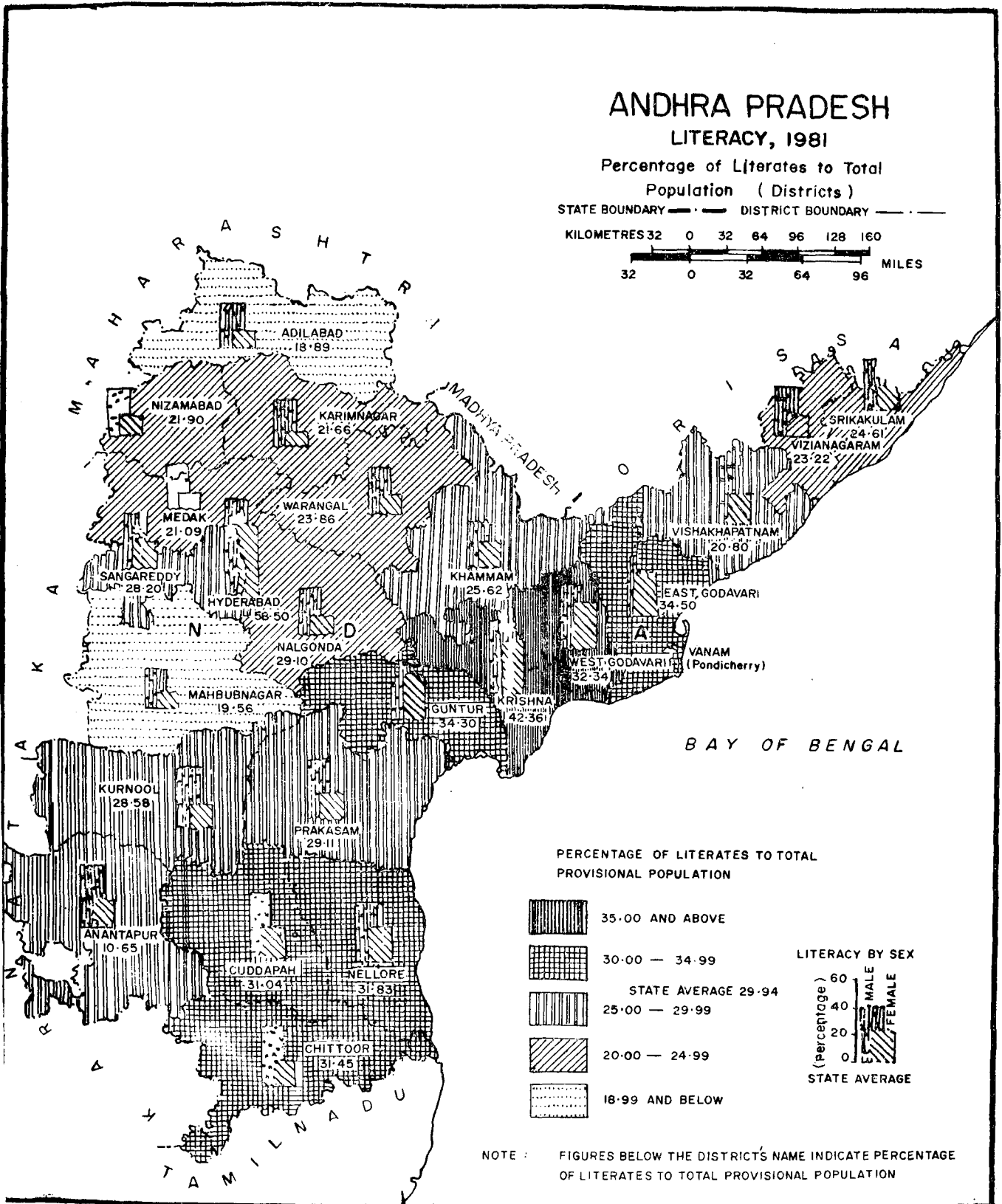
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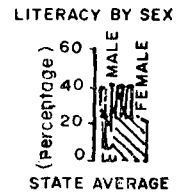
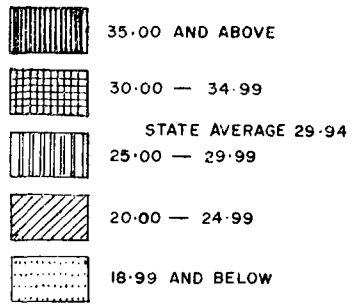
ANDHRA PRADESH LITERACY, 1981

Percentage of Literates to Total
Population (Districts)

STATE BOUNDARY ——— DISTRICT BOUNDARY ———



PERCENTAGE OF LITERATES TO TOTAL
PROVISIONAL POPULATION

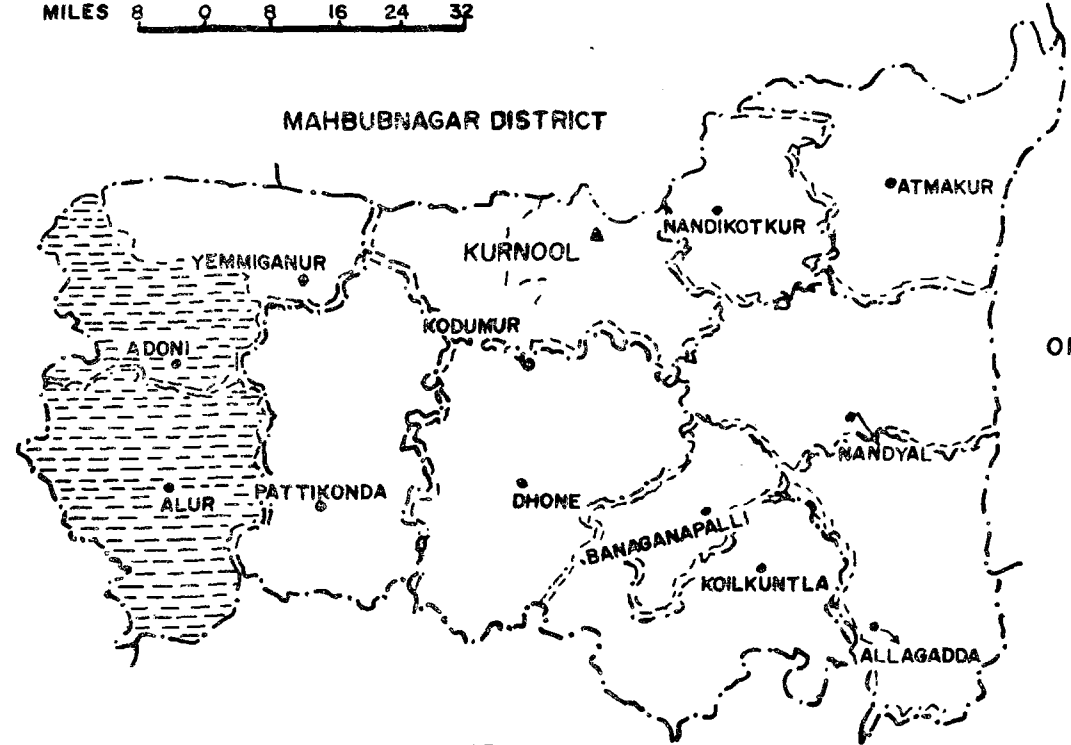


NOTE : FIGURES BELOW THE DISTRICT'S NAME INDICATE PERCENTAGE OF LITERATES TO TOTAL PROVISIONAL POPULATION

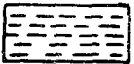
ANDHRA PRADESH
 KURNOOL DISTRICT
 PANCHAYAT SAMITHIS

MILES 8 9 8 16 24 32

MYSORE STATE (KARNATAKA)

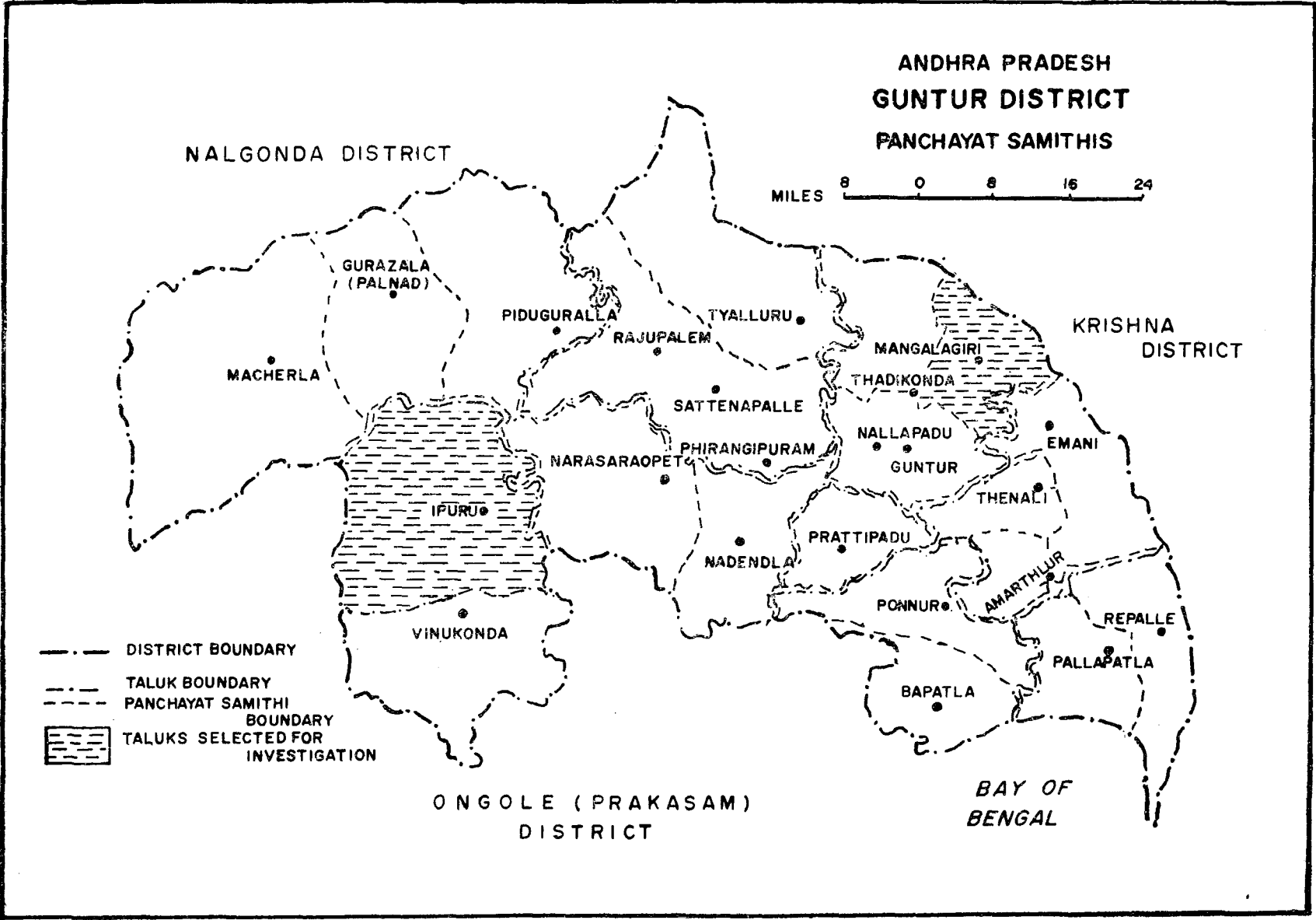


ONGOLE (PRAKASAM)
 DISTRICT

- DISTRICT BOUNDARY
- - - - - TALUK BOUNDARY
- - - - - PANCHAYATI SAMITHI BOUNDARY
-  TALUKS SELECTED FOR INVESTIGATION

CUDDAPHA
 DISTRICT

(XV)

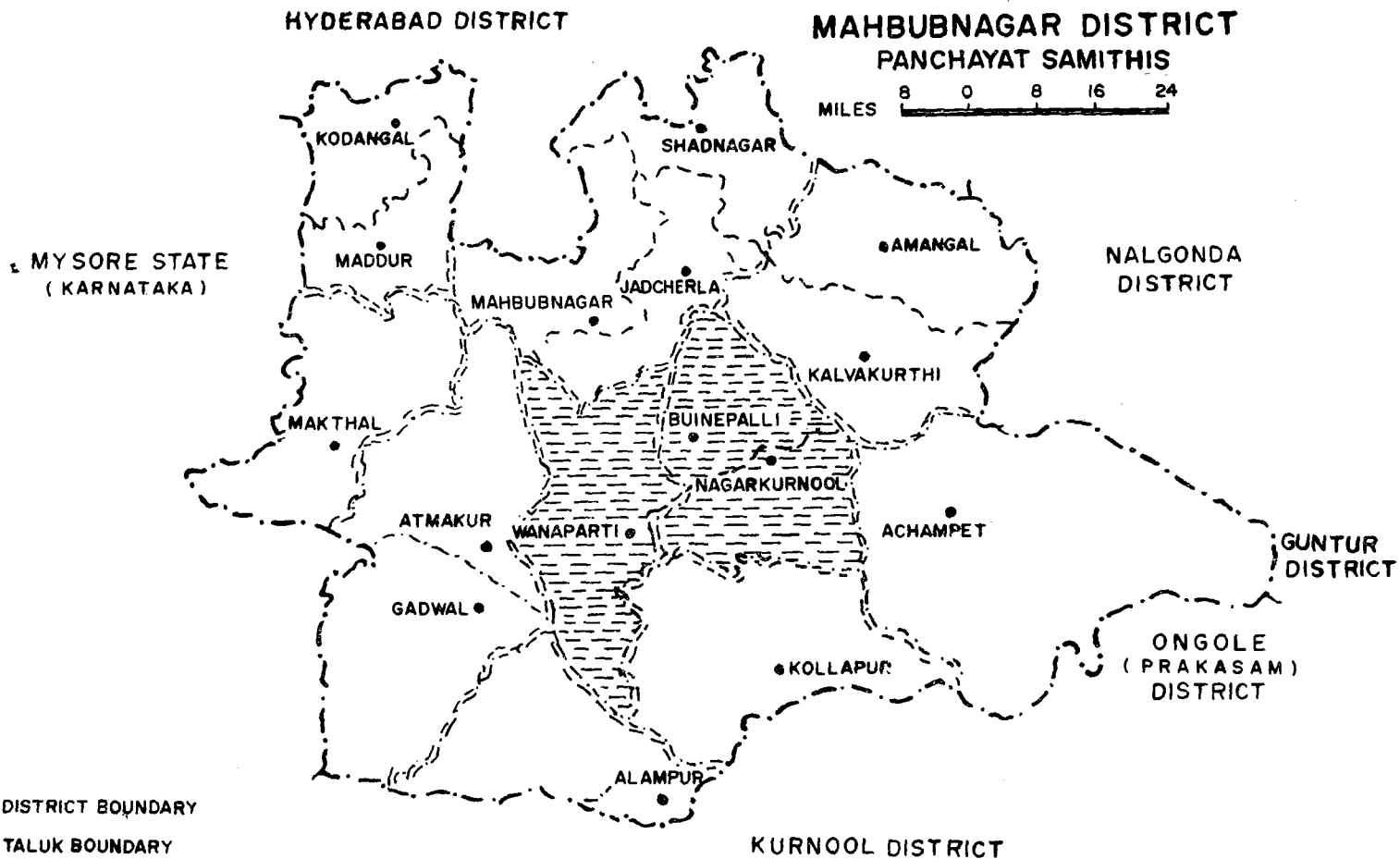



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MAP - 3

ANDHRA PRADESH

MAHBUBNAGAR DISTRICT
PANCHAYAT SAMITHIS



- DISTRICT BOUNDARY
- TALUK BOUNDARY
- PANCHAYAT SAMITHI BOUNDARY
-  TALUKS SELECTED FOR INVESTIGATION

(xix)

MAP - 4

The situation is only slightly different when we look at many studies on wastage and stagnation done for the various parts of India. These studies have also depended on school records. In addition, excepting for a few, such studies do not distinguish between wastage and stagnation.⁵ The figures collected include both, giving no scope for determining wastage and stagnation separately. Additional problems arise as not much attention is paid to the distribution in the levels of wastage given the occurrence of new admission in all grades, that is, from the first to fourth classes, the possibility of double promotion etc. These studies do not account for such peculiarities in their estimation of wastage and stagnation. If we look at the prescription for reducing wastage and stagnation most of the suggestions have been made considering:

- i. the school as a unit of analysis and
- ii. with due emphasis on cooperation to be received from the State Department of Education and the Central Government.

each of which had problems of implementation at one level or other. However, the most important finding that "wastage and stagnation like headache and temperature are not evils in themselves but really symptoms of other evils infecting the national education system"⁶ (our emphasis) in itself has been a diagnosis which has so far not received much attention.

In their eagerness to 'solve' problems of wastage and stagnation, uniformity in the nature of policy prescription has been misinterpreted as amounting to equality of opportunity. The fundamental questions here are: do all the families have equal opportunity to send their children to school? Furthermore, for those children who go to school is there equal opportunity to move up at school?

We believe, however, that in no society can there be absolute equality in education in or other aspects. It is understandable differences in education achievement would exist and for our purpose, we interpret equality, without entering into the controversy as to what the term means as:

- i. the probability of reaching a particular level of educational achievement; and
- ii. the probability of achieving a given score in achievement test administered. These should be the same for all children irrespective of their social, economic status.

5. The two notable exceptions are Bureau of Economics and Statistics and Finance and Planning Department, Government of Andhra Pradesh: *Survey of Primary Education in Telangana Region* (Hyderabad, 1973) R. C. Sharma, C. L. Sanra *Wastage and Stagnation in Primary and Middle Schools in India* (New Delhi: National Council of Educational Research and Training, 1969).

6. See Kothari Commission Report, op. cit.

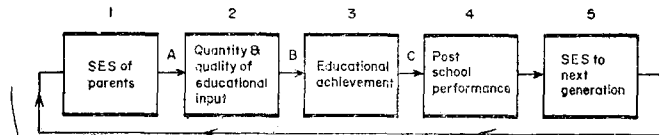
7. For representative studies in this fashion done for developed countries see J.W. Guthrie and others, *Schools and Inequality* (Cambridge: MIT Press, 1971); F. Mayske and others, *A study of our Nations Schools* (Washington: US Department of Labour, 1971); J. W. Coleman and Others, *Equality of Educational Opportunity* (Washington: US Government printing office, 1966).

8. This study does not focus on post school performance of individuals. We hope to examine one aspect of this namely education and income while studying family income pattern and equality.

It is in this background⁷ that we wish to study the problem of wastage and stagnation at school in Andhra Pradesh.

Our Hypothesis

Following much of the literature, we present the following hypothesis for the present study:



Relationships as noted in the figure are no simple as represented. A few observations seen relevant regarding the figures:

First, educational achievement is not only influenced by the SES but also by the quantity and quality of school inputs and also the IQ of the children by the peer group and also by chance. Besides, education also has a role in intergenerational mobility.

At the next stage, post schooling performance as measured by life-time earnings are not only influenced by educational achievements as seen in the figure; change and luck may also influence the same.⁸

It should also be mentioned here that problem of inequality of educational attainment runs parallel to inter-generational mobility and, on the whole, vicious circle, as mostly pointed out in literature, operates at all the time.

We spell the hypothesis of our study as follows

1. Socio-economic status of the family influences the chances of children participating in school or educational activity. The quantity and quality of school service provided to the child are related to the SES in that lower quality of services are associated with children from low socio-economic background.
2. The quality and quantity of schooling influence achievements of the children and also their academic attainment. This relationship is such that higher qualities of school services are largely associated with better levels of academic achievement and attainment. Complementarily

lower levels of achievement resulting in wastage of participation of schools and also dropping out totally from the system, largely can be linked with poor school quality.

The above two together affect the post-school opportunities of a student in that a lack of success is associated to lower achievement and success to higher achievement and hence the persistence of inequality. In this context, we now spell the last hypothesis.

The reduction of wastage and stagnation at school means giving greater opportunity for children irrespective of their background in the figure removal of the hurdles at the points A, B and C.

Setting for the study

The State of Andhra Pradesh was selected as the location for the present study. Andhra Pradesh is characterised by a demographic pattern similar to other states in Southern India. It consists of a number of major population centres containing core cities or urban agglomerations surrounded by villages. Furthermore, a majority of the population live in rural areas, essentially vil-

lages with low or high population densities. A substantial portion of its people are engaged in agriculture or allied activities; over 70 per cent of workers are cultivators or labourers. In all these features, Andhra Pradesh is similar to most of her neighbouring populous states in Southern India. The 1981 Census figures in table 1.1 provide a brief demographic profile of the state categorized by districts.

In terms of the organisational set up of school education, Andhra Pradesh is once again similar to most other states. Article 45 of Indian Constitution demands on the state "..... to provide, within a period of 10 years from the commencement of this constitution, free and compulsory education for all children until they complete the age of 14 years" The translation of this demand into the reality has been the major goal for the multi-level administrative set up consisting of state department of education and departments at district level. The diversity of performance in the latter are striking: This ranges from a staggering enrolment of 181 948 pupils in Class I—V in some 5,818 schools in East Godavari district to an apparently small 30,681 pupils in some 1500 schools in Adilabad district. The gross enrolment ratio for children 6-11 years in rural

TABLE 1.1
SELECTED CENSUS FIGURES FOR ANDHRA PRADESH-1981

Sl. No.	Name of the District	Total	Population		Total Workers	Total literates %	Males	Females
			Rural	Urban				
1.	ADILABAD	16,38,130	1,32,307	3,26,823	10,73,209	28.42	35.51	16.92
2.	ANANTARPUR	26,18,143	20,87,911	4,30,238	11,06,126	27.08	38.11	15.21
3.	CHITTOOR	27,46,847	22,84,952	4,61,895	11,48,342	31.60	42.96	19.84
4.	CUDDAPAH	5,29,547	1,55,348	3,74,199	7,95,402	30.99	43.78	17.66
5.	EAST GODAVARI	37,01,714	28,79,784	8,21,930	14,11,621	35.12	41.41	28.28
6.	GUNTUR	34,27,079	24,81,345	9,45,734	15,02,042	36.25	45.28	26.96
7.	HYDERABAD	22,40,508	—	22,40,508	6,23,119	65.95	65.14	45.98
8.	KARIMNAGAR	24,36,075	20,53,110	3,82,965	11,82,996	21.99	32.55	11.38
9.	KHAMMAM	17,44,966	14,51,930	2,93,036	7,49,395	25.79	33.18	18.02
10.	KRISHNA	30,41,949	20,48,906	9,93,043	12,32,885	41.43	48.29	34.41
11.	KURNOOL	24,03,908	18,14,277	5,89,631	10,73,209	28.42	39.51	16.92
12.	MAHBOOBNAGAR	24,46,548	21,79,429	2,67,119	11,60,432	18.95	27.46	10.30
13.	MEDAK	18,27,588	16,11,139	2,16,449	821,654	21.36	31.66	10.86
14.	NALGONDA	22,75,476	20,16,359	2,59,117	10,34,069	21.81	313.15	12.39

CHAPTER I

INTRODUCTION

Since independence there has been an impressive expansion of education at primary, secondary and higher levels, in India. This stands in sharp contrast to the chronic problems of: (a) quality and equality of opportunity both at school and colleges; (b) wastage and stagnation at all levels, particularly at primary levels everywhere and (c) unemployment and underemployment of the educated. In this study, we are largely interested in the first two problems, namely wastage and stagnation at schools in the wider context of educational opportunity.

The problem of wastage and stagnation in school (and in higher education) has received considerable attention of the planners for quite sometime. It was noted in as early as 1928 by the Hartog Committee¹ and more recently the Kothari Commission² identifying this as a major problem claimed ".....wastage and stagnation like headache and fever and not diseases in themselves, they are really symptoms of other diseases in the education system, chief among which is lack of proper articulation between education and health and the poor capacity of the school to attract and hold students. To these may be added the third ailment poverty which falls outside the system".....

It is undoubtedly true that wastage is one of the most crucial problems facing rural primary education in India today. This concerns those children who "participate in primary education without being permanently literate in the regular course of time".³ They either stagnate because of failure of repetition in the same class, or drop out without completing their education. As a consequence, these children are most vulnerable to fall back to permanent illiteracy in due course. The school facilities created for the spread of literacy remains thus under-utilised.

The causes of the such wide-spread phenomenon of drop-out has been largely classified under three broad categories, namely 'social'—denoting ascribed forms of occurrences such as caste, social habits and customs etc., 'economic' denoting poverty and landlessness, poor occupational status of parents etc. and lastly, 'educational' denoting

inadequate school facilities, over-crowded classes, ineffective teaching methods, poor qualified teachers etc.⁴ The implication of these at the level of village, on district in general have been discussed and debated considerably and several remedies have been suggested at the macro and micro levels to mitigate this problem. Nevertheless, wastage and stagnation continue to remain unabated in many parts of India, especially in the rural side. The present study attempts to throw light on the following issues with special reference to Andhra Pradesh.

- i. Does the system of education in Andhra Pradesh offer equal opportunity to children of varied social background?
- ii. What is the quality of educational opportunity thus offered?
- iii. What is the nature and dimension of wastage and stagnation in education in the rural areas?
- iv. Causes and consequences of wastage and stagnation as elicited from considerations of:
 - a. School and School facilities;
 - b. School teacher characteristics;
 - c. Pupil's family background; and
 - d. The villageas units of analysis

Wastage and Stagnation : Some Issues

We shall begin with a note on data on rural primary education available in India. The statistics from the various sources are often not comparable and even, as has been pointed out, conflicting. Each source be it the Census or Ministry of Education or the All India Educational Survey of NCERT suffers from one form of defect or other. A major lacunae here has been dependence on the available school records which may most often tend to over-report enrolment and other information such as number of teachers available, school facilities etc.

1. Interim Report of the Indian Statutory Commission. *Review of Growth of Education in British India by the auxiliary Committee appointed by the Commission* (Delhi : Government of India Press, 1929). This shall be referred hereafter as Hartog Committee Report.
2. Education and Development. *Report of the Education Commission* (New Delhi : National Council of Educational Research and Training, 1970). This shall be referred hereafter as Kothari Commission Report.
3. Agro Economic Research Centre, *Primary Education in India. Participation and wastage* (New Delhi: Tata McGraw Hill, 1971)
4. See, "Wastage and Stagnation in Primary Education", *The Education Quarterly* (October 1968)

The situation is only slightly different when we look at many studies on wastage and stagnation done for the various parts of India. These studies have also depended on school records. In addition, excepting for a few, such studies do not distinguish between wastage and stagnation.⁵ The figures collected include both, giving no scope for determining wastage and stagnation separately. Additional problems arise as not much attention is paid to the distribution in the levels of wastage given the occurrence of new admission in all grades, that is, from the first to fourth classes, the possibility of double promotion etc. these studies do not account for such peculiarities in their estimation of wastage and stagnation. If we look at the prescription for reducing wastage and stagnation most of the suggestions have been made considering:

- i. the school as a unit of analysis and
- ii. with due emphasis on cooperation to be received from the State Department of Education and the Central Government.

each of which had problems of implementation at one level or other. However, the most important finding that "wastage and stagnation like headache and temperature are not evils in themselves but really symptoms of other evils infecting the national education system"⁶ (our emphasis) in itself has been a diagnosis which has so far not received much attention.

In their eagerness to 'solve' problems of wastage and stagnation, uniformity in the nature of policy prescription has been misinterpreted as amounting to equality of opportunity. The fundamental questions here are: do all the families have equal opportunity to send their children to school? Furthermore, for those children who go to school is there equal opportunity to move up at school?

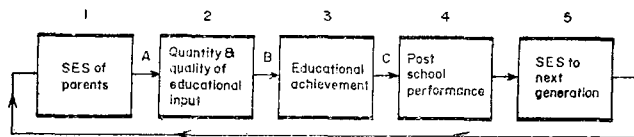
We believe, however, that in no society can there be absolute equality in education in or other aspects. It is understandable differences in education achievement would exist and for our purpose, we interpret equality, without entering into the controversy as to what the term means as:

- i. the probability of reaching a particular level of educational achievement; and
- ii. the probability of achieving a given score in achievement test administered. These should be the same for all children irrespective of their social, economic status.

It is in this background⁷ that we wish to study the problem of wastage and stagnation at school in Andhra Pradesh.

Our Hypothesis

Following much of the literature, we present the following hypothesis for the present study:



Relationships as noted in the figure are not simple as represented. A few observations seem relevant regarding the figures:

First, educational achievement is not only influenced by the SES but also by the quantity and quality of school inputs and also the IQ of the children by the peer group and also by chance. Besides, education also has a role in intergenerational mobility.

At the next stage, post schooling performance as measured by life-time earnings are not only influenced by educational achievements as seen in the figure; change and luck may also influence the same.⁸

It should also be mentioned here that problems of inequality of educational attainment runs parallel to inter-generational mobility and, on the whole, vicious circle, as mostly pointed out in literature, operates at all the time.

We spell the hypothesis of our study as follows

1. Socio-economic status of the family influences the chances of children participating in school or educational activity. The quantity and quality of school services provided to the child are related to the SES in that lower quality of services are associated with children from low socio-economic background.
2. The quality and quantity of schooling influence achievements of the children and also their academic attainment. This relationship is such that higher qualities of school services are largely associated with better levels of academic achievement and attainment. Complementarily

5. The two notable exceptions are Bureau of Economics and Statistics and Finance and Planning Department, Government of Andhra Pradesh: *Survey of Primary Education in Telangana Region* (Hyderabad, 1973) R. C. Sharma, C. L. Sapra; *Wastage and Stagnation in Primary and Middle Schools in India* (New Delhi: National Council of Educational Research and Training, 1969).

6. See Kothari Commission Report, op. cit.

7. For representative studies in this fashion done for developed countries see I.W. Guthrie and others, *Schools and Inequality* (Cambridge: MIT Press, 1971); F. Mayske and others, *A Study of our Nations Schools* (Washington: US Department of Labour, 1971); J. W. Coleman and others, *Fauality of Educational Opportunity* (Washington: US Government printing office, 1966).

8. This study does not focus on post school performance of individuals. We hope to examine one aspect of this namely education and income while studying family income pattern and equality.

lower levels of achievement resulting in wastage of participation of schools and also dropping out totally from the system, largely can be linked with poor school quality.

The above two together affect the post-school opportunities of a student in that a lack of success is associated to lower achievement and success to higher achievement and hence the persistence of inequality. In this context, we now spell the last hypothesis.

The reduction of wastage and stagnation at school means giving greater opportunity for children irrespective of their background in the figure removal of the hurdles at the points A, B and C.

Setting for the study

The State of Andhra Pradesh was selected as the location for the present study. Andhra Pradesh is characterised by a demographic pattern similar to other states in Southern India. It consists of a number of major population centres containing core cities or urban agglomerations surrounded by villages. Furthermore, a majority of the population live in rural areas, essentially vil-

lages with low or high population densities. A substantial portion of its people are engaged in agriculture or allied activities; over 70 per cent of workers are cultivators or labourers. In all these features, Andhra Pradesh is similar to most of her neighbouring populous states in Southern India. The 1981 Census figures in table 1.1 provide a brief demographic profile of the state categorized by districts.

In terms of the organisational set up of school education, Andhra Pradesh is once again similar to most other states. Article 45 of Indian Constitution demands on the state "..... to provide, within a period of 10 years from the commencement of this constitution, free and compulsory education for all children until they complete the age of 14 years" The translation of this demand into the reality has been the major goal for the multi-level administrative set up consisting of state department of education and departments at district level. The diversity of performance in the latter are striking: This ranges from a staggering enrolment of 181 948 pupils in Class I—V in some 5,818 schools in East Godavari district to an apparently small 30,681 pupils in some 1500 schools in Adilabad district. The gross enrolment ratio for children 6-11 years in rural

TABLE 1.1

SELECTED CENSUS FIGURES FOR ANDHRA PRADESH-1981

Sl. No.	Name of the District	Total	Population		Total Workers	Total literates %	Males	Females
			Rural	Urban				
1.	ADILABAD	16,38,130	1,32,307	3,26,823	10,73,209	28.42	35.51	16.92
2.	ANANTARPUR	26,18,143	20,87,911	4,30,238	11,06,126	27.08	38.11	15.21
3.	CHITTOOR	27,46,847	22,84,952	4,61,895	11,48,342	31.60	42.96	19.84
4.	CUDDAPAH	5,29,547	1,55,348	3,74,199	7,95,402	30.99	43.78	17.66
5.	EAST GODAVARI	37,01,714	28,79,784	8,21,930	14,11,621	35.12	41.41	28.28
6.	GUNTUR	34,27,079	24,81,345	9,45,734	15,02,042	36.25	45.28	26.96
7.	HYDERABAD	22,40,508	—	22,40,508	6,23,119	65.95	65.14	45.98
8.	KARIMNAGAR	24,36,075	20,53,110	3,82,965	11,82,996	21.99	32.55	11.38
9.	KHAMMAM	17,44,966	14,51,930	2,93,036	7,49,395	25.79	33.18	18.02
10.	KRISHNA	30,41,949	20,48,906	9,93,043	12,32,885	41.43	48.29	34.41
11.	KURNOOL	24,03,908	18,14,277	5,89,631	10,73,209	28.42	39.51	16.92
12.	MAHBOOBNAGAR	24,46,548	21,79,429	2,67,119	11,60,432	18.95	27.46	10.30
13.	MEDAK	18,27,588	16,11,139	2,16,449	821,654	21.36	31.66	10.86
14.	NALGONDA	22,75,476	20,16,359	2,59,117	10,34,069	21.81	313.15	12.39

Sl. No.	Name of the District	Total	Population Rural	Urban	Total Workers	Total literate	Males	Females
15.	NELLORE . . .	20,06,447	15,89,241	4,17,200	8,35,467	31.89	40.69	22.89
16.	NIZAMABAD . . .	16,79,217	13,55,464	3,23,813	8,06,141	21.91	32.12	11.83
17.	PRAKASHAM . . .	47,56,543	21,07,717	2,48,826	10,49,662	27.39	37.92	16.81
18.	SRIKAKULAM . . .	19,02,941	16,85,772	2,17,169	7,69,568	16.64	35.14	14.16
19.	RANGAREDDY . . .	15,73,862	12,00,812	3,79,050	6,86,234	20.96	41.30	19.02
20.	VISAKHAPATNAM . . .	25,22,313	17,25,853	7,96,460	9,91,018	27.70	35.95	19.40
21.	VIZIANAGARAM . . .	18,09,688	15,19,709	2,89,979	7,92,426	23.13	32.44	13.78
22.	WARANGAL . . .	23,01,372	19,04,207	3,97,165	9,93,685	23.84	23.64	13.72
23.	WEST GODAVARI . . .	28,56,999	22,61,737	5,95,262	11,28,985	37.65	43.51	31.74

Source : Census of India, 1981 *Rural Urban Population by Districts*, Series I - India Provisional Population Paper 2, p.72.

Census of India 1981, "Primary Census Abstract" in *Provisional Population Totals* Series 2 Andhra Pradesh Paper 1.

TABLE 1.2

SELECTED SCHOOLS STATISTICS FOR ALL INDIA AND FOUR SOUTHERN INDIAN STATES

Sl.No.	Characteristic	India	Andhra Pradesh	Karnataka	Tamilnadu	Kerala
1.	Total enrolment in Classes I—V . . .	6,91,56,038	49,25,484	40,98,417	61,20,417	31,48,529
2.	Total enrolment in classes I—V rural areas	5,25,34,367	37,92,108	28,62,101	35,82,554	26,88,427
3.	Total number of school teachers . . .	12,87,499	78,802	34,822	1,12,002	46,889
4.	Total number of primary schools . . .	4,74,636	36,696	32,528	27,588	6,033
5.	Total number of primary schools in rural areas . . .	4,31,602	39,713	20,705	22,621	5,410
6.	Pupil teacher Ratio . . .	41	50	55	42	41

Source : *Fourth All India Educational Survey* (Mimeo), 1980.

Tables 14 & 15 (pp. 36-39) Table 30 (pp. 68-69).

Table 2 & 3 (pp. 12-15) and Table 32 (pp. 72-73).

TABLE 1.3

SELECTED SCHOOL STATISTICS FOR ANDHRA PRADESH—DISTRICTWISE

Characteristics	Adilabad (1)	Anantapur (2)	Chittoor (3)	Cuddapah (4)	E'Godavari (5)	Guntur (6)
Total Enrolment in class I—V	*30,681	85,534	1,11,153	78,465	1,81,948	1,59,002
Total enrolment in classes I—V Rural areas	20,281	62,918	90,048	62,655	1,40,690	1,23,829
TOTAL*	1490*	4,153	4,376	3,710	5,818	6,575
RURAL	1,321@	3,267	3,793	3,157	4,774	5,146
Total number of Primary Schools	1,223	2,278	2,733	2,171	2,436	2,492
Total number of primary schools in rural areas	1,165	2,098	2,615	2,039	2,174	2,097
Pupil—Teacher ratio total*	24	21	25	21	31	24
Pupil—Teacher ratio Rural	16@	19	24	20	29	24
Gross enrolment ratio	B 47.9	72.7	74.3	91.1	65.5	84.2
for children 6—11	G 16.6	41.9	48.5	53.6	61.6	63.5
in rural areas	T 32.1	58.6	61.6	70.1	63.6	74.0

TABLE 1.3 (Contd.)

Characteristics	Hydera- bad (7)	Karim- nagar (8)	Khammam (9)	Krishna (10)	Kurnool (11)	M'Nagar (12)
Total enrolment in classes I—V	*1,53,703	46,478	53,109	1,53,135	93,051	50,516
Total enrolment in classes I—V Rural	30,835	36,992	41,034	1,08,795	68,546	42,089
Total number of School Teachers						
Total	*3,587	1,975	1,740	6,006	3,737	2,702
Rural	1,471@	1,737	1,575	4,671	2,897	2,576
Total number of Primary Schools	1,242	1,351	1,085	2,250	1,715	1,659
Total number of primary schools in rural areas	882	1,274	1,045	1,983	1,527	1,626
Pupil—Teacher ratio Total	*43	24	31	25	25	19
Pupil—Teacher ratio Rural	21@	21	26	23	24	16
Gross enrolment ratio	B 60.6	53.2	61.4	77.8	94.3	44.6
for children 6—11	G 30.7	22.1	41.0	68.5	54.0	20.0
in rural areas	T 46.0	37.7	51.5	73.2	74.9	32.4

TABLE 1.3 (Contd.)

Characteristics		Medak (13)	Nalgonda (14)	Nellore (15)	Nizam- abad (16)	Praka- sham (17)	Srika- kulam (18)
Total enrolment in classes I—V		*42,649	55,345	99,233	30,623	1,16,150	1,40,181
Total enrolment in classes I—V							
Rural areas		34,608@	47,438	82,198	19,584	1,00,984	1,22,911
Total number of School Teachers	Total	*2,074	2,730	3,489	1,167	5,255	5,779
	Rural	1,906@	2,565	2,975	1,033	4,649	5,081
Total number of Primary Schools		1,313	1,523	2,207	773	2,292	3,122
Total number of primary Schools in rural areas		1,281	1,479	2,077	730	2,155	2,994
Pupil—Teacher ratio total		*21	20	28	26	22	24
Pupil—Teacher ratio Rural		18@	18	28	19	22	24
Gross enrolment ratio for children 6—11 in rural areas	B	59.0	85.4	88.3	53.6	82.4	77.4
	G	26.3	29.1	72.8	18.2	59.6	..
	T	42.3	42.6	81.0	35.7	71.2	68.8

TABLE 1.3 (Contd.)

Characteristic		Visakhapat- nam (19)	Warangal (20)	West Godavari (21)	Total
Total enrolment in class I—V		*1,21,796	58,725	1,62,773	20,24,159
Total enrolment in class I—V Rural		85,495@	43,187	1,35,507	15,01,154
Total number of School teachers	Total	*4,713	2,008	5,749	78,902
		3,808@	1,835	4,850	65,087
Total number of Primary Schools		2,438	1,296	2,168	39,696
Total number of Primary Schools in rural areas		*2,253	1,250	1,969	36,713
Pupil—Teacher ratio	Total	*26	29	28	26
Pupil—Teacher ratio	Rural	22@	24	28	23
Gross enrolment ratio for children 6—11 in rural areas	B	71.3	57.6	74.0	69.2
	G	47.5	29.6	72.5	46.5
	T	59.8	44.3	73.3	58.1

SOURCE : Fourth All India Education Survey, Andhra Pradesh (Mimeo) 1980

areas also exhibit a diversity; Kurnool ranks highest with 93.4 and Adilabad lowest at 32.1 for all children. If this ratio is considered separately for boys and girls two points are immediately noteworthy: firstly, the ratio is consistently lower among girls than boys for all districts; and secondly, the rankings depicting the highest and lowest districts stand slightly changed. Kurnool (94.3) and Mahbubnagar (44.6) on one-side and Nellore (72.8) and Adilabad (16.6) and the other form the highest and lowest ranking districts, for boys and girls respectively. Lastly, the teacher-pupil ratio also exhibit a diversity: while some districts (Anantapur, Medak, Cuddapah) have 1:21 as a ratio, there are other districts (Hyderabad, East Godavari, West Godavari, Warangal) which show a much higher ratio. A comparison of Andhra Pradesh, school statistics with those of other states are presented in table 1.2. Similar statistics are presented on table 1.3 which show the inter-district variation.

In consideration for factors such as caste, social and ethnic composition of pupils, governmental arrangements for education extent of financial support subsidy, and historical development, no two state education or school systems resemble each other.

Similarly within any given state no two district education systems are strictly alike in the above mentioned characteristics. Nevertheless, in regard to several important demographic and educational features, Andhra Pradesh bears sufficient parity to some large states in Central, Eastern and South Indian States and this allows us to confirm on the representativeness of the setting for study although we recognize that our findings on the basis of one particular state (or a few districts within a state) cannot serve the basis for generalizing for the remaining states in the country (or about one whole state).

Source of Information

In India a reasonably large amount of information is collected (and compiled) on education.^{9,10} Typically the education statistics comprises facts on the number of children enrolled in school and details of expenditure for education.¹¹ However, much less information is compiled that would help us critically examine what is going on in our schools. The need for a wide variety of data series arises to enable us in testing our propositions. We shall describe below

some major sources of data used in testing our proposition, although we have also collected primary data based on extensive survey.

Fourth All India Educational Survey

In order to aid the government formulate precise and detailed schemes and programmes for development of educational facilities in a planned manner and to ensure proper educational opportunities for all children under 14 years' of age, the Central Government has been collaborating with the state government's to conduct All India Educational Surveys from time to time; so far four educational surveys have been conducted with varied yet specific objective¹².

- (i) To assess the present position of the provision of educational facilities at various stages of school education in respect of coverage of school-going population, the distance to be covered by a child to have access to the school, enrolment of children belonging to weaker sections of the society and girls enrolment etc.
- (ii) To assess the availability of minimum basic facilities in the school such as building, furniture, library, equipment, health and sanitation and incentives;
- (iii) To prepare block maps with existing schooling facilities and to identify clusters of habitations where institutions ought to be opened or existing schools ought to be upgraded; and
- (iv) To prepare the ground for conducting quarterly monitoring of information relating to school attendance at the primary stage and systematic updating of the data relating to enrolment at the primary stage.

However, in this survey priority has been given to the facilities at the various stages of school education only and the survey does not cover Pre-Primary Education, Collegiate and University Education and Professional types of Education. The survey also does not cover Institutions not recognised by the State Government or other competent authorities.

These objectives of the survey envisages the collection of information on the following main items:

- (a) Enumeration of every distinct habitation.
- (b) Enumeration of every primary, middle, secondary and higher secondary school/

9. The annual reports from the Ministry of Education, New Delhi on aspects of enrolment at various stages are based on information compiled from state departments of education. These reports present aggregate figures on all states and serve the purpose of inter-state comparison of progress in all levels of education. See Planning, Monitoring and Statistics Division, Ministry of Education and Culture, *Selected Educational Statistics 1979-80* (New Delhi : Department of Education, 1981).

10. The State Handbook published by the respective Bureau of Economics and Statistics publish Statistics on Education for the whole State. Some districts publish District Handbooks and they are useful in obtaining data and enrolment in primary education— Higher Education at that level. See Bureau of Economics and Statistics, *Handbook of Statistics Andhra Pradesh, 1977-78* (Hyderabad: Government of Andhra Pradesh, 1979) Assistant Director, Planning and Statistics, *Handbook of Statistics, Guntur district 1977-78* (Guntur, ZP 1980).

11. See "Enrolment in Educational Institutions" in *Handbook of Statistics Andhra Pradesh*, op. cit. Table 14.2, p. 94.

12. *Fourth All India Educational Survey, Andhra Pradesh (Mimeo)*, 1980, pp. 6—8.

intermediate/pre-university/junior college.

- (c) Habitations in various population slabs with and without educational facilities at primary, middle secondary and higher secondary stages.
- (d) In case of habitations without schooling facilities at these stages, the distance at which these facilities are available.
- (e) Schooling facilities available at various school stages in habitations predominantly populated by schedule castes, and in case the facilities are not available in the habitation itself, the distance at which they are available.
- (f) Schooling facilities available at various school stages in habitations predominantly populated by scheduled tribes, and in case the facilities are not available in the habitation itself, the distance at which they are available.
- (g) Proportion of scheduled caste population in villages and schooling facilities in them.
- (h) Proportion of scheduled tribe population in village and schooling facilities in them.
- (i) Age-wise enrolment of pupils at various school stages (classwise).
- (j) Age-wise enrolment of pupils belonging to scheduled castes and scheduled tribes.
- (k) Qualification of teachers (stage-wise) working in schools; and
- (l) Proportion of girls in schools.

We have chosen to analyse portions of this data for Andhra Pradesh as this is the only source where intra-district comparisons of educational performance of the system can be made. The major limitations of this data source are that we cannot possibly arrive at any conclusions on individual schools or among individual students. Despite this, the available information forms an adequate base for preliminary analysis.

Survey of Primary Education in Telangana Region (SPETR)

This study was authorised by the Telangana Development Committee and conducted by the Bureau of Economics and Statistics, (SPETR) is generally considered to be the most comprehensive data collection efforts ever undertaken in the history of education in Andhra Pradesh.

The sampling procedure adopted in SPETR resulted in the selection of 225 villages in the whole

Telangana and 271 primary schools of which 200 were in rural and 71 urban areas.¹³

The SPETR was concerned with collection of information for both rural and urban areas on the following:

- (a) Enrolment, stagnation and dropouts as observed from the school records for the period of 1961-62 to 1971-72, school aids and equipments and school finances;
- (b) Socio-economic background of the teachers in the selected schools; and
- (c) socio-economic background of the pupils enrolled in class 1 in 1967-68 in the selected schools and the progress of their education and reasons for dropouts.

In addition to the above, SPETR included a survey in the rural areas of a sample of household for ascertaining the reasons for some of the households not sending their children to school; and family background information on the selected villages were also collected with a view to analyse enrolment, stagnation and dropouts against this background.

This study was mostly concerned with systematic and accurate estimates on dropouts and stagnation in rural and urban areas of Telangana. The reasons for the widespread occurrence of these phenomena have also been analysed considering (i) schools; (ii) households; and (iii) village as units of analysis. However, the phenomenon of 'not sending children to school' and its causes (and consequences) or in other words inequality of educational opportunity among families in the rural setting has received only peripheral attention in the analysis of this data. Nevertheless, this study is the most comprehensive available on primary education in the Telangana region and serves adequately for purposes of intra-district comparisons, on participation in primary education particularly in the rural areas of this region.

Organisation of the Report

The chapters which follow are devoted to a systematic investigation of the present study's major research proposition on equality of educational opportunity. We also examine in detail the extents of wastage and stagnation in rural primary education in Andhra Pradesh.

In Chapter II, we discuss the details of the study, design and methodology adopted for data collection from the rural areas in A.P. Our study is confined to survey of villages in a few districts each in Andhra Pradesh and Telangana region. This chapter also discusses some of the most recent village statistics pertaining to the selected villages.

13. See *op. cit.* pp. 5 - 6.

Chapter III opens with a discussion on the concepts of wastage and stagnation and our approach to rendering this concept suitable for our empirical investigation. The chapter proceeds to examine the impact of school characteristics or its variant that is on the extent of wastage and stagnation among children. The chapter concludes with a systematic examination of estimates on wastage based on years data collected from the present survey.

Chapter IV examines the proposition A (socio-economic status) and its influence on educational performance of children. The chapter begins with a brief review of available literature on the topic and proceeds to analyse inequality of opportunity in rural primary education on the basis of survey data collected for the present study. The last chapter summarize the main findings of our analysis.

CHAPTER II

THE STUDY: METHODOLOGY OF DATA COLLECTION

This chapter consists of two parts: the first explains aspects of our methodology adopted for data collection. The second part summarizes tables drawn from our survey on certain village characteristics.

1.1.0. Sample Design

A stratified sampling design was adopted for our survey of rural areas each district in the region being a stratum. Two districts each in Andhra namely Guntur and one district in Rayalaseema namely Kurnool and two districts in Telangana namely Medak and Mahboobnagar were chosen on the basis of literacy figures,¹ gross

enrolment ratios² and retention ratios. (See also table 2.1 and chart 2.1).

1.1.1. Selection of Blocks

Within the selected districts, two Panchayati Samithi blocks were to be selected in order to give a representative picture of the district. As the present study is focussed towards backward areas and developing backward areas, it was decided to select blocks based on the information supplied by the Bureau of Economics and Statistics Andhra Pradesh. Table 2.2 summarizes the nature and distribution of Samithi blocks in the selected four districts.

TABLE 2.1

RETENTION RATIO IN PRIMARY EDUCATION (CHILDREN IN RURAL AREAS, ANDHRA PRADESH)

Ranking according to retention	Name of the Districts	Enrolment				Cross section data on Rural Retention ratios			
		Class I		Class V		For Boys	For girls	Class V Class I	Class V Class I
		Boys	Girls	Boys	Girls				
1.	CUDDAPAH .	30,497	22,527	12,269	5,901			40.2	26.20
2.	KRISHNA .	39,966	34,511	15,447	12,960			38.65	37.55
3.	GUNTUR .	53,716	44,774	19,949	12,363			37.13	27.61
4.	PRAKASHAM.	46,869	38,244	16,620	9,794			35.46	25.62
5.	CHITTOOR .	51,501	40,434	14,791	7,500			28.70	18.55
6.	EAST GODAVARI	55,004	51,918	15,765	12,935			28.66	24.91
7.	KURNOOL .	42,435	29,018	11,681	5,263			27.52	18.13
8.	SRIKAKULAM	57,285	54,410	15,454	8,162			26.98	15.00
9.	WEST GODAVARI	51,648	50,094	13,930	12,762			26.97	25.48
10.	NALGONDA .	39,492	22,342	9,958	4,268			25.21	19.10
11.	VISAKHA- PATNAM .	49,642	38,655	12,097	5,661			24.37	14.64
12.	ANANTAPUR .	47,751	30,336	11,348	4,453			23.76	14.68
13.	KARIMNAGAR	41,224	20,207	9,345	2,745			22.66	13.58
14.	NELLORE .	44,567	38,113	9,750	5,885			21.88	15.44
15.	WARANGAL .	43,609	22,920	9,210	3,367			21.12	14.69
16.	NIZAMABAD .	25,892	10,509	5,262	1,467			20.32	13.96
17.	KHAMMAM .	32,039	22,054	5,767	3,268			17.99	14.82
18.	HYDERABAD.	32,254	17,944	5,378	2,051			16.67	11.43
19.	MAHBOOB- NAGAR .	44,896	23,304	7,022	2,910			15.64	12.49
20.	MEDAK .	42,847	21,962	5,808	1,746			13.56	7.95
21.	ADILABAD .	28,774	12,521	3,746	1,050			13.00	8.39

Source : Calculated from *Fourth All India Education Survey*. Andhra Pradesh (Mimeo) 1980, Table 131
Ranking has been done according to retention among boys, taking figures upto two decimal places.

1. See table 1.1. Chapter I

2. See table 1.3. Chapter I

ANDHRA PRADESH

RETENTION RATES IN PRIMARY EDUCATION (BOYS IN THE AGE - GROUP 6 TO 11 IN RURAL AREAS)

MILES 8 0 8 16 24 32

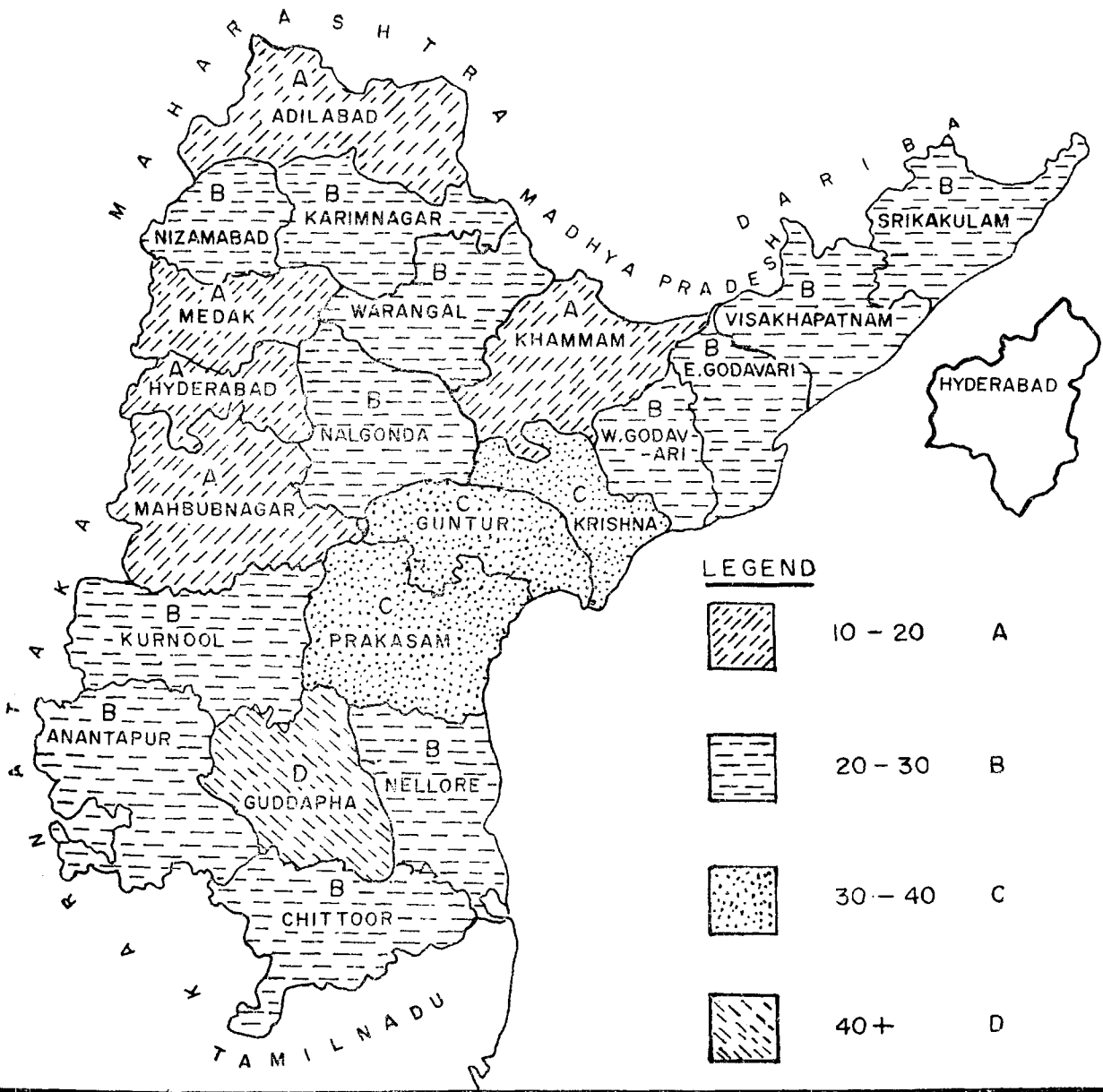


TABLE 2.2
DISTRIBUTION OF SAMITHI BLOCKS ACCORDING TO LEVELS OF DEVELOPMENT

	Kurnool		Guntur		M' Nagar		Medak	
	Nos.	Nos. selected	Nos.	Nos. selected	Nos.	Nos. selected	Nos.	Nos. selected
Advanced	Nil	Nil	7	Nil	Nil	Nil	Nil	Nil
Ordinary	6	1	3	1	1	1	5	1
Backward	7	1	11	1	14	1	6	1
Tribal	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil

Source : List of Panchayat Samithis in Andhra Pradesh (Mimeo) Bureau of Economics and Statistics n.d.

Based on the above table two blocks, namely one belonging to an 'ordinary' category and another belonging to a 'backward' category were selected from each district and they are given below:^{3, 4.}

Name	Status	District
1. Adoni	Ordinary	Kurnool
2. Alur	Backward	Kurnool
3. Tadikonda	Ordinary	Guntur
4. Ipur	Backward	Guntur
5. Wanaparthy	Ordinary	Mahboobnagar
6. Nagar Kurnool	Backward	Mahboobnagar
7. Gajwal	Ordinary	Medak
8. Madak	Backward	Medak

1.1.2. Selection of villages

Within each block, five villages were selected from among the list of villages having one or more primary school giving adequate consideration to area of the village, population density therein and literacy rate⁵. All the primary schools and schools having primary sections in each selected village were covered in the survey.

In the 40 selected villages there were 45 primary schools for which records were available. Thus all the schools were covered in the survey.

2.1.1. Scope of the School Survey

Briefly the information collected in the school survey for the rural areas consists of the following:

- (i) Enrolment, stagnation and dropouts as observed from the school records for the period of 1977-78 to 1980-81, school aids and equipments and school finances;
- (ii) socio-economic background of school teacher in the selected primary schools; and

- (iii) Details of socio-economic background of pupils enrolled in school and recent dropouts and current long absentees on roll.

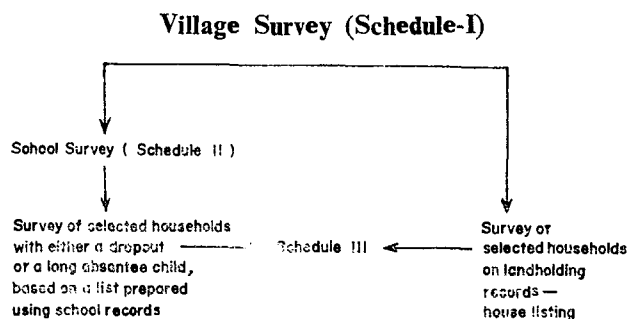
In addition to the above information, certain background data on the selected villages were also collected with a view to analyse, enrolment, stagnation and dropouts against this background.

2.1.2. Scope of Rural Household Survey

In each of the selected villages a sample of households were selected with the aid of landholding records available with respective Karnams,⁶ for a survey with a special focus to ascertain in (i) the reasons for some of the households not sending their children to school; and (ii) if the households found schooling facilities adequate.

Furthermore an additional sample of households was selected, based on a list of dropouts prepared on the basis of school records to ascertain (i) reasons for children dropping out of education; and (ii) how far these households were satisfied with the schooling facilities in the village.

LEGEND I : DETAILS OF SURVEY



³. The bureau of Economics and Statistics have defined categories 'Advanced', 'Ordinary', 'Backward' and 'Tribal' giving consideration to characteristics such as agricultural productivity, access to water etc. For the present analysis, we have considered such definition as valid and accordingly identified the blocks for survey. It must however be mentioned that such definition and categorization implies similarity between two blocks falling in the same category which strictly may not be true. It may be possible that two ordinary blocks may differ in many characteristics although they are "apparently similar".

⁴. In the 1981 Census of India, the Samithi block names and taluk names have been merged.

⁵. The selection of the villages were based on the 1971 census figures available in the respective district handbook. We were able to collect the most recent information on population, literacy rate etc. on the villages selected from each taluk headquarters.

⁶. The Karnams in Andhra villages are the custodians of the landholding records pertaining to each village. By and large, they are domicile of the village although there are noticeable exception to this.

The landholding records maintained by the Karnam forms a single important source on the pattern of land distribution in any particular village. Like other government data the Karnam's figures may not be altogether completely reliable as many holdings are still held on names of absentees landlords, etc. Nevertheless it forms a useful source to start with.

The schedules covered in the survey and the information collected through them are described briefly below:

Schedule I (Village Schedule)

This schedule was designed to collect information on each of the village such as population, areas under various crops, the population of school-going age group of children classified according to occupation and caste categories.

In addition house-listing and land-ownership classified according to occupation and caste categories was also collected with this schedule. For every landholding information was collected regarding caste and occupation of the head of the household, No. of children below 16 years age and the number of all other members classified by sex. These particulars were collected to prepare a sampling frame for household survey.

Schedule II (School Schedule)

This schedule was canvassed for all the primary schools located in the sample village including the upper primary schools conducting primary section. Some villages had more than one primary school located therein and for each of these schools a separate schedule was canvassed. All primary schools in the selected village, whether they were Government, Panchayat Samithi, private fully aided or partly aided were included in the survey. As mentioned earlier, in 40 villages about 45 primary schools were covered.

Information on enrolment, stagnation and dropouts in respect of classes I—V for the last five years i.e., 1976-77 to 1980-81 furniture and equipment available in the school, sports and recreation activities, activities for which parents are invited, financial resources and expenditure of school, details relating to teachers, their qualifications, experience and salary, details relating to social and occupational background of recent enrolls, recent dropouts and long absentees, availability of books/library etc. were collected in this schedule.

Schedule III (Household Schedule)

This schedule was canvassed for sample of Households in the selected villages. The total number of households selected in each of village was between 20—25 based on the following occupational categories:

- (i) Salaried service
 - a. public
 - b. private
- (ii) Self-employed business
- (iii) Large cultivators (10 acres)
- (iv) Medium cultivators (5—9 acres)
- (v) Marginal cultivators (2.5—4.9 acres)

- (vi) Small cultivators (upto 2.49 acres)
- (vii) Labourers with land
- (viii) Labourers without land
- (ix) Clean Artisans (Weavers, Goldsmiths Potters etc.)
- (x) Unclean Artisans (Dhobi, Barbers, etc.)
- (xi) Others

In each of these occupational categories 2-3 households were surveyed.

In addition to this, a list of dropouts were prepared for each village based on information available from school records; from the list 5—8 households were selected which could be categorized according to our occupational classifications, and these households were also surveyed.

Thus in all, for every selected village, we had two groups of households:

- i. a general group with children attending/not attending school; and
- ii. a specific group with atleast one school dropout.

For each of the selected households, information was collected on all household members and their educational attainment, on the children of school-going age whether the children were attending school or not, the reasons for either not attending or dropping-out parental preference for children's education, their satisfaction with schooling facilities available in the village, their willingness to educate the children, details of family income, socio-economic status of the household etc.

Every attempt was made in the survey to collect information on the performance of the school—general functioning, reported deficiencies and attendance on day of inspection, available from the inspection reports. The general nature of the inspection reports were descriptive and in view of this it could not be processed satisfactorily.

3.1.0 Field Work

Investigators were appointed for the survey and were given training at the College for a fortnight. In this period, a pilot testing of the schedules were done in a village for a week. The response was of great help in redesigning aspects of the schedules and giving them a final acceptable form.

Two teams consisting of a supervisor and three investigators each were identified and one team was deputed for Andhra and the other for Telangana districts. In the selected districts field work by the two teams began individually after the training programme.

The actual field work at Andhra was conducted between December 20, 1981—March 6, 1982 and in Telangana between December 21 and March

24, 1982. For each of the team the field work was supervised by a faculty member of the college.

1.1. Tabulation and generation of results of the survey

The primary tabulations of the survey schedule were done at the Centre for Educational Planning and Management, Administrative Staff College of India. The village schedules and the school schedule were analysed initially to generate tables on extents of wastage and stagnation in primary education.

The Household schedules were coded and punched to enable computer data processing. The data thus prepared was stored in magnetic tapes and analysed.

1.2. Methods of data analysis

The information from household schedules numbering over 1,200 were coded and computerised. Every attempt was made to computerise all available information in the questionnaires most useful for our present analysis.

Initially bi-variate tabulations were attempted to explore relationship between socioeconomic characteristics of the family and the decision to either participate or not participate or participate and withdraw from primary education. One major disadvantage with this exercise is that the statistical significance of the variables cannot be tested; nor can the influence of variables be controlled here.

To overcome this we perform multi-variate regression analysis to enquire the determinants of non-participation in primary education measured by the variables, number of children per family who never attended school, number of children in school etc

By doing this exercise, we hope to isolate simultaneously the effect of individual and family characteristics on the above mentioned variables. Such a method would allow for interaction of two or more independent variable namely family or individual characteristics on any particular dependent variable whenever theoretical justification permits.

Thus our findings shall be based on two different statistical tools: tabulations and multivariate regression analysis.

4.0 Summary characteristics of village surveyed

In tables 2.3 and 2.4 are presented certain characteristics of the selected villages classified according to block in Kurnool and Guntur districts respectively. The following points are noteworthy concerning the villages from the two tables.

- (a) The villages in the two blocks surveyed in Kurnool districts are characterised by low literacy rate, with the exception of

Manekurthy village in Alur. If literacy rate is considered according to sexes we find literacy rate among females systematically lower than that of males. In fact, we find 8 out of the 10 villages surveyed in this district have very poor literacy rate for females.

- (b) The villages in the two blocks surveyed at Guntur district however show dissimilar pattern in literacy rate. Tadikonda villages are characterised by high literacy rate, whereas those belonging to Ipur block, on the contrary, exhibit comparatively poorer rates. Literacy rates show systematic variations among the sexes in Guntur, similar to Kurnool. However, females fare considerably better in Tadikonda v's-a-vis Ipur where the literacy rate among females is very poor.
- (c) As expected, the land areas irrigated in Kurnool is lesser than that in Guntur. The former district is historically known to be situated in a water scarce region of Andhra Pradesh. Tadikonda village ranks highest in areas irrigated while Alur shares the lowest position.
- (d) The above ranking almost holds true for the presence of agriculture workers in the selected villages. Tadikonda block leads all other blocks in having larger percentage of agricultural workers. The fact that this block has more area irrigated would imply greater agricultural activity demanding more agricultural labour compared to other blocks which as mentioned earlier are known to be backward in agricultural activities.
- (e) It can be observed that with the exception of one village namely Nangayapalem in Ipur, most of the villages are situated at distance ranging from 9 to 42 kms away from the nearest town. This feature is particularly noteworthy in that almost all the villages were in interior parts of the blocks under consideration, and at large distances from the main road.
- (f) As response to the household survey, it may be observed that in any village about 30 per cent or more of all the households surveyed belonged to the 'dropout' category having atleast a child which was withdrawn from school.

In tables 2.5 and 2.6 are presented certain characteristics of the selected villages classified according to blocks in Mahbubnagar and Medak districts. The following points are noteworthy concerning the villages from the two tables.

- (a) The villages in the two blocks surveyed in Medak and Mahbubnagar are characterised by low literacy rates, similar of Telangana region.

(b) Most of the villages are situated at distance ranging from 2—32 kms away from the nearest town. It can also be observed that many villages surveyed are at interior parts of the block at distances over 12 or more kms away from the main highways.

The above mentioned points are important for consideration throughout this study. In the interpretation of our results we hope to refer to some of these features again and again seeking explanations for low or high participation of village in primary education.

TABLE 2.3

CERTAIN CHARACTERISTICS OF VILLAGES SELECTED FOR SURVEY : KURNOOL DISTRICT

Sl.No.	Name of the Villages	Area Sq. miles	Population(a)			% Literates		% Agriculture labourers			Density of population (b)	
			Total	Males	Females	Total %lite-rates	Literacy by sex	Total	Males	Fe-males		
											Males	Females
ADONI BLOCK												
1.	Pandavagallu	.65	782	410	372	15	24	4	13	14	12	High
2.	Sultanapuram	.17	514	256	258	24	39	10	11	8	13	High
3.	Jummaladinne	.16	869	436	433	4	7	1	20	15	26	High
4.	Sulekari	7.36	1393	700	693	7	13	1	36	27	44	Marginal
5.	Arekal	2.33	844	441	403	16	25	6	19	28	33	Medium
ALUR BLOCK												
1.	Manekurthy	1.32	669	348	321	41	58	39	35	34	36	High
2.	Kuruvalli	4.04	719	352	367	18	32	5	16	13	19	Marginal
3.	Chirumandoddi	1.44	834	425	409	13	23	2	22	14	30	High
4.	Mallikarjunapalli	2.30	874	422	452	22	38	6	10	16	5	Medium
5.	Muddatamagi	2.88	779	383	396	15	28	3	12	9	15	Medium
% of area irrigated to gross are (c)	Distance from nearest town (kms)	No. of schools	School type (d)	No. of households surveyed								
				Total	General group	Dropout households						
5.33	15 Kms	1	p.s.	30	22	8						
10.17	20 Kms	1	p.s.	29	19	10						
53.00	35 Kms	1	p.s.	37	27	10						
19.	35 kms	1	p.s.	41	29	12						
18	9 kms	1	p.s.	33	21	12						
—	18 kms	1	p.s.	46	35	11						
—	30 kms	1	p.s.	48	29	9						
—	13 kms	1	p.s.	41	26	15						
15	37 kms	1	p.s.	48	34	14						
—	37 kms	1	p.s.	37	27	10						

Note: (a) The Census of India 1981 information for all villages are provisional totals and have been collected from the taluq office records.

(b) 500 and above : High; 250-499 : Medium; 100-299: Marginal; and less than 100: low :

(c) Data based on taluq office records

(d) PS : Panchayati Samithi; PA : Private Aided

TABLE 2.4

CERTAIN CHARACTERISTICS OF VILLAGES SELECTED FOR SURVEY :
GUNTUR DISTRICT

Sl. No.	Name of Villages	Area sq. miles	Population(a)			% Literates			Agriculture Labours			Density of population
			Total	Males	Fe- males	Total %lite- rates	Literacy by sex		Total	Males	Fe- males	
							Males	Fe- males				
TADIKONDA BLOCK												
1.	Borupalem	1.03	1071	551	520	36	68	44	20	36	2	High
2.	Abburajapalem	1.22	534	265	269	55	67	42	36	24	46	Medium
3.	Lingayapalem	3.08	1651	832	819	29	36	21	32	40	24	High
4.	Uddandarayunipalem.	2.60	1117	557	560	40	46	33	25	33	3	Medium
5.	Malkapuram . . . . .	.86	1109	551	558	50	63	38	52	38	42	High
IPUR BLOCK												
1.	Naragayapalem	2.47	902	461	441	14	23	5	26	15	37	Medium
2.	Kanumalacheruvu	2.01	1267	643	624	9	16	2	24	19	29	High
3.	Kothalur	6.01	1498	741	757	17	25	9	30	26	34	Marginal
4.	Angalur	1.97	1519	763	756	14	19	9	16	18	13	High
5.	Bommarajupalli.	2.69	1040	515	527	19	30	8	23	22	24	Medium
% of Area Irrigated + gross area (c)	Distance from nearest town (kms)	No. of Schools	School type (d)	No. of households surveyed								
				Total	General group	Dropout Households						
32	42 kms	1	p.s.	33	22	11						
32	40 kms	1	p.s.	31	22	9						
47	16 kms	1	p.s.	32	19	13						
66	14 kms	2	p.s.	34	20	14						
—	13 kms	2	p.s.	39	27	12						
13	2 kms	1	p.s.	32	22	10						
12.5	16 kms	1	p.s.	30	21	9						
73	18 kms	1	p.s.	34	24	10						
89	17 kms	2	p.s.	40	28	12						
—	24 kms	1	p.s.	42	28	14						

Note : (a) The Census of India 1981 information for all villages are provisional totals and have been collected from the taluq office records.

(b) 500 and above : High; 250-499: Medium; 100-249; Marginal; and less than 100 : low

(c) Data based on taluq office records.

(d) PS : Panchayati Samithi; PA : Private Aided.

TABLE 2.5
CERTAIN CHARACTERISTICS OF VILLAGES SELECTED FOR SURVEY

Sl. No.	Name of Village	Area sq. miles	Total population	Total No. of literates	Literacy percentage	Distance from nearest town	No. of schools	School type	Density of population
<i>MAHABUBNAGAR DIST.</i>									
1. <i>Wanaparthy Panchayat Samithi</i>									
1.	Madjigala Mojerla	5.08	1,308	100	7.64	16	1	P.S.	Medium
2.	Cnandapur	2.98	1,523	110	7.22	12	1	P.S.	High
3.	Savigudem	4.73	1,239	133	10.73	11	1	P.S.	Medium
4.	Cnelmella	2.45	803	61	7.59	15	1	P.S.	Medium
5.	Natavelli	2.25	694	26	3.74	8	1	P.S.	Medium
2. <i>Nagarkurnool Panchayat Samithi</i>									
1.	Yedu.la	7.32	2,417	164	6.78	30	1	P.S.	Medium
2.	Gaggalapalle	3.65	1,313	186	14.16	8	1	P.S.	Medium
3.	Gndipalli	3.12	1,194	101	8.45	18	1	P.S.	Medium
4.	Vanpala	3.43	1,476	130	8.80	6	1	P.S.	Medium
5.	Naganool	7.48	1,610	112	6.95	2	1	P.S.	Marginal

TABLE 2.6
CERTAIN CHARACTERISTICS OF VILLAGES SELECTED FOR SURVEY

S.No.	Name of Village	Area sq. miles	Total population	Literacy	Distance from nearest town	No. of schools	School type	Population density
<i>MEDAK DISTRICT</i>								
1. <i>Gajwel P. S. Block</i>								
1.	Murajpalli	2.23	762	2.62	4	1	P.S.	Medium
2.	Masjidpalli	2.44	1375	16.14	12	1	P.S.	High
3.	Areipalli	1.30	608	1.15	16	1	P.S.	Medium
4.	Yalkal	1.22	1322	7.11	14	1	P.S.	High
5.	Ananagiripalli	2.40	603	4.80	10	1	P.S.	Medium
2. <i>Medak Panchayat Samithi</i>								
1.	Chityal	5.35	1355	5.76	5	1	P.S.	Medium
2.	Appajipalle	0.32	350	5.14	16	1	P.S.	High
3.	Maqdumpur	0.87	505	6.53	8	1	P.S.	High
4.	Snalipet	0.83	339	3.53	6	1	P.S.	High
5.	Minpoor	1.63	1093	7.56	32	1	P.S.	High

CHAPTER III

WASTAGE AND STAGNATION IN PRIMARY EDUCATION

This chapter deals with proposition 8 of our main framework of analysis, namely the impact of school characteristics on incidence of wastage and stagnation in primary school. It is divided into four sections. The first section discusses the concepts of wastage and stagnation, approaches to measuring these phenomena as found in available literature. The section concludes with discussion of our approach rendering these concepts and methods suitable for our empirical analysis. In section II, we discuss descriptive statistics on school facilities in our sample. This is followed by estimates and wastage and stagnation based on our data, in section III. The chapter concludes with a summary of our findings. The estimates for Andhra Pradesh are discussed first and then is followed by those for Telangana region.

I

Wastage and Stagnation: Issue in Definition and Measurement Wastage: Issues in definition.

The Hartog Committee defined 'wastage' to mean "the premature withdrawal of children from school at any stage before the completion of the primary course" and 'stagnation' was defined to mean "the retention in a lower class of a period more than a year".¹

While there has been no disagreement concerning the definition and implication of the term stagnation given by the Committee for subsequent research work, the Committee's definition of 'wastage' has raised counter opinions despite its formal acceptance among researchers. Thus, on the one hand, we have a set of arguments which claim that wastage needs to be related to the objectives of education prescribed for the stage (primary, secondary or higher) under investigation.² For instance if attainment of permanent literacy is considered a major objective of primary education (Class-I—V) any child who drops out or in other words withdraw before completion of sufficient time (at least 120 days) in grades IV or

V is considered a case of wastage. On the other hand, a second set of arguments towards defining 'wastage' are based on the concept of 'incremental gain' in learning outcome. Those who support this definition argue that the 'year' instead of the 'stage' should be taken as the temporal unit of enquiry because every year of schooling adds to the partial attainment of the objectives laid down for the stage under investigated^{3, 4}

The difficulty with second definition is that it cannot be applied in situation where the occurrence of 'lapse into illiteracy' takes place. Studies conducted by Gadgil and Dandekar⁵ have shown that it would require for any child a minimum of four years exposure to schooling to ensure retention of effective literacy in his later life. However, the Indian Constitution provides all children free education till age 14 or till class VII, the implecation being that this is the minimum period to make citizens.

Critique of the second definition of wastage consider the above and assuming that the lapse into illiteracy is strictly not applicable to the middle stage, argue that if constitutional directives are the major objectives than any child who drops out or is withdrawn before reaching grade VII would contribute a case of wastage.⁶ And so far their claim is that incremental gain definition would be more applicable for secondary stage. What would be more relevant according to these pains' with learning outcomes.

Wastage : Approaches to Measurement

(i) The first approach assumes that 'in any given authors is linking the concept of 'incremental year the enrolment in classes I—VIII would be equally distributed and then compare enrolment in all the classes with that of Class I concluding that 11 diminution from one class to another represents 'wastage'?' As Veda Prakasha points out, this method suffers from the obvious limitation that Class II of a given year is not the result

1. Interim Report of the Indian Statutory Commission, 1929, op. cit. p. 47.

2. Veda Prakasha, Stagnation and Wastage in *The Indian Year Book of Education* Elementary Education (New Delhi, National Council for Educational Research and Training - 1964) p.133.

3. See R.C. Sharma and C.L. Sapra, *Wastage and Stagnation in Primary and Middle schools in India*. (National Council for Educational Research and Training, New Delhi, 1969) p. 12

4. Studies using this definition are the following : D. V. Chikermane, "A study of Wastage in Primary Education in India" *Education and Psychology Review*, Vol.2 (1962) pp. 20-21. Directorate of Education, Wastage and Stagnation in Primary Schools' Summary : *Indian Journal of Educational Administration and Research*, Autumn, 1960. p. 13 and P. Choudry: *Report of an investigation on Wastage and Stagnation in Primary School in the District of 24 Parganas*. Calcutta, Directorate of Public Instructions, 1965, Gadgil D. R. and Dandekar V. M *Report of Two Investigations Primary Education in Satara District*. (Poona : Gokhale Institute of Economics and Politics, 1955)

5. See Sharma and Sapra, *Op.cit.* p.13

6. Veda Prakasha,

7. See Veda Prakash, *op.cit.* p. 135

of Class I of the same year that of Class I of the previous year when the enrolment may have been less. Such an argument may well be extended to other classes.

(ii) The second method compares the number of children in Class I to those in Class V, five years later. The difference, is considered as a measure of 'wastage'. Such a method although used by Hartog Committee has three major limitations. First, the figures thus obtained may include not only cases of wastage but also those of stagnation. Secondly, no allowance is made here for special circumstances, e.g. rapid expansion period as a part of government efforts and enrolment drive.⁸ Finally, this method does not take into account occurrence of new admission in Classes II to V, nor does it allow for either deaths or double promotion of children.

(iii) In the third method, the career of a cohort of children are followed systematically from the beginning grade of class I through subsequent years until the last grade is reached. The number of children who leave the school before completing the prescribed course is thus definitely determined and the percentage of 'wastage' is calculated from the proportion of these dropouts to the initial cohort.⁹

The method is perhaps the best to measure wastage; unfortunately there are not many studies which adopt this approach. (iv) The fourth method assumes wastage as a continuous variable and is built on the earlier mentioned concept of 'incremental gain' in learning out-comes. The concept of purports that in moving from the first grade to the last grade or any stage of education, the earlier a child leaves in terms of both grade and month, the more will be the 'wastage' due to him. For example, a child who leaves after passing class III constitutes lesser wastage than those who withdraw in Class I. This approach assigns weights in multiple of 10 for class I to V in increasing order. Each completed month in any class I assigned a weight fraction to the total weight for the whole year in that class. Thus one who leaves after completion of class I, has a score of 10 in terms of using the school and wastage of 90 due to him; similarly one who leaves after completion of class I, has a score of 10 in terms of using the school and wastage of 90 due to him; similarly one who leaves after class I but having studied for four months in class II has a score of 18 in terms of having used the school and the wastage assigned to him is 82 due to him.¹⁰

The difficulty with this approach arises due to the intervention of the lapse into illiterary phenomenon mentioned earlier. The latter implies that there are no differences among these children who drop out at later stages namely from classes IV and V vis-a-vis their counterparts in lower classes and hence actual wastage of withdrawal at early stages is much larger or as much larger as withdrawal at a higher class.

Stagnation

Unlike the measurement of wastage, stagnation has brought fourth much less controversy. For measuring the extent of stagnation, the usual method adopted is to use the formula as follows:

$$\text{Index of Stagnation} = 100 \times 1 - \frac{\text{Total optimum years}}{\text{Actually used years}}$$

The expression optimum years is used to denote the total number of years required for a given cohort to complete the prescribed course on the assumption that every child will make normal and regular progress from year to year. The 'actual used years' are, however, calculated by counting every year spent by every child on the cohort.¹¹

This formula constitutes a useful tool for the measurement of stagnation taking into account several factors such as the size of the initial cohort, the number of children remaining in the class after each successive year, the number of trials taken by each child in completing the class, and the total time spent by the whole class to complete any given class or all the four classes. This formula enables statistical comparison between years, classes and even between one school and the other.

It is worthwhile to mention here that although these phenomena have been defined clearly enough to aid systematic estimation many studies determine estimation of stagnation as a residual amount after subtracting the proportion of dropouts from a total measure of 'stagnation and wastage' and thereby obtain separate estimates of the extent of wastage and stagnation.¹² Such a measure of wastage and stagnation or in other words breaking of the total estimate of 'wastage and stagnation' into its component, according to the Report of the Survey of Primary Education

8. A period of rapid expansion naturally results in an abnormal enlargement of Class I and as a consequence, a temporary disproportion between the number in Class I and those in higher classes -see Hartog Committee Report 1929, *op.cit.* p.47 as quoted in Sharma and Sapra, *op.cit.*

9. See Gadgil, D.R. and Dandekar V. N. *op.cit.* P. Chowdhry, *op. cit* for a summary of the results-See Veda Prakasha, *op.cit.* pp. 139-140.

10. See Chickermans, *op.cit.* The 24 Pargana Study used weight 1,2,3, and 4 respectively to pupils for completion of grades I, II, III and V.

11. Veda Prakasha, *op.cit.* p.u. 2

12. "In general out of every 101 pupils on rolls in class I in 1967-68 in the rural areas only pupils completed class V at the end of five years of schooling in 1971-72. Thus the extent of stagnation and wastage in rural areas has been of a staggering order, as high as 89 per cent." (Our emphasis) See Finance and Planning Department, Government of Andhra Pradesh, *Survey of Primary Education in Telangana Region (SPETR), 1973, p.96*

in Telangana Region (SPERTR) is beset with a number of problems as the estimates obtained by such a measurement may not be correct. The Report identifies three reasons for this:

For one thing, the dropouts of a pupil from the educational stream may itself be a consequence of earlier stagnation in the school but this impact on stagnation gets eliminated once he is deducted under dropouts.

Secondly, the concept of dropouts relevant for the purpose of obtaining a measure is 'not dropout' as against the concept of 'gross dropouts' which is more relevant as a measure of wastage. 'Gross dropouts' or simply 'dropouts' at that term refer to pupils who drop out of a class in a particular year and once they dropout, they are out of the educational stream for the rest of the year. On the other hand, some of the dropouts may re-enter the educational stream in the following year or years, so that such re-enrolment more appropriately represent a case of stagnation at the primary stage, though it also bears the impact of dropout.

Thirdly, there is another variety of dropouts: the dropout from the educational stream occurs between one class and another so that it is different from the case of pupils dropping and from a class during the course of a year (SPERTR Report, p. 97).

In view of the above, the Report suggests that, for measurement purpose, the concept of dropout be used to mean and denote these dropouts from a class during the course of a year, as a suitable measure.

The above summary, in brief, presents significant approaches towards defining and measurement of the concept of wastage and stagnation in primary education. It may be mentioned here that for the present study although rendering these concepts useful has been guided by our objective of precise estimation of the extent of wastage in primary education, attempts have been made towards determining its casual factors. While the former objective would only serve to 'unfold' the magnitude of the phenomenon, the latter has policy implications in leading us to understand the process by which these phenomenon occurs and for taking appropriate measures to improve the situation. Thus, in accordance with the above objectives, the first steps has been towards estimation of the extent of dropouts by which we could denote the extent of wastage. For measurement we use the concept of dropout to from a class during a year.¹³

13. Although withdrawals or dropping out occurs all through the year in primary schools, as matter of policy teachers strike-off children's name off school records only during the last working month of the school. From the first day of a child's absence whichever month it be, to the last working day of the school, the child's name is continued on roll and marked absent, declaring him/her as a dropout.

14. Sharma and Sapra, *op. cit.* pp. 26-27.

The following formula was used to calculate the rate of dropouts:

$$\text{Rate of dropout} = \frac{\text{Number of dropouts in a grade}}{\text{Total enrolment in the grade}} \times 100 \text{---(1)}$$

The above formula was used by Sharma and Sapra in their studies.¹⁴ Using information on individual schools, these authors explain their methods:

"The names of pupils who left school during the years 1962-63 and 1963-64 were listed. The school leaves included pupils who obtained school leaving certificates and also those whose names were struck off from the rolls on account of long absence or other reasons. The teachers were requested to ascertain the whereabouts of the school leavers by contacting their parents or by gathering evidence about them from other sources. The school leavers who were found to have joined some other schools were not taken into account for the purpose of calculating the rate of dropout. Those about whom it was definitely known that they had discontinued their studies, constituted clear cases of dropout. To this were added, 60 per cent of the school leavers whose whereabouts were not known. This was done to obtain the total number of dropouts in each grade (grades I—VIII) during each of the years 1962-63 and 1963-64. The decision to treat 60 per cent of the 'not traceable' school leavers as dropouts was taken after making an enquiry of the school leavers in some of the selected schools."

In the present study, we use the formula to arrive at the rate of dropout. Unlike Sharma and Sapra, we do not add to this 60 per cent of children whose whereabouts are not known for the following reasons:

First, in the case of children who withdraw with 'record-sheet' during the course of a year, we treated them as having continued their studies. Secondly, we were able to know the whereabouts of most of the children from the school teachers or other people as our period of consideration was from 1976—81. Fortunately, many continued to stay in the villages surveyed and for those who had moved out, their links in the village were ascertained to confirm their having totally withdrawn from education. Hence we decided not to add a fraction of their number to the dropout rate.

Stagnation mainly occurred in schools due to want of attendance in the class during the year. Following the Telangana Schools Survey Report we express stagnation as a percentage of repeaters in a class to total enrolment in that class in any year.

II

In this section, we present descriptive statistics of certain characteristics of schools selected for investigation. Our findings here would be important in helping us understand the quality of school services in the rural context.

Table 3.1 presents the distribution of the schools according to certain physical features for both Kurnool and Guntur districts. Some of the points noteworthy are the following:

(a) Location of schools

About 50 per cent of the sample schools in Kurnool are located at the outskirts of the village; about 40 per cent are located on either the main road or by-lane whereas only 10 per cent of schools are centrally located and easily commutable from all points in the village. In Guntur, however, a higher proportion namely of about 50 per cent of schools are centrally located while only 33 per cent sample schools are located at the outskirts of the village.

(b) Surroundings

The selected villages in both Kurnool and Guntur have schools located in healthy surroundings in large proportion. And schools located in either dusty or smoky surroundings account for about 30 per cent in Kurnool but only 15 per cent in Guntur.

(c) Structure of school buildings

Almost 70 per cent of the school buildings in Kurnool and Guntur have pucca buildings while about 20 and 31 per cent have either Katcha or thatched buildings or huts respectively in the two districts. Lastly, about 10 per cent of the schools, were found to be having no buildings and were run in either temples or under the shades of trees in Kurnool.

TABLE 3.1

DISTRIBUTION OF SCHOOLS ACCORDING TO CERTAIN PHYSICAL CHARACTERISTICS

Details of	Kurnool		Guntur	
	No.	%	No.	%
(A) LOCATION				
1. Centrally located	1	10	6	46
2. Market Area	..	..	..	..
3. Main Road	2	20	4	31
4. By Lane	2	20	..	..
5. Outskirts	5	50	3	23
Total	10	100	13	100

Details of	Kurnool		Guntur	
	No.	%	No.	%
(B) SURROUNDINGS				
1. Healthy	7	70	11	84.6
2. Dusty	1	10	2	15.4
3. Smoky	2	20	..	..
4. Noisy	..	..	..	..
Total	10	100	13	100.0
(C) TYPE OF BUILDING				
1. Pucca	7	70	9	69
2. Semi Pucca	..	..	..	..
3. Katcha/Thatched	2	20	4	31
4. No Building	1	10	..	..
Total	10	100	13	100
(D) TYPE OF FLOOR				
1. Cement	2	20	3	23
2. Stone floor	3	30	6	46
3. Mud floor	5	50	4	31
Total	10	100	13	100
(E) OWNERSHIP TYPE				
1. Owned	5	50	6	46
2. Rented	2	20	3	23
3. Rent free	3	30	4	31
4. No. Building	..	..	..	..
Total	10	100	13	100
(F) DRINKING WATER FACILITY				
1. Within premises	..	..	3	23
2. Within Neighbourhood	8	80	5	38.4
3. Not available	2	20	5	38.4
Total	10	100	13	100.0
(G) NO. OF TEACHERS				
1. Single	7	70	4	31
2. Two	3	30	2	15.4
3. Three more	..	..	7	52.6
Total	10	100	13	100
(H) MANAGEMENT TYPE				
1. Government	..	..	..	..
2. Panchayati Samithi	10	100	11	84.6
3. Fully	..	..	2	15.4
4. Partial aided	..	..	..	..
5. Unaided school	..	..	..	..
Total	10	100	13	100

(d) Type of floor

Only about 20 per cent of schools in both Kurnool and Guntur have cement flooring whereas about 50 per cent in Kurnool and 31 per cent of schools have mud floor. Lastly a higher proportion of Guntur schools were found to have stone floor than Kurnool.

(e) Ownership of school buildings

In both Kurnool and Guntur 50 per cent of schools were housed in own buildings and about 20 per cent in rented buildings. The remaining 30 per cent schools were run in rent-free buildings. Typical rent-free accommodation include temples or house of a prominent person in village etc.

(f) Drinking water facility

In the selected schools in Kurnool district 80 per cent schools had access to drinking water within the neighbourhood and 20 per cent had no water facilities at all. In Guntur, however, over 20 per cent schools have water within the neighbourhood while 39 per cent schools do not have drinking water at all.

(g) Number of Teachers

70 per cent of the schools are run by single teacher while the remaining 30 per cent are multiple teacher schools with 2 teachers. In Guntur, however, only 30 per cent schools are single teacher run whereas the remaining 70 per cent schools are run by two or more teachers. In fact, in the selected schools about 15 per cent schools had three or more teachers.

(h) Schools by management

In Guntur, all the selected schools were run by the Panchayati Samithies while at Kurnool 85 per cent belonged to this category and the remaining were private aided schools.

We have so far described the physical characteristics of schools and their location—we now turn to enquire quality of service within the school. Table 3.2 presents details of availability and utilization of furniture and equipment in schools in the selected schools in Kurnool and Guntur districts.

TABLE 3.2
AVAILABILITY AND UTILISATION OF FURNITURE AND EQUIPMENT

Item	KURNOOL				GUNTUR			
	Having the item		Using the item		Having the item		Using the item	
	n	%	n	%	n	%	n	%
1. Time piece	4	40	0	0	1	7.6	1	7.6
2. Bell	5	50	4	40	13	100.0	12	92.3
3. Notice board of the school	1	10	1	10	5	38.4	5	38.4
4. Sign board of the school	8	80	7	70	11	84.6	11	84.6
5. National flag with pole and rope	6	60	5	50	11	84.6	11	84.6
6. A table for each teacher	6	60	6	60	11	84.6	11	84.6
7. Tatpatis or benches for students	6	60	5	50	4	30.7	4	30.7
8. Black board for each class	7	70	6	60	13	100.0	12	92.3
9. Box or Almirah for each class	5	50	5	50	8	61.5	8	61.5
10. Duster for each class	4	40	4	40	8	61.5	8	61.5
11. Ball frames	1	10	1	10	3	23.0	5	23.0
12. Alphabet chart	7	70	6	60	7	83.8	7	53.8
13. Map of district	7	70	6	60	13	100.0	13	100.0
14. Map of State	10	100	9	90	13	100.0	13	100.0
15. Map of India	9	90	8	80	12	92.3	12	92.3
16. Map of all countries	3	30	3	30	12	92.3	12	92.3
17. Globe	6	60	3	30	8	61.5	6	46.1
18. Earthen pots for drinking water	2	20	1	10	1	7.6	1	7.6
19. Tumblers	2	20	1	10	1	7.6	1	7.6
20. Buckets	2	20	—	—	1	7.6	1	7.6
21. Brooms	3	30	2	20	10	76.9	18	76.9
22. Waste paper basket for each class	1	10	1	10	1	7.6	—	—
23. Mirror	1	10	—	—	2	15.3	2	15.3
24. Picture books	3	30	1	10	6	46.1	5	38.4
25. Play material	2	20	—	—	3	23.0	3	23.0

Note: 1. a. Total number of schools surveyed in Kurnool: 10

b. Total number of schools surveyed in Guntur :15

2. The percentages are computed to the total number of sample schools and not confined to schools having the item.

Considering furniture and equipment, it can be observed that neither Kurnool nor Guntur has schools in our sample which possess all the items. In Kurnool about 50 per cent of schools have the items mentioned in the table. The only exception to this is the school signboard which a majority of schools therein are found to have. In Guntur over 80 per cent of schools have a box or almirah to preserve their records. In other words, the distribution of furniture and equipment favour Guntur schools more than Kurnool schools.

Turning towards facilities for teachers about 60-70 per cent schools in Kurnool have table and chair for teacher and blackboard whereas the proportion is much higher for Guntur districts.

Facilities for children are generally poor in both districts as can be observed from the fact that only 60 per cent of Kurnool schools have bench or tatpath for children to sit of which only 50 per cent schools use this. In Guntur even less percentage of schools have similar facilities for children.

III

We begin this section with an analysis of enrolment figures in primary schools in the rural areas of Andhra Pradesh. Our specific purpose here is to build a background for our analysis of wastage and stagnation in primary education which follows in the latter half here.

SCHOOL ENROLMENT IN RURAL AREAS OF ANDHRA PRADESH ACCORDING TO CLASS, SEX AND DISTRICT

ENROLMENT IN CLASSES

District	I		II		III		IV		V		Total I - V	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Adilabad . . .	28774	12521	9704	3296	7665	2349	5140	1605	3746	1056	54429	20821
Anantapur . . .	47751	30336	29000	13255	19071	8796	13859	6078	11348	4453	121129	62918
Chittoor . . .	50501	40434	31002	19681	23475	13033	18285	9400	14791	7500	139059	90048
Cuddapah. . .	30497	22527	24009	14966	19591	11225	16093	8036	12269	5901	102549	62655
East Godavari . . .	55004	51918	34750	33427	26582	24428	20264	17982	15765	12935	152365	140690
Guntur . . .	53716	44774	38529	29003	29063	21948	22584	15741	19944	12363	163961	123829
Hyderabad . . .	32254	17944	10592	5059	7864	3294	6573	2487	5378	2051	62643	30835
Karimnagar . . .	41224	20207	16480	6313	12779	4462	10503	3265	9345	2745	90331	36952
Khammam . . .	32039	22054	11682	6888	9153	5071	7107	3743	5767	3268	65748	41023
Krishna . . .	39966	34511	29392	25565	23850	20367	18639	15392	15447	12960	128294	108795
Kurnool . . .	42435	29018	27354	16569	19652	10617	14416	7079	11681	5263	115538	68546
Mahbubnagar . . .	44896	23304	15134	7707	13665	5056	8908	3112	7022	2910	89629	42089
Medak . . .	42847	21962	13285	5346	8956	3235	7084	3219	5808	1746	77980	34608
Nalgonda . . .	39462	22432	18270	9295	13991	6533	11658	5000	9958	4268	93367	47438
Nellore . . .	44567	38113	25152	18776	17388	1138	12934	8037	9750	5885	109791	82198
Nizamabad . . .	25892	10509	9939	3379	7215	2407	6091	1822	5262	1467	54399	19584
Prakasham . . .	46869	38224	32634	23386	25636	16970	20439	12610	16620	9794	142195	100984
Srikakulam . . .	57285	54410	37925	29518	28083	18542	20062	12279	15454	8162	159409	122911
Visakhapatnam . . .	49642	38655	32202	19986	23660	13088	16453	8105	12097	5661	134054	85495
Warangal . . .	43609	22920	16633	7502	13284	5425	10724	3972	9210	3367	93460	43187
West Godavari . . .	51658	50094	31934	31036	24649	23836	18576	17777	13930	12762	140727	135507
Total	901908	646777	495717	329953	375748	232071	286989	165842	230597	126511	2290954	1501154

Source : *Fourth All India Education Survey Report, Andhra Pradesh (Mimeo, 1980) Table 131*

TABLE 3.4

SCHOOL ENROLMENT AS PERCENTAGE OF ENROLMENT IN CLASS I ACCORDING TO CLASS, SEX AND DISTRICT: ANDHRA PRADESH

District	I		II		III		IV		V	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Adilabad	100	100	33.72	26.32	24.55	18.76	17.86	12.81	13.01	8.38
Anantapur	100	100	60.75	43.69	40.14	28.99	29.02	20.03	23.76	14.67
Chittoor	100	100	60.19	43.69	45.58	32.23	35.50	23.24	28.71	18.55
Cuddapah	100	100	79.02	66.43	64.23	49.82	32.76	35.67	40.23	26.19
East Godavari	100	100	63.17	64.38	48.32	47.05	36.84	34.67	28.66	24.91
Guntur	100	100	71.76	64.77	54.10	49.01	42.04	35.15	37.13	27.61
Hyderabad	100	100	32.83	28.19	24.32	18.36	20.38	13.86	16.67	11.43
Karimnagar	100	100	39.97	31.24	30.99	22.08	25.48	16.16	22.66	13.58
Khammam	100	100	36.41	31.23	28.57	22.99	22.18	16.97	18.00	14.82
Krishna	100	100	73.54	74.07	62.18	59.01	46.63	44.60	38.65	37.55
Kurnool	100	100	64.46	57.10	46.31	36.59	33.98	24.40	27.53	19.86
Mahboobnagar	100	100	33.71	33.08	30.45	21.70	19.85	13.36	15.64	12.49
Medak	100	100	31.01	24.35	20.91	14.73	16.54	10.56	13.56	7.95
Nalgonda	100	100	46.30	41.61	35.46	29.24	29.55	22.38	25.24	19.11
Nellore	100	100	56.44	49.27	39.02	29.88	29.03	21.09	21.88	15.44
Nizamabad	100	100	38.39	32.16	27.87	22.93	23.53	17.34	20.33	13.96
Prakasham	100	100	69.63	61.19	54.70	44.40	43.61	32.99	35.46	25.63
Srikakulam	100	100	66.21	54.26	49.03	34.08	35.03	22.57	26.98	15.00
Visakhapatnam	100	100	64.87	51.71	61.21	33.86	33.15	20.97	24.37	14.65
Warangal	100	100	38.15	32.74	30.47	23.67	24.60	17.34	21.12	14.69
West Godavari	100	100	61.83	61.96	47.71	47.59	35.97	35.49	26.98	25.48
Total	100	100	54.97	51.02	41.56	35.89	31.82	25.65	25.57	19.56

In table 3.3, we present enrolment figures for rural areas classified according to class of attendance and sex drawn from the information available in the Fourth All India Education Survey, Andhra Pradesh. In table 3.3, enrolment of pupils in classes II to V computed as percentage of enrolment in Class I are presented.

We recognise intra-district variations in enrolment. However, our prime focus is on the general pattern in enrolment observable for all districts which appear immediately relevant for our analysis. A few points noteworthy regarding tables 3.3 and 3.4 are the following:

(a) The enrolment in class I for both sexes are disproportionately large compared to all other classes. For example, as against 100 per cent enrolment in class I for both sexes, we find the enrolment in class V to be 25.56 and 19.56 per cent (of enrolment in Class I) respectively for boys and girls. This occurrence resembles the All India pattern of uneven distribution of pupils across all Class I—V.¹⁵ Such a situation exists because of (i) the large incidence of stagnation in Class I at the beginning of the year; and (ii) considerable wastage that occurs at the year and in this class.

TABLE 3.5

ENROLMENT IN CLASSES I TO V AS PERCENTAGE OF ENROLMENT IN CLASS I IN SAMPLE SCHOOLS : KURNOOL DISTRICT

Class/Year	I		II		III		IV		V	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
1976-77	100	100	54.64	50.72	49.37	33.33	31	14.29	24	0
1977-78	100	100	73.45	39.43	47.53	30.98	32.09	16.90	25.3	7.04
1978-79	100	100	65.83	25.27	59.62	20.87	37.26	12.08	29.81	9.89
1979-80	100	100	57.12	24.53	34.97	9.81	30.04	4.90	21.18	3.68
1980-81	100	100	80.95	63.86	66.66	24.36	47.61	12.60	42.17	5.88

TABLE 3.6

ENROLMENT IN CLASS I—V AS A PERCENTAGE OF ENROLMENT IN CLASS I IN SAMPLE SCHOOLS : GUNTUR DISTRICT

Class/Year	I		II		III		IV		V	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
1976-77	100	100	73.79	78.86	67.58	60.97	59.31	68.29	44.13	30.89
1977-78	100	100	90.36	82.75	62.75	62.65	55.42	55.86	40.96	37.93
1978-79	100	100	85.09	81.65	74.53	52.07	52.79	38.46	44.72	33.79
1979-80	100	100	114.84	112.6	100.0	76.47	78.9	52.10	48.43	48.73
1980-81	100	100	105.46	93.91	103.90	81.73	74.21	53.91	53.90	33.04

15. See Fourth All India Education Survey Report: Op. Cit Table 15 pp. 38-39. The SPETR Survey found a similar occurrence to be true for Telangana for the periods from 1961-62 to 1971-72 See Chapter V, pp. 70-73.

(b) The pattern of enrolment is systematically less for girls than for boys in all the five classes. This is once again similar to the All India pattern of lesser enrolment for girls compared to boys in all classes.

We now turn to the enrolment pattern observable from our data to consider the disparity if any in enrolment between Classes I and V in the selected schools under investigation. Table 3.5 and 3.6 present enrolment figures in classes II to V estimated as a percentage to enrolment in class I, in the two districts respectively.

The two important patterns namely: (i) disproportionately large enrolment in class I and uneven distribution of pupils in Classes II to V

for both sexes; and (ii) less enrolment of girls in all classes vis-a-vis boys seem to emerge from our finding also.

It appears as if the stress on primary education in rural settings, as a previous study remarked, seems 'to have largely confined to getting the children admitted into the first class without ensuring that they attend the school at least for a minimum period of five years for completing the cycle of primary education covering classes I--V'.¹⁶

The extent of disparity between the enrolment in Class I and V reflects the extent of wastage in primary education in rural areas. And so one simple method to measure the extent of wastage would be to compare the diminution

TABLE 3.7

EXTENT OF WASTAGE IN PRIMARY EDUCATION : KURNOOL DISTRICT

Entry : 1

Entry : 2

	Enrolment			Retention			Retention			Retention			Retention			Retention			Percentage retention to enrolment as of 1976-77 or in class I														
	I			II			III			IV			V																				
	T	B	G	T	B	G	T	B	G	T	B	G	T	B	G	T	B	G	T	B	G	T	B	G	T	B	G						
1976-77 . . .	30	21	9	9																		100	100	100									
1977-78 . . .	36	21	12	14	12	2																100	100	100	47	57	22						
1978-79 . . .	31	18	13	12	10	2	9	8	1													100	100	100	36	48	17	30	38	11			
1979-80 . . .	40	21	19	18	13	5	10	8	2	7	6	1										100	100	100	58	72	38	30	38	17	23	43	11
1980-81 . . .	12	17	15	20	13	7	10	7	3	9	7	2	5	5	0	100	100	100	50	62	37	32	39	16	27	33	17	16	24	0			

Entry : 3

PERCENTAGE WASTAGE AT VARIABLES—(100—Retention Rate)

	I			II			III			IV			V		
	T	B	G	T	B	G	T	B	G	T	B	G	T	B	G
1976-77 . . .	100	100	100												
1977-78 . . .	100	100	100	53	43	78									
1978-79 . . .	100	100	100	64	52	83	70	62	89						
1979-80 . . .	100	100	100	42	38	72	70	62	83	77	57	89			
1980-81 . . .	100	100	100	50	38	63	68	61	84	73	67	83	84	76	100

TABLE 3.8

EXTENT OF WASTAGE IN PRIMARY EDUCATION : GUNTUR DISTRICT

Entry : 1

Entry : 2

	Enrolment I			Retention			Retention			Retention			Retention			Rate: % age retention to			enrolment as of 76-77											
	I			II			III			IV			V																	
	T	B	G	T	B	G	T	B	G	T	B	G	T	B	G	T	B	G	T	B	G	T	B	G						
1976-77 . . .	37	20	17													100	100	100												
1977-78 . . .	36	20	16	31	17	14							100	100	100	84	85	82												
1978-79 . . .	37	18	19	20	15	15	23	23	10				100	100	100	83	75	94	62	65	59									
1979-80 . . .	30	16	14	30	16	14	24	14	10	18	11	7	100	100	100	81	88	74	72	70	63	49	55	51						
1980-81 . . .	30	16	14	24	13	11	18	10	8	18	10	8	12	8	4	100	100	100	61	81	79	44	56	42	50	50	50	32	40	24

30

Entry : 3

PERCENTAGE WASTAGE AT VARIABLES - 100 — RETENTION RATE

	I			II			III			IV			V		
	T	B	G	T	B	G	T	B	G	T	B	G	T	B	G
1976-77 . . .	100	100	100												
1977-78 . . .	100	100	100	16	15	18									
1978-79 . . .	100	100	100	17	25	6	38	35	41						
1979-80 . . .	100	100	100	19	12	26	28	30	37	51	45	59			
1980-81 . . .	100	100	100	40	29	21	56	44	58	50	50	50	68	60	76

in enrolment from class to class over a series of five-year periods over one five-year period. In tables 3.7 and 3.8 are presented the extent of wastage estimated for sample schools of our study for Kurnool and Guntur districts.¹⁷ These are followed by charts I and II showing the decrease in enrolment in each class for the group which entered class I in 1976-77 and which reached class V in 1980-81, for both Kurnool and Guntur separately. It can be observed from table 3.7 (entry 2) that enrolment in class V in 1976-77 for Kurnool district schools. This shows a wastage of about 85 per cent (see entry 3). If enrolment is separated according to the sexes, we notice that of all boys enrolled in Class I in 1976-77, 24 per cent reached class V in 1980-81 (showing a wastage of 76 per cent) while among girls no one reached class V in 1980-81 showing a clear 100 per cent wastage.

From table 3.8 it may be observed for Guntur that the extent of wastage is comparatively less than Kurnool. We find that enrolment in Class V in 1980-81 is 32 per cent of the total enrolment in class I in 1976-77, which is twice as high as Kurnool. This shows a wastage of 68 per cent. We find that 40 per cent of boys and 24 per cent of girls of all these enrolled in class I in 1976-77 reach class V in 1980-81 respectively. Thus the extent of wastage is about 60 per cent for boys and a higher 76 per cent for girls (see entry of table 3.8)

Estimate of Wastage and Stagnation

As mentioned earlier, data relating to enrolment, stagnation and dropouts were collected in the survey for all the sample schools, classwise

for all castes and for harijans separately for the years 1976-77 and 1980-81. Using this data, the methodology discussed in the previous section was adopted to estimate extent of dropouts and stagnation for various years in the two districts. Tables 3.9 and 3.10 present these results for various years for all pupils and harijans separately for the selected schools in the two districts under investigation.

Some of the points noteworthy about these tables are the following:

- (i) The extent of stagnation in both Kurnool and Guntur show an increasing trend in the periods 1976-77 to 1979-80, after which there is a slight decline for all children. Among harijan children in Kurnool, the trend appears to be reverse for 1976-77 to 1978-79 after which there is a sharp increase and then a diminution by almost fifty per cent. However in Guntur the extent of stagnation shows a declining trend among boys whereas among girls it shows an increasing trend with the exception of the period of 1978-79 which shows the lowest rate for both boys and girls among harijans.
- (ii) Guntur district shows systematically higher incidence of stagnation than Kurnool district among all the children for all the years we have estimated these figures. Given that Guntur ranks higher than Kurnool in retention rates, the result is somewhat surprising.

TABLE 3.9

PERCENTAGE OF STAGNATION AND DROPOUTS TO TOTAL ENROLMENT IN PRIMARY CLASSES IN SELECTED VILLAGES : KURNOOL DISTRICT

Year	All Children				Harijans			
	Stagnation		Dropouts		Stagnation		Dropouts	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
1976-77	11.24	13.4	28.16	33.64	14.17	16.7	21.13	12.23
1977-78	11.66	18.12	32.64	25.44	13.8	1.4	41.00	25.5
1978-79	19.92	20.48	33.48	33.32	5.25	1.4	21.25	16.9
1979-80	23.2	26.68	43.12	41.94	24.33	16.25	36.6	27.75
1980-81	22.58	21.76	40.1	43.68	13.93	11.00	49.45	25.12

Unfortunately, the relatively small number of schools/villages per block implied that it would be difficult to comment on general trend in the whole block. Hence, we aggregated our findings for the two blocks in a district in our interpretation of results. We do however recognize intra-district variations in our findings and then implication for wider analysis of results.

TABLE 3.10

**PERCENTAGE OF STAGNATION AND DROPOUTS TO TOTAL ENROLMENT IN
PRIMARY CLASSES IN SELECTED VILLAGES : GUNTUR DISTRICT**

Year	All Children				Harijans			
	Stagnation		Dropouts		Stagnation		Dropouts	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
1976-77	35.73	33.45	17.09	14.91	60	49	32	21.75
1977-78	26.36	35.64	14.55	18.64	48.2	53	35.67	26.40
1978-79	41.36	41.82	22.18	21.36	38.43	38.4	39.50	30.67
1979-80	37.45	40.73	26.64	35.09	40.43	42.33	34.17	48.6
1980-81	31.55	36.64	28.00	26.55	38.63	45.43	25.83	43.83

(iii) In both districts the incidence of stagnation is higher for girls among all children and also among harijan pupils for all years. The exception to this are in Kurnool districts among harijans for 1977-78 and 1978-79 where stagnation is considerably less among girls than boys. It is possible that enrolment of harijan girls during these years may not have been commensurate with that of boys and hence could mask the extent of real incidence of wastage.

(iv) The rate of dropouts are higher than that of stagnation for all including harijans in Kurnool whereas in Guntur the reverse situation occurs. The extent of dropout is systematically less than stagnation for all children for all years.

(v) By and large, the rate of dropouts shows an increasing trend in both districts. From 1976-77, the rate of dropout shows an increase of about 11 per cent for boys

and girls whereas that increase is over 28 per cent and 13 per cent among harijan boys and girls respectively in Kurnool. In Guntur, the rate of dropout in 1980-81 over 1976-77 is about 11 per cent for boys and girls in all children group. Among harijan boys, the trend in dropout shows a slight decline while for girls the percentage increase in 1980-81 is almost twice in the rate of dropout recorded in 1976-77.

Previous studies by Gadgil and Dandekar¹ have shown higher incidence of dropout and stagnation among lower castes in generally and harijans in particular than upper castes and we find our results largely supporting these studies.

In Tables 3.11 and 3.12 are presented extent of stagnation for each class classified by sex for all castes and harijans for the five years for which we have the data. This is followed by tables 3.13 and 3.14 where details of dropouts are given for the two districts in similar fashion.

TABLE 3.11

EXTENT OF STAGNATION IN CLASSES I—V IN SELECTED VILLAGES : KURNOOL

		All Children					Harijans				
		I	II	III	IV	V	I	II	III	IV	V
1976-77	B	21.6	11.0	6.9	7.3	9.4	9.4	22.5	10	10	
	G	30.5	10.0	12.0	4.5	10	10	16.7	—	—	
1977-78	B	26.4	14.4	10.7	1.8	5	13.8				
	G	24.6	21.4	9.1	2.5	33	1.4				
1978-79	B	26.1	27.1	11.2	5.2	29.5	3.8	6.7			
	G	26.3	21.6	18.7	33.3	2.5	1.4				
1979-80	B	28.5	19	17	20.8	13.7	27	16	30		
	G	29.5	23.1	17.5	23.3	30	22.5	10	—		
1980-81	B	31.7	30.6	20.3	14.4	15.9	12.6	13	16.2		
	G	37.2	28.3	21.6	21.6	10	23	10			

TABLE 3.12

EXTENT OF STAGNATION IN CLASSES I TO V IN SELECTED VILLAGES : GUNTUR

		All Children					Harijans				
		I	II	III	IV	V	I	II	III	IV	V
1976-77	B	34.36	36	31.91	28.73	30.82	28.54	17.45	17.45	11.36	22
	G	41.27	33.82	42.45	34.55	33.64	31.90	37.72	29.72	7.27	13.36
1977-78	B	25.00	20.09	25.18	33.82	18.81	34.00	44.5	44.3	46.33	77.66
	G	28.00	28.81	33.90	31	23.18	64.00	67.00	70.0	60.00	41.5
1978-79	B	44.55	40.91	36.18	36.73	32.55	29.00	49.00	42.00	49.33	33.0
	G	45.64	41.82	29.73	34.27	17.73	70.4	61.2	48.33	62.5	45
1979-80	B	41.36	38.09	30.18	36.55	26.09	84.80	41.00	37.00	15.33	31.25
	G	40.64	42.00	30.55	41.73	21.35	65.4	45	38.8	6.5	59.67
1980-81	B	45.09	34.91	24.82	37.45	25.36	48.5	36.75	30.75	29	49.2
	G	46.45	38.91	29.09	26.64	34.73	45.2	55.6	46.25	60.5	40

TABLE 3.13

EXTENT OF DROPOUTS IN CLASSES I—V IN SELECTED VILLAGES : KURNOOL

		All Children					Harijans				
		I	II	III	IV	V	I	II	III	IV	V
1976-77	B	29.1	18.5	26.2	32.6	34.4	22.5	22	30	10	
	G	49.1	38.1	28.5	32.5	20	16.7	10	10		
1977-78	B	55	39.8	33.5	15.2	19.7	47	35	—		
	G	54.1	32.9	34.4	2.5	3.3	24.3	—	26.7	—	
1978-79	B	44.3	38.9	28.2	27.1	28.9	32.5	10.0		—	—
	G	58.9	36.7	31.7	35	5.0	33.8	—	—		
1979-80	B	47.7	38.6	29.6	39.5	44.2	50.2	50.1	29.7	30	
	G	58.7	40.2	40.8	40	50	38.8	16.7	—		
1980-81	B	48.3	42.4	31.7	34.8	43.3	43.5	35	20.8	—	
	G	56.7	41.3	15.0	26.7	—	38.3	12.3	—	—	

TABLE 3.14

PERCENTAGE OF DROPOUTS FROM CLASSES I TO V IN SAMPLE SCHOOLS : GUNTUR

		All Children					Harijans				
		I	II	III	IV	V	I	II	III	IV	V
1976-77	B	11.36	23.0	21.9	14.9	18.45	40	57	—	50	83
	G	19.18	19.27	24.6	22.2	36.6	41.5	53.5	75	—	—
1977-78	B	16.09	14.09	16.55	23.9	27.18	30	36	33.0	34.75	66.75
	G	16.36	13.91	16.55	21.91	26.82	20.5	43	45.5	14.0	41.5
1978-79	B	19.09	20.55	20.09	29.18	16.09	27.8	29.6	—	—	—
	G	14.91	20.09	28.45	12.45	12.91	25.25	12.5	50	—	—
1979-80	B	30.55	76.73	18.27	33.09	17.18	34.33	56	57	55.33	56.75
	G	30.27	33.09	37.33	32.00	15.18	55.6	52.4	56.25	48.2	65
1980-81	B	25.56	20.09	24.82	26.27	35.91	16.5	18.5	28.32	27	74
	G	28.00	23.00	18.27	17.55	22.18	36.2	46.6	62.67	58.5	41.5

In all the four tables some of the cells particularly for harijans are empty. One reason for this is that in some of the higher classes in primary schools, i.e., class III and above the number of children were negligibly small or there were in many schools, the harijans children rarely reached class V we need to consider this all the time while interpreting our findings. The important feature of the above four tables are the following:

- (i) Regarding the incidence of stagnation, the extent is consistently higher in Guntur than in Kurnool and also generally higher among girls than among boys in both districts for all years under investigation.
- (ii) As expected, the rate of stagnation is much higher in class I compared to all other classes in both districts. This is also true for harijan children in Guntur.
- (iii) The incidence of stagnation is disproportionately distributed across the various classes in both districts. If we compare the extent of dropouts among all children category on one hand and harijan children on the other, we find that the latter group shows a much larger rate of stagnation than all children group for Guntur. Unfortunately, we do not have similar data to compare for Kurnool.
- (iv) As found earlier, the dropout rates (tables 3.11 and 3.12) are higher than those of stagnation in Kurnool, while in Guntur, the incidence of dropouts are less than stagnation for all classes.
- (v) By and large, for all years, dropout rates are systematically higher for girls than boys in all classes in both districts. There are exceptions to this as in the case of all children for 1980-81. The lesser number of girls in higher classes compared to boys, and a small number out of this withdrawing from the class may be one reason for some of these exceptions. However, if we had a large number of schools surveyed, possibly a greater amount of uniformity in findings could have occurred.
- (vi) When we consider the extent of stagnation across the classes, we notice that as we move from class I to V the rate of stagnation shows a progressive decline for both districts.¹⁹ This decline is higher for boys than girls implying that in any class girls stagnate more than boys.

The point for consideration here is whether stagnation is concentrated at the entry

point, i.e., class I or near the point of exist, viz., class V. We notice that stagnation is concentrated mostly at the entry.

The rate of dropout is generally higher in the first two classes compared to other classes. For more recent years data, dropout rates are higher for all classes among harijans for both boys and girls (see tables 3.13 and 3.14 in both districts).

- (vii) It can also be observed from tables 3.13 and 3.14 for Kurnool the rate of dropout is considerably high in all the classes among boys while for girls it is concentrated at the point of entry and shows a decline as we move from class I to class IV. One reason for this could be that the percentage of girls in higher classes and slightly less than boys of these remaining a fraction dropout which is reflected as a smaller percentage to the total enrolment of girls in that class.

At this juncture, a point to consider concerns the possible impact of stagnation on rates of dropout in the higher classes subsequent to entry in the Class I. It is often argued that dropouts during subsequent years could largely arise from the stagnating pupil and hence given the occurrence of stagnation at all classes, this line of argument anticipated higher rates of dropouts as one moves from class I to V. Our data reveals contrary findings to the above argument: from the tables we notice a downward trend in the rate of dropout from Class I (where it is highest) to Class V (where it is much lower at least among all the classes). Our findings imply that in both districts when we consider the rate of dropout according to class, the 'propensity' to dropout is lower in the higher classes than in the lower classes, this being considerably independent of the impact of stagnation. We hasten to add here that we do not entirely rule out the role of stagnation as a contributory factor to dropouts. As several studies have conclusively shown, the incidence of dropouts is also deeply rooted in social and economic factors, and to an extent in school services offered to children etc.²⁰ To explore further in this line of thinking appears relevant for the present study and accordingly we discuss below the impact of certain school and village factors/characteristics on stagnation and wastage in primary education. It is worthwhile mentioning here that our results are based on the findings from the 20 village schools surveyed. Although it is impossible to make firm generalization on a relatively small sample as this, our findings would in the least show us directions of influence, if any, of school characteristics on extent of stagnation and dropouts.²¹

19. For some years there is on the contrary an increase.

20. See Sharma and Sapra, *op. cit.*, chapter II. Also SPETR Report, *op. cit.*, pp. 106-107. Unfortunately this report does not discuss the impact of socio-economic factors in the incidence of dropouts in detail.

21. For an excellent discussion in school facilities and their impact on participation in primary education at a macro level see Agro Economic Research Centre, *Primary Education in Rural India Participation and Wastage*, New Delhi : Tata McGraw Hill, 1971.

(a) The structure of school buildings and the extent of stagnation and dropout:

Sharma and Sapra in their study did not find any relationship between school buildings type and the rate of dropout in a school.²² The

SPETR Report found that the structure of the school building had no impact on the extent of stagnation and dropouts in rural areas with the exception of schools without buildings where stagnation was considerably.²³ In Table 3.15 we present our results on the structure of school

TABLE 3.15

PERCENTAGE OF STAGNATION AND DROPOUTS TO ENROLMENT IN SAMPLE SCHOOLS ACCORDING TO STRUCTURE OF SCHOOL BUILDING

	Percentage of stagnation to enrolment in schools in								Percentage of dropouts to enrolment in schools in							
	Guntur				Kurnool				Guntur				Kurnool			
	All		Harijans		All		Harijans		All		Harijans		All		Harijans	
	B	G	B	G	B	G	B	G	B	G	B	G	B	G	B	G
Pucca	31	42.86	41.83	37.67	35	20.8	..	..	24.57	26.29	32.75	48.00	53.4	34.2	32.6	15.6
Semi Pucca	36	12	33	44	56.4	25.4	..	..	20	10	12	22	40.8	23.2	..	..
Thatched	11	24	..	..	..	..	..	..	29	21	..	..	..	..	..	..
No building	58	67	25	45	19.8	41.2	24	..	87	77	28.5	69.5	17.6	7.6	7.8	..
Total	31.5	36.47	33.28	45.56	37.07	32.47	24	..	40.14	33.57	24.42	43.17	37.17	21.73	32.6	15.6

building type and the extent of stagnation and dropouts for both Kurnool and Guntur districts. Some of the findings noteworthy are the following:

- (1) For both districts extent of stagnation is high in schools with pucca buildings, the least being that among girls in Kurnool;
- (2) Our findings for semi-pucca buildings show a mixed trend while the extent of stagnation in this case is higher than that for pucca buildings in Kurnool; in Guntur the rate of stagnation is less for boys and even lesser for girls. Perhaps the less number of schools with semi-pucca buildings in our sample for Guntur may be one reason for this anomaly.
- (3) Schools without buildings as expected, have the highest rate of stagnation among both sexes in both districts with the exception for boys in Kurnool.
- (4) Guntur pucca buildings school show a lesser rate of stagnation than their counterparts at Kurnool.
- (5) The rate of dropout is much lower in schools, with pucca buildings than in those without buildings in Guntur, while surprisingly Kurnool shows a reverse trend.

- (6) In schools with pucca buildings the rate of dropout is higher for harijan pupil than non-harijan in Guntur while this is not so in Kurnool.

Our findings are mixed and given this it is difficult to conclude firmly on the impact of the building structure and extent of dropout and stagnation definitely.

(b) Single or multiple teacher schools and the extent of stagnation and dropouts:

The SPETR Report found incidence of stagnation high among single teacher schools compared to multiple teacher schools, while the dropout rate was the same in both type of schools in rural areas.²⁴ Sharma and Sapra considered the impact of teacher-pupil ratio and its impact on the rate of dropout.²⁵ They found strong correlation between the two after aggregating their data and suggest that 'to minimize the rate of dropouts in school, the number of pupils per teacher may be reduced so that individual contact between the teacher and taught is made possible'.

We now turn to our findings to enquire if they support these earlier studies. Our results are presented in table 3.16 which shows the percentage of dropouts and stagnation in single and multiple teacher schools for both districts.

22. Sharma and Sapra, *op. cit.*, p. 68
23. SPETR Report, *op. cit.* p. 107
24. See *op. cit.*, p. 109
25. See *op. cit.*, p. 67

It can be observed that in both districts among all including harijan pupil stagnation and dropouts are systematically higher in single teacher schools than in multiple teacher schools.

The noticeable exception to this is the case of harijan girls in both districts among whom stagnation and dropouts are higher in multiple teacher schools than in single teacher schools. One could search for reason to explain this. One obvious reason for this may be inadequacy of data at hand for us. The second and more serious one would be that in the rural setting enrolment of girls is much lesser in general and among those belonging to harijan community

are even lesser in particular. Intuitively reasoning, it is possible for harijan girls to survive among in a small group of girls (and boys) consisting of both harijans and non-harijans. This may explain the observed lesser extent of stagnation and rate of wastage thereon. On the other hand multiple teacher schools usually have more children and are apparently more complex in terms of classrooms atmosphere. The likelihood of the harijan children being isolated is greater in this context and observed higher rate of stagnation and dropout rate may also arise as a result of this. We hasten to add that these sociological reasons are offered here more as conjunctures.²⁶

TABLE 3.16
PERCENTAGE OF STAGNATION IN SINGLE AND MULTIPLE TEACHER SCHOOLS

	Percentage of Stagnation to enrolment in schools in								Percentage of dropouts to enrolment in schools in							
	Guntur				Kurnool				Guntur				Kurnool			
	All		Harijans		All		Harijans		All		Harijans		All		Harijans	
	B	G	B	G	B	G	B	G	B	G	B	G	B	G	B	G
Single Teacher	47.50	58.5	35.00	44.00	23	20	44	2.8	54.5	52	28.5	39	39.4	37.2	16.8	5.6
Multiple teacher	31.6	37	39.83	40	21.3	25.4	18.4	15.2	27.63	25	20.43	31.14	36.4	29.4	26	20.4

(c) Location of Teachers Residence and extent of Stagnation and dropouts:

The SPERT Report observed that 'the residence of the teacher in the same village where the school is located is crucial for performance of the pupil and this factor appears more important than the native place of the teacher'. Similarly Sharma and Sapra found that a higher rate of dropout was associated with teachers arriving from longer distances to school.²⁷

We now present our results in 3.17 on the relationship between teachers residence and the extent of stagnation and dropout, to enquire if our findings support earlier studies. We find:

- (i) in both Guntur and Kurnool the rate of stagnation is higher where the teacher residence outside the village among boys in the all children category. Among girls, however, the reverse seems to hold at Kurnool while teacher residence appear to have no impact on the percentage of stagnation at Guntur.

TABLE 3.17
STAGNATION AND DROPOUTS OF CHILDREN IN SCHOOLS ACCORDING TO PLACE OF TEACHER'S RESIDENCE

	Percentage of Dropouts								Percentage of Stagnation							
	Guntur				Kurnool				Guntur				Kurnool			
	All		Harijans		All		Harijans		All		Harijans		All		Harijans	
	B	G	B	G	B	G	B	G	B	G	B	G	B	G	B	G
1. Location of School Teacher's residence is in some village	36.6	42.2	37.8	32.6	37.8	14.6	23.8	16.6	29.6	33.00	23.4	39.2	31.00	53.66	30.6	18
2. Teachers' residence is outside the village	32.8	38.4	30	38.75	63	27.2	41.2	29	37	31.75	12.67	31	41.2	13.8	11.2	—

26. Some aspects of this are discussed in K.V. Eswara Prasad—Village Society and Educational Backwardness—1981 (Mim eo)

27. See *op. cit* p. 66

- (ii) Among Harijans, the rate of dropout is higher in villages where teacher resides in the same village than in the schools where teacher lives outside.
- (iii) The rate of dropouts as expected is higher where teacher resides outside the village in Kurnool while at Guntur the reverse seems to be true.

The continued residence of a teacher with the village where the school exists implies his awareness towards village society and also increases his social participation in village activities leading to his/her greater acceptance in the village as an entity.²⁸ Inturn, this would promote greater participation of the village in primary education and result in lesser wastage.

On the contrary, a teacher living outside the village where his school is situated has less chance of social interaction with that village and is unlikely to effect social participation of the village in education. This may be one reason for the incidence of greater rate of wastage and stagnation in such schools.

Where we find contrary evidence to the above propositions say in the case of harijans or boys in Guntur, it is explainable. For a teacher residing outside the village where his school is situated, he is more prone to manipulate school attendance register or absent himself for days together from work and yet present records to show as though he has worked etc., unlike a teacher who resides in the same village where the school is situated.²⁹

If we accept the general trend of earlier studies, we find our results supporting the view that teacher residence is related to the extent of dropouts and stagnation at primary schools.

- (d) Distance of Villages having Primary Schools from urban centre and the extent of stagnation and dropout:

The SPETR Report found rates of stagnation and dropout to be independent of the distance of the village having the primary school from the urban centre.

It is often argued that the farther distance of the village from urban centre, the less the chances of urban-rural interaction and hence greater likelihood of participation in the local school within the village given higher opportunity, cost of transport to urban centre schools, in the existing context of relatively poor transport facilities from distant and interior villages to urban centres.

On the contrary one could argue as follows: the lesser rural-urban interaction implies not necessarily greater participation in education of these distant villages. Rather these village schools are greatly disadvantaged in terms of having poor schooling facilities particularly since access to them are difficult given that many such villages do not have connecting roads. It follows then that such schools would be neglected at the level of the block office in terms of the latter's inability to provide inspection, physical facilities, facilities for schools and terms of furniture, equipment and building, etc. that all of which make school 'attractive'. If this is true then we could say the degree of attractiveness is lesser in the schools away from the urban centres and hence the extent of dropouts and stagnation may be more therein.³⁰

We now move to enquire from our data which kind of argument holds. Table 3.18 presents our results to the extent of stagnation and wastage according to the distance of village from urban centres. The following points are noteworthy.

- (1) Stagnation is higher for all children in Guntur where schools are away from the urban centres. Results for Kurnool show a reverse trend.

TABLE 3.18

STAGNATION AND DROPOUTS ACCORDING TO DISTANCE OF SCHOOL FROM NEAREST URBAN CENTRE

Distance of vil- lages in which school is loca- ted from nearest urban centre	Percentage of stagnation to enrolment								Percentage of dropout to enrolment							
	Guntur				Kurnool				Guntur				Kurnool			
	All		Harijans		All		Harijans		All		Harijans		All		Harijans	
	B	G	B	G	B	G	B	G	B	G	B	G	B	G	B	G
Less than 2 kms																
2 to 5 kms																
5 to 10 kms					28.8	25.6							33.6	26	13.2	00
10 to 25 kms	34.60	35.00	31.2	23.4	31.2	26.2			20.8	15.6	8.2	13.8	36.8	15.4	21.8	11.0
25 kms and above	40.67	42.67	28.33	22.67	23.4	24.8			19.8	19.2	—	14.2	49.4	24.2	23.2	16.2

28. There are counter arguments to this suggesting that teachers prolonged presence for years in any villages would mean negative influence in school participation. The Government accordingly transfers teachers from schools every four years.

29. Some of these issues are discussed in greater details in K.V Eswara Prasad, *op. cit.*

30. For an elaboration, see K V Eswara Prasad, *op. cit.*

- (2) The rate of dropouts are higher in schools farther away from the urban centres in both districts for boys and girls although Kurnool records a higher rate of dropout. This is also true among harijan children in both districts.

By and large our results support the line of argument that the schools situated away from urban centres are less 'attractive' and hence have greater incidence of dropouts.

(a) Proportion of area irrigated in the village and extent of wastage and stagnation.

Irrigation is an important factor contributing prosperity of a village by increasing the economic activity therein. It is a universally accepted fact that the level of economic activity in rural areas

are characterized by seasonal fluctuations. Earlier studies have revealed the seasonal variations in job opportunities in rural areas³¹ and hypothesized their likely impact on rural primary education. It is possible that a small child may either have to work on the family farm or may find employment on daily wage basis during peak agricultural activity season. Such employment opportunity arises from two sources namely (i) substitution for adult labour by child-labour for certain types of 'light' activity; particularly in peasant-proprietor farm; and (ii) on a contractual wage-basis children may be called along with a family to work during the peak season. The implications of these phenomena are that the 'opportunity cost' of keeping a child in school is higher during harvesting and sowing seasons than during the rest of the year".³²

TABLE 3.19

STAGNATION AND DROPOUTS ACCORDING TO PROPORTION OF IRRIGATED AREA IN SAMPLE VILLAGES

Percentage of irrigated area to total cropped area of the village	Percentage of stagnation								Percentage of Dropout							
	Guntur				Kurnool				Guntur				Kurnool			
	All		Harijans		All		Harijans		All		Harijans		All		Harijans	
	B	G	B	G	B	G	B	G	B	G	B	G	B	G	B	G
Less than 10%	51	50.5	40.5	23	14	23	12.4	11.6	47	36.5	14.1	26	24.6	20.6	26.4	6.6
10 to 25%	34.5	45.5	25	45	37.2	31.3	37.2	9	58	49	12	45	48.2	24.2	6.6	7.6
25 to 50%	27.25	30.75	30.5	38.5	nil	nil	nil	nil	22	25.1	34.5	33	nil	nil	nil	nil
50% and above	33.5	44	53.5	77	nil	nil	nil	nil	nil	nil	nil	nil	nil	nil	nil	nil
All schools	36.56	42.68	37.38	45.38	20.6	27.15	12.9	10.3	42.33	36.86	20	34.66	36.4	22.4	15.5	7.1

Thus given that children contribute to family income by their work, "education of a child turns out to be more expensive proposition during the periods of high agricultural activity in the course of a year"³³ this situation, it is likely that once a child is withdrawn from school he/she may never return to school.

We do not have adequate data on seasonal variations in attendance for our school to enquire the relationship between agricultural activity pattern and school attendance. Rather we have data on the extent of area irrigated in each village. This type of data was used by the SPETR Report which found negative correlation between the percentage of irrigated area in the village and the proportion of stagnation in primary schools located in such villages³⁴ and no meaningful relationship between the former and rate of dropouts.

We present in table 3.19 the results of our findings on areas irrigated and the extent of stagnation and dropout.

- (i) In Guntur an increase in percentage area irrigated is followed by a decrease in the

extent of stagnation among all children. This finding is similar to the earlier mentioned SPETR Report. In Kurnool among all children including harijan pupil, and among harijan pupil at Guntur, the converse situation prevails.

- (ii) In both districts among all children including harijan pupil increase in area irrigated is followed by an increase in dropout rates.

Inadequacy of data prevents from conclusively commenting on the impact of area irrigated on incidence of stagnation and dropout in primary education.

Finally, we attempted a number of additional tabulations on teacher factor such as his age, qualifications and teaching experience in the present school and total experience as a teacher and the rate of stagnation and dropout. We did not find any discernable trend emerging from our results and hence these tabulations are not presented here.

31. Planning Commission, Government of India, *Report of the Committee on Unemployment Estimates* (New Delhi: Government of India Press 1970).

32. Agro Economic Research Centre, *Primary Education in Rural India Op. cit.* p. 66.

33. *Ibid*

34. SPETR Report, *Op.cit.* p, 113

WASTAGE AND STAGNATION IN PRIMARY EDUCATION: TELENGANA

This Part is devoted to the study of wastage and stagnation in Telangana Region. In the first section, the descriptive statistics of the sample schools selected are discussed. And in the second section estimates of wastage and stagnation used on our data are presented.

Table 3.20 presents the distribution of schools according to certain physical features for both Mahbubnagar and Medak districts. Some of the points noteworthy are the following:

(a) Location of Schools

Only 18 per cent of the sample schools in Mahbubnagar are located at the outskirts of the village; one in 3 schools are centrally located and the remaining on the main road or bylane, giving accessibility within reach to school-going children. This pattern is almost true of the sample schools in Medak district with the exception that here the number of schools are in outskirts are east.

(b) Surroundings

The selected villages in both Mahbubnagar and Medak are mostly situated in dusty surroundings. It can also be observed that a higher percentage (27 per cent) of schools in Medak are located in healthy surroundings compared to Mahbubnagar.

(c) Type of Building

Most of the sample schools in Mahbubnagar have pucca buildings (64 per cent) while about 50 per cent have semi-pucca structures. In Medak, however the number of schools with pucca buildings are the least (18 per cent) while these with semi-pucca buildings are higher. Also more schools in the sample in Medak have Katcha type of buildings than Mahbubnagar.

(d) Type of Floor

Only 18 per cent of schools in Mahbubnagar are found with cement floor and a higher 45 per cent schools have stone floor. In Medak however, none among the sample schools had cement floor. Lastly, most of the schools in the district have mud floor unlike in Mahbubnagar.

(e) Ownership of School Buildings

In both Mahbubnagar and Medak equal proportions of sample schools are housed in own build-

ings. Only 9 per cent of school buildings in Mahbubnagar are rented whereas 36 per cent of school buildings in Medak are rented. Lastly a higher proportion of schools are run in rent free buildings in Mahbubnagar than in Medak.

(f) Drinking Water Facility

In the selected schools in Mahbubnagar district 27 per cent of schools had drinking water within the premises while 63 per cent within the neighbourhood. In Medak however only 9 per cent schools had drinking water within the premises while 72 per cent had within the neighbourhood. Lastly 18 per cent of sample schools in Medak had no drinking water facility.

(g) Number of Teachers

Over 70 per cent of sample schools in Mahbubnagar had two or more teachers and the number of single teachers were small. In Medak however 90 per cent of schools are run by single teachers while only a small number have two or more teachers.

We have thus far described physical features of a school and we now turn to enquiry on the quality of services within these schools. Table 3.21 presents details of availability and utilisation for furniture and equipment in the selected schools of Mahbubnagar and Medak districts.

It can be observed from the table that neither Mahbubnagar nor Medak has schools in our sample which possess all the items. Items like mirror and waste paper baskets were available only in 3 (6.66 per cent) sample schools while buckets, ball frames and play materials were available in only 8 (17.77 per cent) sample schools. Time pieces, school notice board, and earthen pots were available in 9 (20.00 per cent) 10 (22.22 per cent), 11 (24.24 per cent) of the sample school respectively. The items relating to the facilities for teachers were available in more sample schools than the items on facilities for pupils. Facilities for children were generally poor in both the districts. Considering facilities for teachers only less than 50 per cent of the sample schools had teaching aids such as ball frames, alphabet charts, picture book, district map, world map and Globe. None of the sample school had first aid box. It can also be observed from the above table that sample schools were having the item but they were not making use of them.

TABLE 3.20A

DISTRIBUTION OF SCHOOLS ACCORDING TO CERTAIN PHYSICAL CHARACTERISTICS

Details of	Mahbubnagar		Medak	
	No.	%	No.	%
(A) LOCATION				
1. Centrally located	4	36	3	27
2. Market Area	—	—	—	—
3. Main Road	2	18	1	9
4. By lane	3	27	6	54
5. Outskirts	2	18	1	9
Total	11	100	11	100
(B) SURROUNDINGS				
1. Healthy	1	9	3	27
2. Dusty	9	81	8	72
3. Smoky	—	20	—	—
4. Noisy	1	9	—	—
Total	11	100	11	100
(C) TYPE OF BUILDING				
1. Pucca	7	64	2	18
2. Semi Pucca	3	27	6	54
3. Katcha/Thatched	1	9	3	27
4. No building	—	—	—	—
Total	11	100	11	100
(D) TYPE OF FLOOR				
1. Cement	2	18	—	—
2. Stone floor	5	45	2	36
3. Mud Floor	4	36	9	82
Total	11	100	11	100
(E) OWNERSHIP TYPE				
1. Owned	3	21	3	27
2. Rented	1	9	4	36
3. Rent free	6	54	4	36
Total	11	100	11	100
(F) DRINKING WATER FACILITY				
1. Within the premises	3	27	1	9
2. Within the neighbourhood	8	63	8	72
3. Not available	—	—	2	18
Total	11	100	11	100
(G) NO. OF TEACHERS				
1. Single	4	36	10	90
2. Two	2	18	—	—
3. Three or more	5	54	1	9
Total	11	100	11	100

TABLE 3.20B

AVAILABILITY AND UTILISATION OF FURNITURE AND EQUIPMENT

	Mahbubnagar		Medak	
	Having the item	Using the item	Having the item	Using the item
A. FURNITURE & EQUIPMENT				
1. School signboard	2	1	4	4
2. School notice board	3	3	—	—
3. School bell	10	10	4	4
4. National Flag	9	9	6	4
5. Time piece	3	1	2	—
6. Box or Almirah	5	—	—	—
7. Mirror	—	—	—	—
B. FACILITIES FOR TEACHERS				
8. Table for teacher	10	10	8	7
9. Chair for teacher	11	11	7	5
10. Black Board	8	7	9	9
11. Duster	5	5	3	3
C. FACILITIES FOR PUPILS				
12. Tatpatis or Benches	2	2	3	3
13. Earthern pots	6	5	2	2
14. Tumblers	2	2	2	2
15. Buckets	3	3	2	1
16. Brooms	6	6	1	1
17. Wastepaper basket for each class	1	1	—	—
D. TEACHING AIDS				
18. Ball Frames	4	2	—	—
19. Alphabet chart	2	2	6	5
20. Picture book	2	1	2	—
21. Dist. map	2	4	3	2
22. State map	6	4	3	2
23. India map	6	4	3	2
24. World map	3	—	1	—
25. Globe	3	3	2	1
E. OTHER EQUIPMENT				
26. First Aid box	—	—	—	—
27. Play materials	1	1	2	2

II

The data relating to enrolment, stagnation and dropouts was collected under the survey from all the sample schools, class-wise for the year 1976-77 to 1980-81 for Telangana region.

(A) Wastage in primary schools (1) Mahbubnagar district

Table 3.21 shows the enrolment in class I to V as percentage of enrolment in class I in sample schools of Mahbubnagar Primary stage for all the students and schedule caste students in Mahbubnagar district were of the order of 83.49 per cent and 98.49 per cent respectively. Thus nearly 16 per cent of students who were enrolled in standard I continued their studies to complete standard V. However the situation is worse in case of scheduled caste students. Only 1.51 per cent of students who were enrolled in standard I continued their studies to complete standard V.

Table 3.22 shows the extent of wastage in sample schools of Mahbubnagar district. The educational wastages for all the boys who were enrolled in standard I continued to complete standard V were 79.81 per cent. The educational wastage for scheduled caste boys at primary stage were the order of 94.76 per cent. Thus nearly 5 per cent of schedule caste boys who were enrolled in standard I continued to complete standard V. The average educational wastages for all the boys and schedule caste boys in standard I were of the order of 56.31 per cent and 55.45 per cent respectively.

Table 3.23 shows the extent of wastage in sample schools of Mahbubnagar district. The educational wastage for girls were of the order of 87 per cent. The educational wastage for scheduled caste girls at primary stage were of the order of 94.76 per cent. None of the scheduled caste girls was enrolled at standard I continued to complete standard V. However nearly 16 per cent of scheduled caste girls who were enrolled in I st

TABLE 3.21

EXTENT OF WASTAGE AT PRIMARY STAGE IN MAHBUBNAGAR DISTRICT

	All students					Scheduled caste students				
	I	II	III	IV	V	I	II	III	IV	V
1976-77 . . .	100.00					100.00				
1977-78 . . .	100.00	42.95				100.00	51.51			
1978-79 . . .	100.00	36.25	24.89			100.00	45.67	19.69		
1979-80 . . .	100.00	44.28	27.08	18.50		100.00	32.64	20.99	12.12	
1980-81 . . .	100.00	39.78	31.18	21.53	16.51	100.00	21.43	16.67	7.41	1.51
Average . . .	100.00	40.81	27.71	20.01	16.51	100.00	37.81	19.11	9.76	1.51

TABLE 3.22

EXTENT OF WASTAGE AMONG GIRLS IN PRIMARY EDUCATION—MAHBUBNAGAR DISTRICT

Year	For all girls					For scheduled caste girls				
	I	II	III	IV	V	I	II	III	IV	V
1976-77 . . .	100	—				100.00				
1977-78 . . .	100	38.21				100.00	63.63			
1978-79 . . .	100	38.29	17.83			100.00	14.28			
1979-80 . . .	100	43.66	31.91	36.30		100.00	24.49	21.43		
1980-81 . . .	100	36.57	27.46	39.00	12.74	100.00	16.07	10.20	—	
Average	100	39.18	25.73	37.65	12.74	100.00	29.61	15.81	—	

TABLE 3.23

EXTENT OF WASTAGE AMONG BOYS IN PRIMARY EDUCATION—MAHBUBNAGAR DISTRICT

Year	For all Boys					For scheduled caste boys				
	I	II	III	IV	V	I	II	III	IV	V
1976-77	100					100.00				
1977-78	100	41.42				100.00	47.37			
1978-79	100	41.55	34.61			100.00	58.20	28.07		
1979-80	100	48.41	30.37	28.40		100.00	40.19	32.83	19.29	
1980-81	100	43.38	37.40	25.79	20.19	100.00	32.45	28.45	8.95	5.26
Average	100	43.69	34.13	27.09	20.19	100.00	45.55	29.77	14.12	5.26

ard continued their studies to complete standard III.

Wastage at primary schools in Medak District

Table 3.24 shows the total enrolment of all the students and scheduled caste students in classes I to V as percentage of all the students and scheduled caste students at primary stage in selected schools of Medak district. It reveals that the wastages for all students at primary stage were of the order of 92 per cent. Thus, nearly 8 per cent of the students who were enrolled in standard I continued their studies to complete the standard V. The wastages among scheduled caste students at standard III was of high order 89 per cent. Nearly 11 per cent of the scheduled caste students who were enrolled in the I standard continued their studies to complete III standard. It may be seen here that majority of the sample schools of Medak district are not conducting all the five classes at primary stage. However, the headmasters of these schools are supposed to conduct all the five classes at primary stage.

This is a severe problem in this region and adds to a high rate of educational wastage at primary stage.

Table 3.25 shows the extent of wastage for boys in class I to V in sample schools of Medak district. The educational wastages for boys were of the order of 92.27 per cent. Thus nearly 6 per cent boys who were enrolled in standard I continued to complete standard V. Similarly the educational wastages for scheduled caste boys in standards I and II were of the order of 76.42 per cent and 89.51 per cent respectively. In other words, a little more than 10 per cent of scheduled caste boys who were enrolled in standard I continued upto standard III.

Table 3.26 shows the extent of wastage for girls in class I to V in sample schools of Medak district. The educational wastages for girls at primary stage were of the order of 95.84 per cent. Thus only 4 per cent of the girls who were enrolled in standard I continued to complete stan-

TABLE 3.24

EXTENT OF WASTAGE AT PRIMARY STAGE IN MEDAK DISTRICT

Year	For all students					For scheduled caste students				
	I	II	III	IV	V	I	II	III	IV	V
1976-77	100.00	..				100.00				
1977-78	100.00	25.71				100.00	13.03			
1978-79	100.00	33.61				100.00	21.05	13.04		
1979-80	100.00	25.85	14.28	15.19		100.00	22.34	13.16	..	
1980-81	100.00	36.31	8.52	10.08	7.62	100.00	21.34	6.38	..	..
Average	100.00	30.37	11.73	12.63	7.62	100.00	19.44	10.86	..	—

TABLE 3.25

EXTENT OF WASTAGE AMONG BOYS IN PRIMARY EDUCATION—MEDAK DISTRICT

Year	For all boys					For all girls				
	I	II	III	IV	V	I	II	III	IV	V
1976-77	100.00					100.00				
1977-78	100.00	30.94				100.00	15.00			
1978-79	100.00	39.79	14.92			100.00	21.21	10.00		
1979-80	100.00	27.85	14.79	16.02		100.00	26.56	12.12		
1980-81	100.00	41.64	16.11	12.75	7.73	100.00	31.58	9.37	..	..
Average	100.00	35.05	15.27	14.38	7.73	100.00	23.58	9.37		

TABLE 3.26

EXTENT OF WASTAGE AMONG GIRLS IN PRIMARY EDUCATION—MEDAK DISTRICT

Year	For all girls					For scheduled caste girls				
	I	II	III	IV	V	I	II	III	IV	V
1976-77	100.00	..				100.00				
1977-78	100.00	16.66				100.00	9.09			
1978-79	100.00	23.33	6.94			100.00	5.26	9.09		
1979-80	100.00	25.31	14.66	5.55		100.00	12.5	5.26		
1980-81	100.00	23.76	13.26	6.66	4.16	100.00	12.5	3.12		
Average	100.00	23.76	12.22	6.10	4.16	100.00	9.84	5.82		

standard V. The educational wastage for scheduled caste girls in standard I and II were of the order of 90.16 per cent and 94.18 per cent respectively. Majority of the sample schools in Medak district conduct upto class III. Moreover, the total enrolment of scheduled caste girls was found to be less than boys. The educational wastage for girls in standard I were of the order of 77.19 per cent. In other words nearly 77 per cent of the schedule caste girls who were enrolled in I standard did not continue their studies upto II standard. They dropped out even in standard I. The educational wastage for scheduled caste boys and girls in standard I were 76.42 per cent and 90.16 per cent respectively.

The educational wastage for boys and girls at primary stage were of the order of 92.27 per cent and 95.84 per cent respectively. The educational wastages for scheduled caste boys and girls in standard III were of the order of 89.51 per cent and 94.18 per cent respectively. The educational wastage for boys and girls in standard I were 64.95 per cent and 77.19 per cent respectively.

(B) Stagnation in Primary Schools of Mahbubnagar and Medak Districts.

Table 3.27 shows the percentage of stagnation total enrolment in Primary Classes in the sample schools of Mahbubnagar and Medak. The average percentage of stagnation for boys and girls at primary stage in Mahbubnagar district were 45.40 per cent and 47.86 per cent respectively. The average percentage of stagnation for girls and boys at primary stage in Medak district were 67.12 per cent and 72.57 per cent respectively. The average percentage of stagnation for all students was 37.12 per cent in Mahbubnagar district as against 62.70 per cent in Medak districts. The average percentage of stagnation for boys at primary stage was 45.40 per cent in Mahbubnagar district as against 67.12 per cent in Medak district. Similarly the average percentage of stagnation for girls at primary stage was 47.86 per cent in Mahbubnagar district as against 72.57 per cent in Medak district.

Table 3.28 shows the percentage of stagnation to total enrolment of schedule caste students in primary classes in the selected schools of Mahbub-

TABLE 3.25

EXTENT OF WASTAGE AMONG BOYS IN PRIMARY EDUCATION—MEDAK DISTRICT

Year	For all boys					For all girls				
	I	II	III	IV	V	I	II	III	IV	V
1976-77	100.00					100.00				
1977-78	100.00	30.94				100.00	15.00			
1978-79	100.00	39.79	14.92			100.00	21.21	10.00		
1979-80	100.00	27.85	14.79	16.02		100.00	26.56	12.12		
1980-81	100.00	41.64	16.11	12.75	7.73	100.00	31.58	9.37	..	..
Average	100.00	35.05	15.27	14.38	7.73	100.00	23.58	9.37		

TABLE 3.26

EXTENT OF WASTAGE AMONG GIRLS IN PRIMARY EDUCATION—MEDAK DISTRICT

Year	For all girls					For scheduled caste girls				
	I	II	III	IV	V	I	II	III	IV	V
1976-77	100.00	..				100.00				
1977-78	100.00	16.66				100.00	9.09			
1978-79	100.00	23.33	6.94			100.00	5.26	9.09		
1979-80	100.00	25.31	14.66	5.55		100.00	12.5	5.26		
1980-81	100.00	23.76	13.26	6.66	4.16	100.00	12.5	3.12		
Average	100.00	23.76	12.22	6.10	4.16	100.00	9.84	5.82		

standard V. The educational wastage for scheduled caste girls in standard I and II were of the order of 90.16 per cent and 94.18 per cent respectively. Majority of the sample schools in Medak district conduct upto class III. Moreover, the total enrolment of scheduled caste girls was found to be less than boys. The educational wastage for girls in standard I were of the order of 77.19 per cent. In other words nearly 77 per cent of the schedule caste girls who were enrolled in I standard did not continue their studies upto II standard. They dropped out even in standard I. The educational wastage for scheduled caste boys and girls in standard I were 76.42 per cent and 90.16 per cent respectively.

The educational wastage for boys and girls at primary stage were of the order of 92.27 per cent and 95.84 per cent respectively. The educational wastages for scheduled caste boys and girls in standard III were of the order of 89.51 per cent and 94.18 per cent respectively. The educational wastage for boys and girls in standard I were 64.95 per cent and 77.19 per cent respectively.

(B) Stagnation in Primary Schools of Mahbubnagar and Medak Districts.

Table 3.27 shows the percentage of stagnation total enrolment in Primary Classes in the sample schools of Mahbubnagar and Medak. The average percentage of stagnation for boys and girls at primary stage in Mahbubnagar district were 45.40 per cent and 47.86 per cent respectively. The average percentage of stagnation for girls and boys at primary stage in Medak district were 67.12 per cent and 72.57 per cent respectively. The average percentage of stagnation for all students was 37.12 per cent in Mahbubnagar district as against 62.70 per cent in Medak districts. The average percentage of stagnation for boys at primary stage was 45.40 per cent in Mahbubnagar district as against 67.12 per cent in Medak district. Similarly the average percentage of stagnation for girls at primary stage was 47.86 per cent in Mahbubnagar district as against 72.57 per cent in Medak district.

Table 3.28 shows the percentage of stagnation to total enrolment of schedule caste students in primary classes in the selected schools of Mahbub-

TABLE 3.29

PERCENTAGE OF STAGNATION TO TOTAL ENROLMENT OF STUDENTS AND SCHEDULED CASTE STUDENTS IN PRIMARY CLASSES IN SELECTED SCHOOLS OF MAHBUBNAGAR AND MEDAK DISTRICTS

Year	All Children						Harijans					
	Mahbubnagar			Medak			Mahbubnagar			Medak		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
1976-77	48.54	56.77	42.41	50.76	61.00	49.78	52.05	27.27	45.05	54.16	90.00	52.27
1977-78	52.26	54.31	42.77	80.12	93.12	73.51	29.52	43.78	31.29	83.33	78.57	61.02
1978-79	51.02	42.19	34.10	67.35	71.71	57.87	29.05	12.24	43.87	47.89	29.41	41.12
1979-80	43.59	46.76	36.92	77.25	79.85	75.12	38.79	59.37	74.43	87.84	68.29	74.40
1980-81	31.48	39.27	29.41	60.14	57.05	57.19	47.53	80.39	47.97	77.19	66.66	69.38
Average percentage of stagnation	45.40	47.86	37.12	67.12	72.57	62.70	39.38	44.61	48.52	70.08	66.58	59.63

Percentage of stagnation according to classes

Table 3.30 shows the percentage of stagnation in classes I to V in selected schools of Mahbubnagar and Medak districts. As can be observed from the table, the average percentage of stagnation for all students in I standard was 55.58 per cent in Mahbubnagar as against 68.69 per cent in Medak district. Similarly, the average percentage of stagnation for all the students in II standard was 41.94 per cent in Mahbubnagar district as against 69.70 per cent in Medak district. The percentage stagnation for all students in Mahbubnagar district has shown a decline from standard I to standard V.

Table 3.31 shows the percentages of stagnation for scheduled caste students in classes I to V in the selected schools of Mahbubnagar and Medak districts. The average percentage of stagnation for scheduled caste students in standard I was 41.45 per cent in Mahbubnagar but 52.58 per cent in Medak district. The average percentages of stagnation for scheduled caste students in IInd and IIIrd standards were 23.40 per cent and 22.09 per cent respectively in Mahbubnagar as against 62.59 per cent and 90.47 per cent respectively in Medak district. It can be inferred from the above table that the percentages of stagnation for scheduled caste students in all the classes were comparatively higher in Medak district than Mahbubnagar district.

TABLE 3.30

PERCENTAGE OF STAGNATION IN CLASSES I TO V IN SELECTED SCHOOLS

Year	Mahbubnagar					Medak				
	I	II	III	IV	V	I	II	III	IV	V
1976-77	50.47	47.46	41.73	20.89	20.51	42.38	75.00	69.70	56.10	72.73
1977-78	70.66	45.00	32.98	29.67	27.54	85.21	85.00	77.78	59.46	96.77
1978-79	65.64	52.25	33.83	41.43	26.51	75.46	63.18	60.00	42.00	78.57
1979-80	65.92	25.21	25.19	13.08	38.71	80.50	67.31	47.50	60.60	100.00
1980-81	25.21	39.80	26.03	23.20	9.33	59.94	57.55	41.02	53.33	88.23
Average	55.58	41.94	31.95	25.65	24.52	68.69	69.60	59.20	54.29	67.46

Note : Figures are percentages to total enrolment in each class.

TABLE 3.31

PERCENTAGE OF STAGNATION ANNUALLY FROM CLASSES I TO V IN SAMPLE SCHOOLS
(For Scheduled Caste Students)

Year	Mahbubnagar					Medak				
	I	II	III	IV	V	I	II	III	IV	V
1976-77	45.71	50.00	33.33	71.43	100.00	48.38	61.54	..	..	..
1977-78	43.21	5.88	14.28	33.33	33.33	48.07	75.00	..	..	..
1978-79	23.84	19.51	21.43	25.00	50.00	37.50	66.66	100.00	..	..
1979-80	41.36	11.32	12.00	..	..	52.52	61.90	100.00	..	..
1980-81	53.16	30.30	29.41	..	..	76.47	47.87	71.43	..	..
Average percentage of stagnation	41.45	23.40	22.09	43.25	61.11	52.58	62.59	90.47		

NOTE : Figures are percentages to total enrolment of scheduled caste students in each class.

C. Impact of different factors on stagnation and dropouts:

(a) Structure of school building

Table 3.32 percentages of stagnation and dropouts to total enrolment in sample schools according to structure of school buildings. It reveals that the percentage of stagnation of schools running in thatched huts were 65.79 per cent and 54.26 per cent in Mahbubnagar and Medak districts respectively. Schools running in thatched huts in Telangana region were having the highest percentage of stagnation. The percentage of dropouts to total enrolment in schools running in thatched huts/houses was 15.79 per cent in Mahbubnagar district as against 5.42 per cent in Medak district.

(b) Single teacher schools and multiple teacher schools

Table 3.33 shows the percentage of stagnation and dropouts in single teacher and multiple teacher sample schools. It reveals that the percentages of stagnation among pupils in single teacher and multiple teacher primary schools were 37.65 per cent and 28.14 per cent respectively in Mahbubnagar district as against 43.60 per cent and 28.14 per cent respectively in Mahbubnagar district as against 43.60 per cent and 71.77 per cent respectively in Medak district. The total percentage of stagnation was 42.29 per cent in single teacher schools and 32.74 per cent in multiple teacher schools. The percentages of dropouts among pupils of single teacher and multiple teacher schools were 16.67 per cent and 13.21 per cent respectively in Mahbubnagar district as against 4.78 per cent and 16.13 per cent respectively in Medak district. The percentage of dropouts among pupils of multiple teacher was 16.13 per cent as against 4.78 per cent in single teacher schools in Medak districts.

TABLE 3.32

PERCENTAGE OF STAGNATION AND DROPOUTS TO ENROLMENT IN SAMPLE SCHOOLS
ACCORDING TO STRUCTURE OF SCHOOL BUILDING

	Percentage of stagnation to enrolment in schools in Telangana region			Percentage of dropouts to enrolment in schools		
	Mahbubnagar Dist.	Medak Dist.	Total	Mahbubnagar Dist.	Medak Dist.	Total
Pucca	34.26	29.70	33.72	15.14	1.98	13.58
Semi Pucca	17.28	65.93	38.79	10.50	9.97	10.46
Thatched	65.79	54.26	56.88	15.79	5.42	7.78

TABLE 3.33

PERCENTAGE OF STAGNATION AND DROPOUTS IN ALL THE DISTRICTS

Type of teacher	Percentage of stagnation to enrolment in schools in			Percentage of dropouts to enrolment in schools in		
	Mahbubnagar Dist.	Medak Dist.	Total	Mahbubnagar Dist.	Medak Dist.	Total
1. Single teacher	37.65	43.60	42.29	16.67	4.78	7.09
2. Multiple teacher	28.14	71.77	32.74	13.21	16.13	13.52

(c) Teacher's residence

Table 3.34 shows the percentages and stagnation and dropouts of children in sample schools according to place of residence of teachers. It travels that the percentages of stagnation was higher in the schools where teacher resides outside the village. The percentage of stagnation in sample schools of Mahbubnagar and Medak districts were 24.71 per cent and 80.16 per cent respectively where teacher's residence was outside the village. Similarly the total percentage of dropouts were higher in the village schools where teacher's residence was outside the village. The percentages of dropouts in sample schools of Mahbubnagar and Medak districts were 14.21 per cent and 9.30 per cent respectively where the teacher resides outside village.

(d) Distance of villages having primary schools from urban centre

Table 3.35 shows the percentage of stagnation and dropouts in selected schools of Mahbubnagar and Medak districts according to distance of school from nearest urban centre. It reveals that the percentage of stagnation was higher for all students in Medak district than Mahbubnagar district. However, both in Mahbubnagar and Medak districts, the percentages of stagnation were higher where schools were nearer from

urban centre. In Medak, the percentage of dropouts was higher in schools farther away from urban centres.

(e) Proportion of area irrigated in the village and extent of wastage and stagnation

Table 3.36 shows the percentages of stagnation and dropouts according to proportion of irrigated area in sample villages of Telangana regions. The total percentage of stagnation for all children in Telangana region was the highest (64.15 per cent) in those villages where the irrigated area was 50 per cent and above to total cropped area of the village. The percentage of stagnation was also high (46.55 per cent) in those villages where the irrigated area was less than 10 per cent to the total cropped area of village. The above findings were true for Mahbubnagar and Medak in Mahbubnagar and Medak districts. The percentages of dropouts were 28.85 per cent and 9.6 per cent respectively in those villages where the irrigated area was 10 per cent to total cropped area of the villages. In Medak, the percentage of dropouts was higher (9.75 per cent) in those villages where irrigated area was 50 per cent and above to total cropped area of the village. Thus it can be inferred that the percentages of stagnation and dropouts were higher both in villages having less irrigated areas to total cropped area and larger irrigated area to total cropped areas than other categories of irrigated areas.

TABLE 3.34

STAGNATION AND DROPOUTS OF CHILDREN IN SAMPLE SCHOOLS ACCORDING TO PLACE OF RESIDENCE OF TEACHERS

	Percentage of stagnation			Percentage of dropouts		
	Mahbubnagar	Medak	Total	Mahbubnagar	Medak	Total
1. Location of school Teachers residence on same Village	23.46	71.95	40.96	6.17	..	2.66
2. Teachers residence outside the Village	24.71	80.16	38.29	14.21	9.30	12.74

TABLE 3.35

**PERCENTAGE OF STAGNATION AND DROPOUTS OF CHILDREN ACCORDING TO DISTANCE
OF SCHOOL FROM URBAN CENTRES**

Distance of village in which school is located from nearest urban centre	Percentage of stagnation to enrolment			Percentage of dropout to enrolments		
	Mahbubnagar	Medak	Total	Mahbubnagar	Medak	Total
Less than 2 Kms . . .	..	..	..	..	..	..
2 to 5 Kms	44.53	66.38	54.54	19.71	2.58	11.85
5 to 12 Kms	31.78	33.33	32.19	3.21	7.84	4.45
10 to 25 Kms	22.79	60.85	34.56	17.78	9.11	14.64
25 Kms and above . . .	23.85	..	23.85	5.44	..	5.44

TABLE 3.36

**PERCENTAGE OF STAGNATION AND DROPOUTS ACCORDING TO PROPORTION OF IRRIGATED
AREA IN SAMPLE VILLAGES**

Percentage of irrigated area to total cropped area of the village	Percentage of Stagnation			Percentage of Dropout		
	Mahbubnagar	Medak	Total	Mahbubnagar	Medak	Total
Less than 10%	39.90	57.60	46.55	28.85	9.6	21.62
10% to 25%	24.02	..	24.02	9.61	..	9.61
25% to 50%	45.72	41.89	34.29	11.71	1.35	9.12
50% and above . . . . .	..	64.15	64.15	..	9.75	9.75

All Schools

CHAPTER IV

INEQUALITY OF OPPORTUNITY IN RURAL PRIMARY EDUCATION

The previous chapter was concerned with both estimation of wastage and stagnation and the impact of schools characteristics on these. The present chapter deals with proposition 1 of our main framework of analysis namely the impact of family characteristics on extent of children's educational achievement in general and a family's decision to participate or withdraw their children from the education system in particular. The latter forms our focus here as this pertains to an aspect of the analysis of inequality of educational opportunity. This chapter consists of four parts. In part one we review in brief some of the approaches to define and study inequality of opportunity in education. In the second part we present bivariate tabulations to explore relationships between socio-economic characteristics of the family and the extent of participation in education. In the third part we explore further this theme by performing multivariate regression analysis. In the fourth part we look at some of the reasons for the inequality in participation in education. The chapter concludes with a summary.

I

The previous Literature

(i) Equality of Educational Opportunity: Some Issues

One of the most widely accepted definition of the concept of educational opportunity found in several studies include the following elements:¹

1. Providing a *free* education upto a given level which constituted the principal entry point to the labour force.
2. Providing a *common curriculum* for all children regardless of background.
3. Partly by design and partly because of low population density, providing that children from diverse backgrounds attend the *same school*.
4. Providing equality within a given *locality*, since local taxes provided the source support for schools.

This conception of equality of opportunity according to Coleman implicitly assumes (i) that the existence of free schools eliminates economic sources of inequality of opportunity and (ii) that equality of opportunity lies in *exposure* to a given curriculum.

Coleman finds these assumptions inadequate for empirical research as they overlook many other aspects of equality in education. He defines several types of inequality in his very exhaustive and widely debated work *Equality of Educational Opportunity*.

"One of inequality may be defined in terms of differences of the community's input to the school, such as per-pupil expenditure, school plants, libraries, quality of teachers, and other similar quantities.

A second type of inequality may be defined in terms of the racial composition of the school, following the Supreme Court's decision that segregated schooling is inherently unequal. By the former definition, the question of inequality through segregation is excluded, while by the latter, there is inequality of education within a school system so long as the schools within the system have different racial composition.

A third type of inequality would include various intangible characteristics of the school as well as the factors directly traceable to the community inputs to the school. These intangibles are such things as teacher morals, teachers' expectations of students, level of interest of the student body in learning, or others. Any of these factors may effect the impact of the school upon a given student within it. Yet such a definition gives no suggestion of where to stop, or just how relevant these factors might be for school quality.

Consequently, a fourth type of inequality may be defined in terms of consequences of the school for individuals with equal backgrounds and abilities. In this definition, equality of educational opportunity is equality of results, given the same individual input. With such a definition, inequality might come about from differences in the school inputs and/or racial composition and/or from more intangible things as described above.

Such a definition would require that two steps be taken in the determination of inequality. First, it is necessary to determine the effect of these various factors upon educational results (conceiving of results quite broadly, including not only achievement but attitudes towards learning, self-image, and perhaps other vari-

1. See Coleman, J.S. "The Concept of Equality of Educational Opportunity" *Harvard Educational Review*, 68 (1968), pp. 7-22 for microsociological theories on inequality of educational opportunity generation see Raymond Boundon *Education, Opportunity and Social Inequality* (New York, John Wiley and Sons, 1973).

ables). This provides various measures of the school's equality in terms of its effect upon its students. Second, it is necessary to take these measures of quality, once determined, and determine the differential exposure of Negroes (or other groups) and whites to schools of high and low quality.

A fifth type of inequality may be defined in terms of consequences of the school for individuals of unequal backgrounds and abilities. In this definition, equality of educational opportunity is equality of results given different individual inputs. The most striking examples of inequality here would be Children from households in which a language other than English, such as Spanish or Navaho, is spoken. Other examples would be low-achieving children from homes in which there is a poverty of verbal expression or an absence of experience which lead to conceptual facility.

Such a definition taken in the extreme would imply that educational equality is reached only when the results of schooling (achievement and attitudes) are the same for racial and religious minorities as for the dominant group".

Coleman's approach and analysis has been subjected critical examination by social scientists in the US. Despite this one point stands apart: it is obvious that equality in education can be studied from several view-points. One could examine whether individuals from different groups in a society are treated alike in educational institutions, for example, in terms of access to the institutions or in terms of resources offered. Also it is possible to focus on the performance of individuals within the institutions with the purpose of searching for systematic variations between individuals from different socio-economic groups. If such variations are found one could attempt to enquire whether they are due to differential types of treatment within institutions or differences related to conditions that are outside to the school. One such source of difference could stem from the socio-economic status of the family. Another could arise from the differentiated treatment in terms of resources to school and the content of education.² The present chapter deals with the first sources of difference namely the study of inequality of opportunity in terms of socio-economic background of families.

(ii) Criteria for Measuring Inequality

It is possible to measure inequality in many different ways. As we have observed through Coleman's definition and in the above discussion, typical educational measures may be equal opportunity for access to some stage of education, or equal amounts of educational resources devoted to each individual.³ It is possible to use measures of educational achievements; in this case equality may denote unequal provision of resources. In the available literature we find wide spread agreement on the measure of equality in terms of the level of income or in terms of some status ranking of position in society.

(iii) Prior empirical evidence

Earlier studies in India and other countries have identified children from poor families do not have the same opportunity as those from richer families.⁴ Some of these studies have distinctly pointed out that poor parents do not want their children at school for various reasons, an important one being their economic value.⁵

Two major sources of influence affecting participation in education and student achievement have been subject of debate in the available literature, namely the impact of (i) schools and (ii) the socio-economic status of the family on children's achievement in education.

We review some of these studies as they are of relevance to our discussion in succeeding sections of this chapter.

(a) The quality difference between rural and urban schools have been noted by a few other studies to explain inequality in participation in primary education.⁶ In the rural area the quality of school education—furniture, equipment and instructions are remarkably inferior and hence the children from these areas exhibit lesser levels of achievement. One proof for this is the fact that greater incidence of dropout and stagnation are found in these areas compared to urban centres.⁷

With the exception of very few studies, we do not have reliable data on quality of school services and their impact on educational achievement.⁸ Neither do we have a reliable method of indexing the quality of school services, we have discussed at length in the previous chapter.

2. For an excellent discussion on some of these issues see Kjell Eide (1978) "Some Key Problems of Equality of Education", International Institute of Educational Planning, Mimeo.

3. *Ibid.*, p. 7.

4. See Ruhela, S.P (1969) *Social Determinants of Educability in India*. (New Delhi : Jain Brothers); Central Institute of Research and Training in Public Co-operation (1975) *School Dropout Among Harijan Children Causes and Cure* (New Delhi: The Institute).

5. Agricultural Economics Research Centre (1969) *Primary Education in India—Participation and Wastage*, (Bombay : Tata McGraw-Hill Publishing Co.).

6. See Sharma and Sapra, *op. cit.*, SPETR Report, *op. cit.*

7. *Ibid.*

8. C.L. Sapra (1973) "A Study of relationship between size, cost and efficiency in secondary school" *Indian Education Review*, pp. 181—201.

This does not however mean as T Husen⁹ points out that schools or school resources are "unimportant"¹⁰ or don't make any "differences". The "effect" of school as can be seen from the studies, particularly by Jencks and others,¹⁰ have been inferred by the portion of the between-pupil variance which is explained by school resources, a portion that can be quite substantial in school-oriented subjects like science.

(b) Available evidence on the relationship between socio-economic status of the family and their participation in education generally and in particular children's achievement in school for the developed countries suggest that children from the less educated families find lesser representation in school and also perform less well. J R Gass pointing out the "disillusion" as to what education could be concluded that big increases in education in the 1950's and 1960's brought about only marginal advances in equality of opportunity.¹¹

Coleman Report, the Plowden Report,¹² The Blau and Duncan analysis of US data¹³ and the International assessment of education achievement report in mathematics¹⁴ all go on to show the home background to be of great importance in accounting for both between-school and between student differences in achievement in key school subjects which show another type of inequality. This has been confirmed by more recent surveys similar in nature but in other subjects.

For the developing countries however the availability evidence suggest that the correlation between academic achievement measured by learning in science and reading scores in quite low.¹⁵ On the other hand we also have evidence which tend to show the socio-economic status of the family overwhelmingly important in participation in schooling.¹⁶ Typically the following findings are suggested from many such studies in India.

- (a) the lower the position of persons in the caste and occupational hierarchy, the higher is their degree of illiteracy;
- (b) The lower the position of persons in the caste and occupational hierarchy, the lower is their amount of education; and

- (c) The lower the position of persons in the case and occupational hierarchy, the lower is the quality of their education.¹⁷

To sum up from the above brief survey it is clear that family background or the socio-economic status of the family influence considerably both the extent of participation in education and children's achievement in education. At this juncture it is worthwhile to return to our main framework of analysis. We spell the hypothesis below:

Socio-economic status (SES) of the family influences the chances of children participating in school or educational activity. The quantity and quality of school services provided to the children is related to the SES in that lower quality of services provided to the child is related to the SES in that lower quality of services are associated with children from low socio-economic background.

In our present analysis we consider education, caste, income and land holdings of the family, the number of literate children and adults, as indicators of socio-economic status of the family.

Our analysis includes the following aspects: First we consider the impact of SES on the extent of participation in primary education. We measure participation in terms of the number of children in school, the number of dropouts and the number of children never been to school, sexwise per family and study how these vary across some of the components of the variables which constitute the SES.

Secondly, considering the dropout children as units of analysis we study the influence of SES on the class reached in school before withdrawal from studies.

Finally, we focus on the reasons for children dropping out of the education system or for never attending or in other words never participating in primary education how these are influenced by the SES.

Resource constraint has prevented us from studying children's achievement in particular subjects. Nevertheless the above mentioned aspects

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- 9. T. Husen (1974) *Talent, Equality and Meritocracy* Availability and Utilisation of Talent (The Hague : Martinus Nijhoff).
 - 10. C. Jencks and others (1972) *Inequality : A Reassessment of the Effect of Family and Schooling in America* (New York: Basic Books).
 - 11. T. Husen (1972) *Social Background and Educational Career : Research Perspectives on Equality of Educational Opportunity* (Paris: OECD).
 - 12. Plowden (1967) *Children in their Primary Schools* : A Report of the Central Advisory Council for Education (London : Her Majesty's Stationary Office).
 - 13. Blau, P.M. and Duncan, O.D. (1967) *The American Occupational Structure* (New York : Wiley).
 - 14. T. Husen (ed.) *International Study of Achievement in Mathematics : A Comparison of Twelve countries* as cited in T. Husen (1974) op.cit. p. 88.
 - 15. Hiyman, S.P. (1979) "Investment in Indian Education : Uneconomic" ? World Bank Working Paper, No. 327.
 - 16. See Sharma and Sapra, op.cit.. Also see the Central Institute of Research and Training in Public Cooperation (1975) *School Dropout Among Harijan Children Causes and Cure*, (New Delhi : CIRTPC).
 - 17. V.S. D'Souza (1969) "Education, Social Structure and Democracy in India", in S.P. Ruhela (ed.) *Social Determinants of Education in India* (New Delhi : Jain Brothers).

serve as adequate proxies to study—issues in inequality of opportunity in rural primary education.

We shall begin with some pure description to analyse the above questions. The problem with pure description is that it tells very little about the casual process. To do this we shall perform suitable regression analysis in the third section. Thus the next section is concerned with the question; what is the impact of the socio-economic status of the family on the extent of children's participation in education?

II

We have mentioned earlier the following characteristics associated with the socio-economic status of the family; education, occupation and caste of parents, income and land-holdings of the family. These are associated with the extent of participation in education which is measured in terms of the average number of school dropouts, number of children never joined school and number of children currently in school. We begin with exploring the relationship between costs, land holdings and the extent of participation.

A. Impact of Caste and Landholdings

Table 4.1 to 4.4 present the results for Kurnool, Guntur, Mahbubnagar and Medak districts respectively. The following points considering the dropouts are noteworthy from these tables.

- (a) In the Andhra region (Kurnool and Guntur) the average number of dropouts among girls are systematically lesser than among boys. This is true for backward and scheduled castes and is independent of the amount of land-holdings of the family.
- (b) In the Telangana region however first it can be observed that school dropout among girls are higher for backward castes whereas among scheduled castes the reverse is the case in Mahbubnagar district. Secondly in Medak district surprisingly an average family does not seem to have any dropout girl children.
- (c) The average number of dropouts (boys) per family among the scheduled caste, particularly in the landless and small farmers category is higher compared to all other castes in the same category in all the districts under investigation with the exception of Kurnool.

The observed less number of school dropouts and particularly a lesser number among girls than boys per family, calls for explanations. One could argue that the education system is effective enough to retain children in school and hence the apparently less number of school dropouts per family in general and lesser number of school dropout girls than boys in particular. If this is true we should expect the average number of children per family in school to be significantly higher than the number of dropouts, which would be an indicator of say the extent of participation in education.

TABLE 4.1

CASTE, LANDOWNERSHIP AND NUMBER OF SCHOOL DROPOUTS, CHILDREN NEVER JOINED SCHOOL AND CHILDREN IN SCHOOL PER FAMILY : KURNOOL DISTRICT

Land Ownership by caste	Average No. of dropouts		Average No. of children never joined school		Average No. of children in school	
	B	G	B	G	B	G
1	2	3	4	5	6	7
(A) BACKWARD CASTES						
1. Landless	.063	.063	.688	.688	.25	Nil
2. Small farmers	.600	.300	.500	.700	.20	.10
3. Marginal farmers	.750	.125	.750	.375	.375	.125
4. Medium farmers	.250	.258	.625	.625	.188	Nil
5. Large farmers	.545	.091	.455	.909	.636	Nil
ALL	.377	.164	.607	.672	.311	0.31

1	2	3	4	5	6	7
(B) SCHEDULED CASTES						
1. Landless . . . . .	.222	.111	.667	.333	.444	Nil
2. Small farmers . . . . .	.143	.143	.571	.857	.143	Nil
3. Marginal farmers	—	—	1.667	Nil	.333	Nil
4. Medium farmers . . . . .	.200	.200	.400	1.000	.400	.2
5. Large farmers	1.000	—	1.000	1.000	—	Nil
ALL	.200	.120	.720	600	.320	.04
(C) OTHER CASTES						
1. Landless	—	—	.333	1.000	.333	Nil
2. Small farmers	—	—	1.000	Nil	—	Nil
3. Marginal farmers	—	—	Nil	Nil	—	—
4. Medium farmers	—	—	.750	Nil	.250	Nil
5. Large farmers	—	—	Nil	2	—	Nil
ALL			.500	.500	.200	Nil

Note: (1) Small farmer Upto 2.49 acres
 Marginal farmers 2.5 —4.9 acres
 Medium farmers 5.00 —7.40 acres
 Large farmers 7.5 and above acres

- (2) (a) Backward Caste : Boya, Ediga, Kuruba, Golla, Tilaga, Vellam Mudiraj and Muthrasi
 (b) Christian, Muslims and other castes.
 (3) Denotes no observation in the category.
 (4) Nil denotes figures based on inadequate number of observations (less than 5).

TABLE 4.2

CASTE, LANDOWNERSHIP AND NUMBER OF SCHOOL DROPOUTS, CHILDREN NEVER JOINED SCHOOL AND CHILDREN IN SCHOOL PER FAMILY: GUNTUR DISTRICT

Land ownership by caste	Average No. of dropouts		Average No. of Children never joined school		Average No. of Children in school	
	Boys	Girls	Boys	Girls	Boys	Girls
1	2	3	4	5	6	7
(A) BACKWARD CASTES						
1. Landless . . . . .	.333	.111	.111	.222	.667	Nil
2. Small farmers . . . . .	.200	.300	.700	.300	.300	.200
3. Marginal farmers	Nil	Nil	.200	Nil	.800	.400
4. Medium farmers . . . . .	.385	.154	.077	.308	.462	.615
5. Large farmers	1.000	.300	.300	.300	.500	.400
ALL	.234	.191	.277	.255	.511	.340
(B) SCHEDULED CASTES						
1. Landless . . . . .	.526	.158	.158	.421	.368	.211
2. Small farmers . . . . .	.300	.100	.200	.400	.400	.200
3. Marginal farmers	Nil	Nil	.500	1.000	1.0	.5
4. Medium farmers . . . . .	.500	Nil	1.00	1.000	Nil	Nil
5. Large farmers	—	—	—	—	—	—
ALL	.424	.121	.242	.485	.394	.212

1	2	3	4	5	6	7
(C) OTHER CASTES						
1. Landless	Nil	Nil	Nil	Nil	1.0	Nil
2. Small farmers	Nil	Nil	Nil	Nil	1.0	.333
3. Marginal farmers	—	—	—	—	—	—
4. Medium farmers	Nil	Nil	Nil	2.	Nil	Nil
5. Large farmers	—	—	—	.400	—	—
ALL					8	.2

See notes for Table 4.1

TABLE 4.3

CASTE, LANDOWNERSHIP AND NUMBER OF SCHOOL DROPOUTS, CHILDREN NEVER JOINED SCHOOL AND CHILDREN IN SCHOOL PER FAMILY : MAHBUBNAGAR DISTRICT

Land Ownership by Caste	Average No. of dropouts		Average No. of children never joined school		No. of children in school	
	Boys	Girls	Boys	Girls	Boys	Girls
(A) BACKWARD CASTES						
1. Landless . . . . .	.100	.300	.200	.100	.700	.500
2. Small farmers	Nil	Nil	.600	1.00	.600	.200
3. Marginal farmers	Nil	Nil	.429	.143	1.000	.286
4. Medium farmers . . . . .	.167	.167	.750	1.00	.250	Nil
5. Large farmers . . . . .	.250	.250	.250	.333	.667	.333
ALL . . . . .	.128	.178	.426	.511	.617	.255
(B) SCHEDULED CASTES						
1. Landless	—	—	—	—	—	—
2. Small farmers	Nil	.143	.857	.429	.143	.286
3. Marginal farmers . . . . .	.251	Nil	.750	.500	.500	.250
4. Medium farmers . . . . .	.444	Nil	.444	.333	.222	Nil
5. Large farmers	—	—	—	—	—	—
ALL . . . . .	.250	.050	.650	.400	.250	.150
(C) OTHER CASTES						
1. Landless	Nil	Nil	Nil	Nil	Nil	2.0
2. Small farmers . . . . .	.25	.25	0.	1.25	.500	.750
3. Marginal farmers	—	—	—	—	—	—
4. Medium farmers	Nil	Nil	.5	1.00	.500	Nil
5. Large farmers	—	—	—	—	—	—
ALL . . . . .	.143	.143	.143	1.000	.429	.714

See notes for Table 4.1

TABLE 4.4

CASTE, LANDOWNERSHIP AND NUMBER OF SCHOOL DROPOUTS, CHILDREN NEVER JOINED SCHOOL AND CHILDREN IN SCHOOL PER FAMILY : MEDAK DISTRICT

Land ownership by Caste	Average No. of dropouts		Average No. of children never joined school		No. of Children in school	
	Boys	Girls	Boys	Girls	Boys	Girls
(A) BACKWARD CASTES						
1. Landless	Nil	..	1.333	.667	Nil	Nil
2. Small farmers	Nil	..	.567	.933	.333	.067
3. Marginal farmers	Nil	..	.750	2.000	.750	Nil
4. Medium farmers	.125	..	.542	.875	.542	.125
5. Large farmers	..	..	..	..	..	..
ALL	.049	..	.607	.967	.426	.082
(B) SCHEDULED CASTES						
1. Landless	Nil	..	1.0	1.0	1.0	Nil
2. Small farmers	Nil	..	.556	.667	.333	.222
3. Marginal farmers	Nil	..	..	..	..	..
4. Medium farmers	.222	..	1.500	.500	.750	.250
5. Large farmers	..	..	..	..	..	..
ALL	.133	..	.067	.600	.400	.277
(C) OTHER CASTES						
1. Landless	..	..	..	..	..	..
2. Small farmers	..	..	1.000	.500	.500	1.00
3. Marginal farmers	..	..	.500	Nil	.500	Nil
4. Medium farmers	..	..	1.000	Nil	1.000	Nil
5. Large farmers	..	..	..	.500	2.500	Nil
ALL	..	..	.625	.250	1.125	.250

See Notes for Table 4.1

The counter explanation for the observed occurrence would be that this arises because many families do not send their children to school at all.¹⁷ In other words poor participation in education among the rural families could be a major reason why the average number of dropouts per family is quite low. If this explanation is true we should expect a larger number of children per family who have never joined school, in all the districts.

To test the validity of either of these explanations we return to tables 4.1 to 4.4 and observe the panels pertaining to the number of children never joined school and those in school. The results for both Kurnool and Medak districts support the counter explanation; the number

of children never joined school is systematically higher than the number currently in school and thus poor participation in education obviously is a widespread phenomenon in these districts.

However, the results for Guntur and Mahbubnagar districts support the first explanation: the average number of children per family in school is systematically higher than the number of children never joined school showing that there is greater participation in these districts in education than the earlier mentioned districts under investigation.

Lastly, three general findings are obvious for all the districts from tables 4.1 to 4.4. First it can be observed that the number of girls in

17. We study the reasons for these in the following pages.

school per family is lesser than the number of boys implying inequality in participation in education among children, the girls obviously being at a disadvantage. This is further augmented by the fact that a greater number of girls per family never appear to have joined school compared to boys. Secondly, the participation of the scheduled castes in education is generally lesser compared to the backward or other castes in all the four districts. A larger number of school dropouts or children never joined school and lesser number of children currently in school seems typical of scheduled caste families, in rural Andhra Pradesh and Telangana.

Finally, it can also be observed that the number of children never attend school per family is inversely related to the extent of land holding. The SPETR report¹⁸ found that the percentage of families which never send their children to school was the highest among agricultural (34.1 per cent). From tables 4.1—4.4 we find that the landless and the small farmers (in some districts,

the medium farmers also) participate to a lesser extent in education. This can be observed from their having more children who never attend school, than the larger or marginal farmers.

In sum from tables 4.1—4.4 we have evidence to treat to caste, sex and the extent of land-holding as the sources of inequality in participation in primary education.

B. Impact of family Income

In the available literature,¹⁹ we have evidence which show income of the family as a predictor of educational status of children. We next present results from our analysis in tables 4.5 to 4.9 where we explore another important component of the socio-economic status of the family namely family income and its relationship with the extent of participation in primary education in the four districts under investigation. Our particular interest is on the analysis of the interaction of caste and income on participation in primary education.

TABLE 4.5

CASTE, FAMILY INCOME AND NUMBER OF SCHOOL DROPOUTS, CHILDREN NEVER JOINED SCHOOL AND CHILDREN IN SCHOOL PER FAMILY : KURNOOL DISTRICT

Family income in (Rs.) by caste	No. of dropouts		Average No. of children never joined school		Average No. of children in school	
	Boys	Girls	Boys	Girls	Boys	Girls
(A) BACKWARD CASTES						
1. Upto 2499	.417	.139	.472	.472	.417	.0
2. 2500-4999	.400	.880	.550	.850	.200	.1
3. 5000-7499	Nil	.200	1.800	1.400	Nil	Nil
4. 7500+	—	—	—	—	—	—
(B) SCHEDULED CASTES						
1. Upto 2499	.200	Nil	.733	.267	.400	0.
2. 2500-4999	.200	.3	.700	1.100	.200	.1
3. 5000-7499	—	—	—	—	—	—
4. 7500+	—	—	—	—	—	—
ALL	.200	.120	.120	.600	.320	0.40
(C) OTHER CASTES						
1. Upto 2400	Nil	Nil	.750	.250	.500	Nil
2. 2500-4999	.75	.25	0.	.500	Nil	Nil
3. 5000-7499	Nil	Nil	1.0	1.000	Nil	Nil
4. 7500+	—	—	—	—	—	—
ALL	.300	.100	.580	.5	.200	0.

Note : See table 4.1 for explanations

-denotes no observation in the category

Nil denotes figures based on inadequate number of observations (less than 5)

18. SPETR Report, *op.cit.*, Table 4.5 p.50.

19. See Sharma and Sapra *op.cit.*

TABLE 4.6

CASTE, FAMILY INCOME AND NUMBER OF SCHOOL DROPOUTS, CHILDREN NEVER JOINED SCHOOL AND CHILDREN IN SCHOOL PER FAMILY : GUNTUR DISTRICT

Family Income in (Rs.) by caste	Average No. of dropouts		Average No. of children never joined school		Average No. of children in school	
	B	G	B	G	B	G
(A) BACKWARD CASTES						
1. Upto 2499 . . . . .	.125	.063	.438	.313	.500	.188
2. 2500-4999 . . . . .	.308	.154	.231	.308	.615	.308
3. 5000-7499 . . . . .	.091	.455	.182	.273	.455	.455
4. 7500+	—	—	—	—	—	—
ALL	.234	.191	.277	.255	.511	.340
(B) SCHEDULED CASTES						
1. Upto 2400	Nil	Nil	.375	.500	.375	.125
2. 2500-4999 . . . . .	.500	.125	.063	.375	.563	.250
3. 5000-7499 . . . . .	.114	.286	.429	.714	.143	.143
4. 7500+ . . . . .	.500	Nil	.500	.500	Nil	.500
ALL	.424	.415	.242	.485	.394	.212
(C) OTHER CASTES						
1. Upto 2499	Nil	Nil	Nil	.667	.667	Nil
2. 2500-4999	Nil	Nil	Nil	Nil	1.000	.500
3. 5000-7499	—	—	—	—	—	—
4. 7500+	—	—	—	—	—	—
ALL	—	—	—	.400	.800	.200

Note : See tables 4.1 and 4.5 for explanation.

TABLE 4.7

CASTE, FAMILY INCOME AND NUMBER OF SCHOOL DROPOUTS, CHILDREN NEVER JOINED SCHOOL AND CHILDREN IN SCHOOL PER FAMILY : MAHBUBNAGAR DISTRICT

Family income in (Rs.) by caste	Average No. of dropouts		Average No. of children joined school		Average No. of children in school	
	Boys	Girls	Boys	Girls	Boys	Girls
(A) BACKWARD CASTES						
1. Upto 2499	Nil	Nil	.400	.200	.600	.200
2. 2500-4999 . . . . .	.091	.161	.452	.581	.548	.161
3. 5000-7499 . . . . .	.429	.143	.572	.571	.857	.571
4. 7500+	Nil	.500	Nil	.250	.750	.500

1	2	3	4	5	6	7
(B) SCHEDULED CASTES						
1. Upto 2499	Nil	Nil	Nil	1.000	Nil	Nil
2. 2500-4999	.188	0.063	.750	.375	.250	.188
3. 5000-7499	Nil	Nil	Nil	1.000	Nil	Nil
4. 7500+	1.0	Nil	.500	Nil	.500	Nil
ALL	.250	.250	.650	.400	.250	.150
(C) OTHER CASTES						
1. Upto 2499	Nil	Nil	Nil	1.0	Nil	1.
2. 2500-4999	Nil	Nil	Nil	2.0	.5	Nil
3. 5000-7499	Nil	Nil	0.5	0.0	1.0	.5
4. 7500+	1.	1.0	Nil	1.0	Nil	2.0
ALL	.143	.143	.143	1.00	.429	.714

Note : See table 4.1 and 4.5 for explanation

TABLE 4.8

CASTE, FAMILY INCOME AND NUMBER OF SCHOOL DROPOUTS, CHILDREN NEVER JOINED SCHOOL AND CHILDREN IN SCHOOL : MEDAK DISTRICT

Family income in (Rs.) by caste	Average No. of dropouts		Average No. of Children never joined school		Average No. of children in school	
	Boys	Girls	Boys	Girls	Boys	Girls
(A) BACKWARD CASTES						
1. Upto 2499	Nil	—	.400	.750	.400	.200
2. 2500-4999	.083	—	.778	1.111	.389	—
3. 5000-7499	Nil	—	.500	.500	Nil	—
4. 7500+	Nil	—	Nil	1.500	Nil	—
ALL	.049	—	.607	.967	.426	.082
(B) SCHEDULED CASTES						
1. Upto 2499	.222	—	.556	.779	.333	.111
2. 2500-4999	Nil	—	1.333	.333	.500	.500
3. 5000-7499	—	—	—	—	—	—
4. 7500+	—	—	—	—	—	—
ALL	.133	—	.867	.600	.400	.267
(C) OTHER CASTES						
1. Upto 2499	—	—	.833	—	—	—
2. 2500-4999	—	—	—	.167	.667	.333
3. 5000-7499	—	—	—	1.000	2.000	—
4. 7500+	—	—	—	—	3.000	—
ALL	—	—	.625	.250	1.125	.250

It can be observed from the table that; (1) independent of caste, low income is systematically related to lesser participation in primary education as can be seen from the relatively lesser number of children in school, a greater number not attending school, and larger number of dropouts per family in all the four districts; (2) conversely, with the exception of scheduled castes higher income is associated with higher participation namely with more children in school and less number either not attending school or dropping out. (3) Within any particular income group a larger number are found not to attend school and lesser number in school among girls than boys.

The implication of these findings need to be looked into with more given that at really low income levels poverty dominates everything also and hence this could explain lesser participation of the income groups upto Rs. 5000 irrespective of caste. However at higher income there could be the influence of caste or other such social factors and perhaps this may explain the lesser participation of the scheduled caste compared to other castes.²⁰

Given that our data contains scheduled caste families in all income group and not necessarily in the low income group alone, at least in two districts (Guntur, and Mahbubnagar) our findings lend mild support to a hypothesis spelled out in an earlier study that "the relative importance of caste in education increases as one moves to the higher income group"²¹

Lastly it can also be observed that rural households in Kurnool and Medak as found earlier appear to participate lesser in education compared to their counterparts at Guntur and

Mahbubnagar districts when we consider the impact of family income.

C. The Impact of Educational Status of Parents

The literature on the influence of educational status of parents on the extent of participation in education of a family are numerous.²² In the Indian context Chikermana²³ found that the presence of a large number of illiterate members in the family related to the phenomenon of wastage in primary education. This has been supported by Sharma and Sapra²⁴ who find 'a negative relationship between the educational status of parents and families of school children and the rate of dropout.'

To explore further in these lines suggested by previous studies we present in table 4.9 to 4.12 our results on the relationship between parental educational status and the extent of participation in education in the four districts under investigation.

The following points can be observed from these tables. (1) Higher educational attainment of father is positively related to greater participation education as can be and a decrease in the number of children never joined school, with increase in father's educational levels.

(2) With the exception of Guntur district we find surprisingly an increasing trend in the number of dropouts with increase in the educational level of father.

(3) With the exception of Kurnool and Medak districts it can be observed that an increase in mother's education level is associated with greater participation of girls in primary education in both Guntur and Mahbubnagar districts.

TABLE 4.9

EDUCATIONAL LEVEL OF PARENTS AND NUMBER OF SCHOOL DROPOUTS, CHILDREN NEVER JOINED SCHOOL AND CHILDREN IN SCHOOL PER FAMILY : KURNOOL DISTRICT

Educational level of parents	Average No. of dropouts		Average No. of children never joined school		No. of children in school	
	Boys	Girls	Boys	Girls	Boys	Girls
1	2	3	4	5	6	7
(A) FATHER'S EDUCATION						
1. None	.309	.132	.662	.721	.279	.015
2. Primary (I—V)	.364	.182	.636	.545	.364	.045
3. Middle (VI—VII)	0*	.500*	0.*	.0*	.0*	.5*
4. High school (VIII—X)	1.0*	.0+	0.+	.0*	.5*	0.*
5. Inter and above	0.*	0.*	0.+	0.*	1.0*	0.*
ALL	.323	.146	.625	.635	.302	.031

20. We have largely been influenced by an earlier study in our interpretation here. See Agricultural Economic Research Centre. *op. cit.*

21. *Ibid.*

22. See for a review see Davide, Lavin (1965) "Sociological Determinants of Academic Performance" in S.D. Sieber and E. Wilder (1973) eds, *The School in Society* (New York : Free Press).

23. Chikermane, D.V. *op. cit.*, p. 139.

24. Sharma and Sapra, *op. cit.*, p. 83.

1	2	3	4	5	6	7
(B) MOTHER'S EDUCATION						
1. None . . . . .	.333	.118	.624	.645	.312	.032
2. Primary (I—V) . . . . .	.0*	1.00*	.667	.333	.0*	0.*
3. High School (VIII—X) . . . . .	..	..	..	..	..	..
4. Middle School (VI—VII) . . . . .	..	..	..	..	..	..
5. Inter and above . . . . .	..	..	..	..	..	..
ALL . . . . .	.323	.146	.625	.635	.302	.031

*Based on very few observations (less than 5).

—No observation in the category.

TABLE 4.10

EDUCATIONAL LEVEL OF PARENTS AND NUMBER OF SCHOOL DROPOUTS, CHILDREN NEVER JOINED SCHOOL AND CHILDREN IN SCHOOL PER FAMILY : GUNFUR DISTRICT

Educational level of parents	Average No. of dropouts		Average No. of children never joined school		No. of children in school	
	Boys	Girls	Boys	Girls	Boys	Girls
(A) FATHER'S EDUCATION						
1. None . . . . .	.409	.068	.386	.477	.295	.182
2. Primary (I—V) . . . . .	.226	.226	.126	.258	.548	.419
3. Middle (VI—VII)	0.*	.250*	0.*	0.*	.750	.500*
4. High School (VIII—X)	0.*	.400*	0.*	.200*	1.400	.200
5. Inter and above	0.*	0.*	0.*	0.*	1.00	0.*
ALL . . . . .	.294	.134	.247	.353	.482	.282
(B) MOTHER'S EDUCATION						
1. None . . . . .	.318	.152	.318	.439	.394	.258
2. Primary (I—V) . . . . .	.118	.176	0.	.059	.765	.412
3. Middle (VI—VII)	1.00*	.0*	0.*	0.*	0.*	0.*
4. High School (VIII—X)	1.00*	0.5*	0.*	0.*	0.*	0.*
5. Inter and above . . . . .	..	..	..	..	..	..
ALL . . . . .	.294	.153	.247	.353	.482	.282

Note : *Based on very few observations (less than 5).

—No observation in the category.

TABLE 4.11

EDUCATIONAL LEVEL OF PARENTS AND THE NUMBER OF SCHOOL DROPOUTS, CHILDREN NEVER JOINED SCHOOL AND CHILDREN IN SCHOOL PER FAMILY : MAHBUBNAGAR DISTRICT

Educational level of parents	Average No. of dropouts		Average No. of children never joined school		No. of children in school	
	Boys	Girls	Boys	Girls	Boys	Girls
(A) FATHER'S EDUCATION						
1. None . . . . .	.148	.074	.574	.648	.352	.093
2. Primary (I—V) . . . . .	.308	.154	.154	.308	1.000	.692
3. Middle (VI—VII)	0.*	.667	.167	0.	.833	.667
4. High School (VIII—X)	1.*	0.*	0.*	0.*	0.*	2.0*
5. Inter and above . . . . .	..	..	..	..	..	..
ALL . . . . .	.162	.135	.460	.527	.500	.270
(B) MOTHER'S EDUCATION						
1. None . . . . .	.176	.118	.500	.574	.471	.191
2. Primary (I—V)	0.	.333	0.	0.	.833	1.167
3. Middle (VI—VII) . . . . .	..	..	..	..	..	..
4. High School (VIII—X) . . . . .	..	..	..	..	..	..
5. Inter and above . . . . .	..	..	..	..	..	..
ALL . . . . .	.162	.135	.460	.527	.500	.270

*Based on very few observations (less than 5).

—No observation in the category.

TABLE 4.12

EDUCATIONAL LEVEL OF PARENTS AND NUMBER OF SCHOOL DROPOUTS, CHILDREN NEVER JOINED SCHOOL AND CHILDREN IN SCHOOL PER FAMILY : MEDAK DISTRICT

Educational level of parents	Average No. of dropouts		Average No. of children never joined school		No. of children in school	
	Boys	Girls	Boys	Girls	Boys	Girls
(A) FATHER'S EDUCATION						
1. None . . . . .	.041	0	.689	.985	.459	.095
2. Primary (I—V) . . . . .	.250	0	.500	.375	.375	.375
3. Middle (VI—VII)	0.*	0*	0.*	0.*	2.00*	.500
4. High School (VIII—X) . . . . .	..	..	..	..	..	..
5. Inter and above . . . . .	..	..	..	..	..	..
ALL . . . . .	.060	0.*	.655	.833	.488	.131
(B) MOTHER'S EDUCATION						
1. None . . . . .	.061	0.	.671	.885	.427	.134
2. Primary (I—V) . . . . .	..	..	..	..	..	..
3. Middle (VI—VII)	0.*	0.*	0.*	0.*	3.0*	0.*
4. High School (VIII—X) . . . . .	..	..	..	..	..	..
5. Inter and above . . . . .	..	..	..	..	..	..
ALL . . . . .	.060	0.	.655	.833	.488	.131

*Based on very few observations (Less than 5).

— No observation in the category.

The effect of the educational status of parents on the extent of participation in education may be generally complex. We may, following the available literature argue that parents exposed to education may command more income. This association between education and income is particularly relevant for the rural areas where skilled and educated manpower are scarce. More highly educated parents because they earn more may be in a position to consume more education for their children than their less educated counterparts.

Finally there is also another argument by sociologists and economists that more educated parents may prefer only less number of higher quality children. For instance, more educated parents prefer better educated children than less educated parents.²⁵ Thus education of parents affect their taste in some manner and hence the educated parents participate more in children's education. While our results show the direction of influence, more details are required on parental preferences participation in primary education.

III

We have thus far focussed on the impact of the socio-economic status of the family on the extent of its participation in education. In some of our tables we found small cells in number such that the average number of school dropouts, number of children never joined school and the number of children in school are subject available literature points out two alternatives.²⁶ We may conclude that not much can be learnt from the tables. Or we could make some qualitative assumption about the underlying structure of relationship between parental education, landholdings, income and other such variables; in this process we imply that the figures in the table do not show any relationship simply because of sampling errors. Assuming that say the average number of such dropouts per family is independent of the effect parental education and the number of children in school is independent of the effect of family income, it is possible to estimate the size of these effects by multiple regression analysis. The justification for such a method is that some structure is imposed on a problem for one to analyse it. The technique of regression analysis is nothing other than cross-tabulation of mean values with some restrictions imposed on the permitted patterns of differences.²⁷

In this section we perform multiple regression analysis to explain further the impact of the socio-economic status of the family on the extent of participation in education. In particular we look the casual factors which influence the

non-participation measured by the number of children never joined school or number of children dropouts per family.

One point: We have from the tabulations in the previous section found similarity in the trend of our result on the impact of socio-economic status in Kurnool and Medak districts on the one hand Guntur and Mahbubnagar districts on the other. Given this and the prohibitive cost of computer data processing we have restricted the analysis to Kurnool and Guntur districts. We hope the results for Kurnool holds true for Medak and these for Guntur are valid for Mahbubnagar too.

REGRESSION ANALYSIS

Our dependent variable is the number of children never joined school per family. As mentioned earlier we treat this as an index of non-participation in education. We spell below our independent variables.

Family Income: This refers to the total income of the household earned from agricultural and other activities of all members. We have estimated the annual income of the family and from this arrived at income per-month.

Land-holdings: This refers to the amount of land (irrigated and unirrigated) owned by a family. At any instant the extent of land may be an index of its wealth, particularly if this is irrigated. For sake of convenience in estimation we have combined the total land holdings as one unit instead of having them separately as amount of irrigated and unirrigated land.

Occupation: Family income varies with occupation of the head of household. However occupation is not a characteristic of an individual. It reflects on aspects of the way he earns his living. We have defined occupation as follows: (1) owner cultivator—including all farmers independent of the extent of their land holdings; (2) Agricultural labourer with land; and (3) Landless labourers. We measure occupation using dummy variables. The reference group here are all individuals in other unspecified occupations.

Number of illiterates: Chikermane in his study found relationship between the number of illiterates in the family and the number of dropouts there. Sharma and Sapra found their results supporting this finding. Our question is: does illiteracy breed non-participation in Education? For every family we have collected information on the number of illiterates (and literates) therein. We define illiterates as those who cannot both read and write.

25. For further elaboration see Keely Allen C (1980) "Interactions of Economic and Demographic Household Behaviour" in R.A. Easterlin, ed, *Population and Economic change in developing Countries* (Chicago : University of Chicago Press).

26. See R. Layard and others (1978) *The Causes of Poverty* (London: Her Majesty's Stationery Office).

27. *Ibid.*, p. 37.

Father's Education: Several previous studies have shown father's educational status as an excellent predictor of participation in education in general and children's educational outcomes in particular. Our question converse to the earlier one is: does literacy breed greater participation? We measure father's education in terms of the years he has studied at school.

In addition to these we tried including other variables such as caste, mothers educational level etc. in the regression equations. Some of these were found to add insignificantly to the explanatory power of the models and hence we report here these equation(s) which had the best fit.

TABLE 4.13

REGRESSION ANALYSIS TO EXPLAIN NON-PARTICIPATION IN EDUCATION—DEPENDENT VARIABLE: NUMBER OF CHILDREN NEVER JOINED SCHOOL

Variables	Kurnool				Guntur			
	Boys		Girls		Boys		Girls	
	Coefft.	Std. Error	Coefft.	Std. Err.	Coefft.	Std. Err.	Coefft.	Std. Error
Family Income	-.00007	(.000)	.0001	(.000)	-.00003	(.000)	-.00004	(.000)
Land holdings	-.00095	(.017)*	.0184	(.018)*	.0123	(.021)*	.0176	(.028)*
OCCUPATION								
Cultivator	.2406	(.238)*	-.1898	(.255)*	-.0666	(.154)*	.0689	(.200)*
Labourer	.5540	(.214)	-.1972	(.229)*	-.1117	(.169)*	.1216	(.220)*
Landless	.747	(.240)	-.1535	(.257)*	-.1644	(.158)*	.1593	(.207)*
Others	—	—	—	—	—	—	—	—
No. of illiterates in the family	.2910	(.055)	.2263	(.058)	.1768	(.055)	.2274	(.046)
Father's Education	.062	(.027)	-.0217	(.029)*	-.0052	(.017)*	.0224	(.023)*
Constant	-.6948		-.2564		.0264		-.1933	
R ²	.3739		.344		.344		.311	
N	95		95		83		83	

- Note : 1. *Denote variable not significant.
2. Variable definition: see text.
3. Regressions were run on a 25 per cent sample of data.

Results

Table 4.13 presents the results for the regression analysis to explain the extent of non-participation in education for Kurnool and Guntur districts respectively.

Considering the results for boys in Kurnool we find the following:

- (a) As expected, family income negatively affects non-participation. In other words the lesser the income of the family lesser its participation and conversely higher income would go with higher participation. Higher income perhaps indicates a degree of well-being allowing families to participate or consume greater amount of education. In view of this the co-efficient of the income terms is in the expected direction.

- (b) The co-efficient of the variable land-holding although has the anticipated sign is however insignificant. In the rural households larger amount of land-holdings necessarily demands more labour particularly in the case of owner cultivators. While the large cultivator may hire labour, the small cultivators usually sell their labour in addition to being employed and employing their children in their land. However for the large cultivators who are also economically better off the more land owned and cultivated would imply greater income and hence may prefer participation in education other things remaining the same. One caution needs mention here : larger possession of land owned in itself may not suggest more wealth as the extent of irrigated land alone would be a super-

rior predictor of land family wealth. We included percentage of irrigated land to the total land owned in the equation replacing land-holdings as such. We did not find the variable significant. One explanation for this may be that the income variable already included in the equation may be a better predictor of family wealth as in our case it includes income from agricultural activities also. Which in other words implies that importance of landholdings is already included in the income term.

- (c) The co-efficient of the occupation term cultivators is not significant implying that being a cultivator does not influence non-participation. This is again in the expected direction. One may explain this as follows: The more narrow we define occupation the greater it's correspondence with income. Owner cultivators in our category of occupation have the highest income status and by virtue of this they are rather participants in education than non-participants.
- (d) Considering the co-efficients of the labourers and landless labourers terms, we find they are positive and significant. Being a labourer is quite rightly at a disadvantage in that it promotes non-participation. We find poverty dominates everything else and hence it is not surprising that they participate lesser education compared to others.
- (e) It can be observed the number of illiterates in a family significantly affects non-participation. Our findings go on to prove that illiteracy breeds illiteracy. Illiterate parents are more unlikely to be aware of the value of education and may not find it necessary to educate their children. It may also be that illiteracy may run parallel with the poverty in the rural setting. This perhaps may explain the unusually large significance of this variable.
- (f) We find the co-efficient of the variable fathers education significant and surprisingly positive in sign. This is not in line with expectation although the magnitude of the variable is small. One may argue that more educated parents may prefer non-participation for reasons other than education and hence the observed positive contribution of this variable. Or perhaps if we had larger data base the co-efficient would have been in the anticipated direction.

When we consider the equation for girls in Kurnool we find that most of the co-efficient's have insignificant impact on non-participation with the exception of family income and the number of illiterates in the family. This is explainable. In the rural areas the decision to

send girls to school is not necessarily dependent on either the economic status of the family or parental educational attainment. Rather, traditional values and taboos are more dominant here as many sociologists point out which bias parents against allowing girls to participate in education to this one could and the tradition of illiteracy in the family arising because of large number of illiterates there. One additional point: girls are usually considered essential to perform household work initially and then inducted into labour when they reach the age of 9 years or so. Given this it is not surprising to find only two variables significant in the model. The implications are that considering the non-participation of girls in particular in education, it is important that we look for sociological and other such variables to explain the phenomenon, than only through economic variables alone.

The behaviour of variables in the models for boys and girls in Guntur have almost the same pattern described in the above paragraph. The presence of illiterates and income status of the family continue to dominate non-participation. Guntur as we may recall has shown greater participation in education compared to Kurnool and this may explain the poor significance of the other variables. This explanation is further strengthened by the finding that many of the variable although not largely significant yet have their anticipated sign.

The explanatory power of these models are reasonably proving that we need to consider several other factors to explain equality in participation in Education. Obviously for Kurnool and Guntur like districts some of the variables included show significant influence although we may add that the necessity to look for other variables or explanation here. However, this exercise is in greater need for Guntur and Guntur like districts where traditional variables have proved to be of little significance in explaining non-participation. Obviously there is scope for further refinement in inclusion or specification and measurement of new variables in analysis.

IV

In the previous section we examined the relative importance of a number of casual factors affecting non-participation in education in the rural setting considering family as units of analysis. In this section we analyse the reasons for non-participation expressed by the heads of household.

(1) Reasons for not sending the children to school

Tables 4.14 to 4.17 present details of income and occupational status of families and reasons for not sending children to school or in other words for not participating in education, in the four districts respectively. Since results in the previous two sections clearly show higher participation with higher family income. We have confined our analysis here to two low income group households.

Our findings are as follows: first, irrespective of the income group it can be observed that non-participation is typical of small cultivators at Guntur and Mahbubnagar districts and of labourers with or without land at Kurnool and Medak districts.

Secondly, considering the lowest income group in all the districts we find the dominance of financial problem as a major deterrant to sending children to school. This is in line with our expectation. Typically low income families may

not be in any position to 'afford' education of children for want of financial resources.

Thirdly we also notice another important reason for non-participation, namely household services such as work in family farm or rearing of cattle etc. Low-income households are unlikely to hire labour for obvious reasons. In such a situation the contribution of child labour in each or kind are important economics incentives for the rural poor in not sending to school.

TABLE 4.14

INCOME AND OCCUPATIONAL STATUS OF FAMILIES AND REASONS FOR NOT SENDING CHILDREN TO SCHOOL: KURNOOL DISTRICT

Father's Occupation	Reasons								Row total
	Service required to look after younger children	Financial problems	Household work	Other labour : cattle	Other labour unspecified	Children not inter-ested-	Other reasons		
Income Group upto 2,499									
1. Large cultivators	—	—	—	3.8	—	—	—	—	3.8
2. Medium cultivators	—	3.8	—	—	—	—	—	3.8	7.7
3. Marginal cultivators	3.8	—	—	—	—	—	—	—	—
4. Small cultivators	—	—	—	—	—	—	—	—	—
5. Labour with land	3.8	7.7	15.4	11.5	3.8	—	—	—	42.3
6. Labour without land	—	15.4	—	—	11.5	—	—	—	26.9
7. Others	—	3.8	—	—	3.8	3.8	7.6	7.6	11.5
Column Total	7.7	30.8	15.4	15.4	19.2	3.8	7.6	7.6	100.0 (Chi ² =48)
Income Group upto Rs. 2500—4999									
1. Large cultivators	—	—	—	—	—	—	—	6.7	6.7
2. Medium cultivators	—	—	—	—	6.7	—	—	—	6.7
3. Marginal cultivators	—	—	—	—	—	—	—	6.7	6.7
4. Small cultivators	—	—	6.7	—	—	—	—	—	6.7
5. Labour with land	6.7	6.7	6.7	—	13.3	6.7	—	—	40.0
6. Labour without land	—	13.3	6.7	—	6.7	—	—	—	26.7
7. Others	—	—	6.7	—	—	—	—	—	6.7
Column Total	6.7	20.0	26.7	—	26.7	6.7	13.7	13.7	100.0 (Chi ² =33)

1	2	3	4	5	6	7	8	9	10
6. Labour without land
7. Others
Column total	.	50.00	..	50.00	..	..	..	..	100.0
Income Group Rs. 2,500—4,999									
1. Large cultivators	4.5	..	..	..	4.5
2. Medium	.	..	4.5	..	4.5	4.5	..	..	13.0
3. Marginal	.	..	22.7	..	4.5	9.0	4.5	9.0	50.0
4. Small	.	..	13.6	4.5	..	..	..	..	22.7
5. Labour with land	.	..	4.5	..	..	4.5	..	..	9.1
6. Labour without land
Column total	.	..	45.5	4.5	13.6	18.2	4.5	13.5	100.00 (Chi ² =19.2)

TABLE 4.17

INCOME AND OCCUPATIONAL STATUS OF FAMILIES AND REASONS FOR NOT SENDING THE CHILDREN TO SCHOOL : MEDAK DISTRICT

Father's Occupation	Reasons							Row Total
	Service required to look after younger children	Financial problems	Household work	Other labour Cattle	Other labour unspecified	Children not interested	Other reasons	
Income Group Rs. 2,500—4,999								
1. Large cultivators	—	—	—	—	—	—	—	—
2. Medium cultivators	—	—	—	—	—	—	—	—
3. Marginal cultivators	—	—	6.7	—	—	—	—	6.7
4. Small cultivators	—	6.7	—	—	—	—	—	6.7
5. Labour with land	6.7	20.0	6.7	—	20.0	6.7	13.3	73.3
6. Labour without land	—	—	—	—	6.7	—	—	6.7
7. Others	—	—	—	—	6.7	—	—	6.7
Column total	6.7	26.7	13.3	—	33.7	6.7	13.3	100.0 (Chi ² =11.27)
Income Group Rs. 2,500—4,999								
1. Large Cultivators	—	—	—	—	—	—	—	—
2. Medium cultivators	—	—	—	—	—	—	3.0	3.0
3. Marginal cultivators	—	12.1	6.1	—	9.1	—	6.1	33.3
4. Small cultivators	—	—	9.1	—	6.1	—	6	21.2
5. Labour with land	—	18.2	6.1	—	8.1	3.0	6.1	42.4
6. Labour without land	—	—	—	—	—	—	—	—
7. Others	—	—	—	—	—	—	—	—
Column total	—	30.3	21.2	—	24.2	3.0	21.2	100.00 (Chi ² =11)

We now turn to the next higher income group Rs. 2,000—999 in the table 4.14—4.17. We find that financial problems and the contribution of children to household services continue to remain as major reasons for non-participation. We can also observe that the value of children's labour have been specified by a greater percentage of parents as important reasons for non-participation in education.

In sum, our above findings on low-income households in rural setting regarding the reasons for non-participation are in line with previous studies.

(ii) Reasons for dropping out of school.

Withdrawal from school is also another form of non-participation and now we turn to the reasons for this. In tables 4.18—4.21 we present our results for the reasons for dropping out of school according to the last class attended for the four districts under investigation.

It can immediately be observed from the tables that most of the withdrawal takes place during the first three classes. This finding is much akin to the overall situation in Andhra Pradesh and thus lends support to the representativeness of our data.

In early years of withdrawal it can be observed that none of the mentioned reasons dominate. However as we move towards class 5 and above some reasons stand apart: Financial problem, household work and non-availability of adequate school facilities for further studies in the villages.

The importance of financial problems and the contribution of children's services at home have already been discussed. However, if we consider school-related factors influencing withdrawal from education, the issue of inadequate facilities for further studies in rural settings demands our attention. Typically village primary schools conduct upto Vth class or in some villages in Telengana upto III class only beyond which children need to go to upper primary schools situated in other villages not necessarily nearby. For typical low income families, the opportunity cost of sending children to other villages for further studies until completion of say the first or second level is considerably higher than having them attend school in the same village of their residence. In a number of instance lack of facilities act as disincentives particularly in the cases where schools have only upto Class II or III for parents to send children to other school. Given this situation the fact that many parents identified inadequate facilities as a major reason for non-participation in education lends further support to the existence of widespread inequality of educational opportunity in the rural setting.

TABLE 4.18

REASONS FOR DROPPING OUT OF SCHOOL ACCORDING TO CLASS LAST ATTENDED : KURNOOL DIST.

Class								Percentage
	1	2	3	4	5	6	7	Row Total
Services required to look after younger children.	7.4	—	3.7	3.7	—	3.7	—	18.5
Financial problem .	3.7	3.7	11.1	—	7.4	—	—	25.9
Agriculture work .	3.7	—	—	—	—	—	3.7	7.4
Other household work.	3.7	7.4	3.7	3.7	—	—	—	18.5
Other types of labour :								
Cattle	—	—	—	—	—	—	—	—
Other types of labour :								
Unspecified	3.7	3.7	3.7	—	—	—	—	11.1
Child not interested .	—	11.1	—	—	—	—	—	11.1
Irregular teacher attendance	3.7	—	—	—	—	—	—	3.7
No facility in village for further studies .	—	—	—	—	3.7	—	—	3.7
Column total	25.9	25.9	22.2	7.4	11.1	3.7	3.7	100.0

TABLE 4.19

REASONS FOR DROPPING OUT OF SCHOOL ACCORDING TO CLASS LAST ATTENDED : GUNTUR DISTRICT

											Percentage
Reasons	Class	1	2	3	4	5	6	7	8	9	Row Total
Service required to look after younger children .		—	—	—	—	—	—	—	—	—	—
Financial problems .		—	4.0	4.0	—	12.0	—	4.0	4.0	4.0	32.0
Agricultural work .		—	—	—	—	4.0	—	—	—	—	4.0
Other household work		4.0	4.0	8.0	—	—	4.0	4.0	—	—	24.0
Other types of Labour: Cattle		—	4.0	—	—	—	—	—	—	—	4.0
Other types of labour: Unspecified		—	4.0	8.0	4.0	—	—	—	—	—	16.0
Child not interested .		—	4.0	4.0	—	—	4.0	—	—	—	12.0
Irregular teacher attendance		—	—	—	—	4.0	—	—	—	—	4.0
No facility for further studies		—	—	—	—	4.0	—	—	—	—	4.0
Column Total		4.0	20.0	24.0	4.0	24.0	8.0	8.0	4.0	4.0	100.00

TABLE 4.20

REASONS FOR DROPPING OUT OF SCHOOL ACCORDING TO CLASS LAST ATTENDED : MAHBUBNAGAR DISTRICT

											Percentage
Reasons	Class	1	2	3	4	5	6	7	8	9	Row Total
Service required to look after the youger children		7.1	7.1	—	—	—	—	—	—	—	14.3
Financial problems .		—	14.3	7.1	—	—	—	7.1	—	14.3	42.9
Agricultural work .		—	—	—	—	—	—	—	—	—	—
Other household work		7.1	—	7.1	—	—	7.1	7.1	—	—	28.6
Labour : Cattle.		—	—	—	—	—	—	—	—	—	—
Labour : Unspecified		—	—	—	—	7.1	—	—	—	—	7.1
Child not interested .		—	—	—	—	—	—	—	—	7.1	7.1
Irregular teacher attendance		—	—	—	—	—	—	—	—	—	—
No facility for further studies		—	—	—	—	—	—	—	—	—	—
Column Total		14.3	21.4	14.3	—	7.1	7.1	14.3	—	21.4	100.0

TABLE 4.21

**REASONS FOR DROPPING OUT OF SCHOOL ACCORDING TO CLASS LAST ATTENDED :
MEDAK DISTRICT**

Reasons	Class	Percentage										
		1	2	3	4	5	6	7	8	9	Row Total	
Service required to look-after younger children		—	—	—	—	—	—	—	—	—	—	—
Financial Problems		—	—	—	—	—	—	—	—	—	—	—
Agriculture work		—	20.0	—	—	—	—	—	—	—	—	20.0
Other household work		—	—	—	—	—	—	—	—	—	—	—
Labour : Cattle		—	—	—	—	—	—	—	—	—	—	—
Labour : Unspecified		—	20.0	20.0	—	—	—	—	—	—	—	40.0
Child not interested		40.0	—	—	—	—	—	—	—	—	—	40.0
Irregular teacher attendance		—	—	—	—	—	—	—	—	—	—	—
No facility in village for further studies		—	—	—	—	—	—	—	—	—	—	—
Column total		40.0	40.0	20.0	—	—	—	—	—	—	—	100.0

CHAPTER V

SUMMARY OF FINDINGS

We have been concerned in this study with primary education in Rural Andhra Pradesh. At a general level the result of this study shows that wastage in the form of high ratio of dropouts, stagnation in the form of high rate of repetition in classes of study and inequality in participation in the form of a large proportion of children never attending school, continue to plague the education situation in Andhra Pradesh. The ratio of children in class V to those in class I which has been termed as retention ratio was found to be low as 25.57 per cent for boys and 19.56 per cent for girls in Andhra Pradesh in 1978 which is lower than the All India figures of 34.87 per cent for boys and 25.48 per cent for girls, and much below the figures, for say, Kerala (boys: 89 per cent, girls: 84 per cent) Tamil Nadu boys: 70 per cent, girls: 56 per cent) and so on.

Although difficult, when we consider the factors that act as deterrent to expansion of primary education generally and also to the state government policy siding expansion, namely, the Policy of Non-detention in particular the important ones turn out to be the issues of dropouts and non-participation.

This study has been focussed towards providing detailed analysis of the problem of wastage and non-participation due to inequality of opportunity in rural primary education in Andhra Pradesh. At the macro level, we utilised data for all Andhra to study pattern in retention rate, and other similar studies which have attempted to isolate pattern from all-India figures.

We also conducted field surveys to collect data of our own in ten villages each at Kurnool, Guntur, Mahbubnagar and Medak districts. These districts and the villages therein were carefully chosen in regard to several criteria with the purpose that at macro level our findings could largely reflect the situation at the district and, perhaps, at the state level. An added factor for consideration has been the comparative analysis of backward regions, Kurnool and Medak, with relatively more developed districts, Guntur and Mahbubnagar, respectively.

Our focus on the analysis of wastage and inequality of opportunity in primary education has not only been towards precise estimation of the extent of dropouts and the percentage children who never attend school but also to be able to explain some of the casual factors associated with these phenomena. We found that the pattern of retention among the boys and girls were dissimilar among the districts within Andhra Pradesh and hence could not assume that a set of common

factors could aid explanation of retention or in a wider context participating among children.

Our finding on the extent of wastage and stagnation first at Kurnool and Guntur and then at Mahbubnagar and Medak are presented below:

Kurnool and Guntur

- (i) The incidence of stagnation is consistently higher in Guntur than Kurnool and also generally higher among girls than among boys in both districts for the years 1976-77 — 1980-81 under investigation.
- (ii) Stagnation is much higher in class I compared to all other classes in both districts. This is also true for harijan children in Guntur.
- (iii) The incidence of stagnation is disproportionately distributed across the various classes in both districts. If we compare the extent of dropouts among all children category on one hand and harijan children on the other, we find that the latter group shows a much larger rate of stagnation than all children group for Guntur. Unfortunately, we did not have similar data to compare for Kurnool.
- (iv) The dropout rates (Chapter 3) are higher than those of stagnation in Kurnool, while in Guntur, the incidence of dropouts are less than stagnation for all classes.
- (v) By and large, for all years, dropout rates are systematically higher for girls than boys in all classes in both districts. There are exceptions to this as in the case of all children for 1980-81. The lesser number of girls in higher classes compared to boys, and a small number out of this withdrawing from the class may be one reason for some of these exceptions. However, if we had a larger number of schools surveyed, possibly a greater amount of uniformity in findings could have occurred.
- (vi) When we consider the extent of stagnation across the classes, we notice that as we move from class I to V the rate of stagnation shows a progressive decline for both districts. This decline is higher for boys than girls implying that in any class girls stagnate more than boys.

The point for consideration here is whether stagnation is concentrated at the entry point, i.e., class I or near the point

of extent, viz., class V. We notice that stagnation is concentrated mostly at the entry.

The rate of dropout is generally higher in the first two classes compared to other classes. For more recent years data, dropout rates are higher for all classes among harijans for both boys and girls.

- (vii) It was also found that in Kurnool the rate of dropout is considerably high in all the classes among boys while for girls it is concentrated at the point of entry and shows a decline as we move from class I to class IV. One reason for this could be that the percentage of girls in higher classes and slightly less than boys of these remaining a fraction dropout which is reflected as a smaller percentage to the total enrolment of girls in that class.

Mahbubnagar and Medak

- (viii) The Educational wastage of scheduled caste boys at primary stage was of the order of 94.74 per cent. The educational wastage for girls was of the order of 87.26 per cent. The educational wastage for schedule caste girls at primary stage was of the order of cent per cent. The wastage for all students at primary stage was of the order of 92 per cent.
- (ix) The educational wastage for boys was of the order of 92.27 per cent. Thus, nearly 6 per cent of boys who were enrolled in standard I continue to complete standard V. Similarly, the educational wastage for schedule caste boys in I and II standards was of the order of 76.42 per cent and 89.51 per cent respectively. The educational wastages for girls at primary stage were of the order of 96.84 per cent. Thus, only 4 per cent of the girls who were enrolled in Ist standard continued to complete standard V. The educational wastages for schedule caste girls in I and III standard were of the order of 90.16 per cent and 94.18 per cent respectively.
- (x) The average percentage of stagnation for boys and girls at primary stage in Mahbubnagar district were 45.40 per cent and 47.86 per cent respectively. The average percentage of stagnation for girls and boys at primary stage in Medak district were 67.12 and 72.57 per cent respectively.
- (xi) It was found that the average percentage of stagnation for schedule caste boys and girls in Mahbubnagar district was 39.38 per cent and 44.61 per cent respectively. The average percentages of stagnation for scheduled caste boys and girls were 70.08 per cent and 66.58 per cent respectively in Medak district.

In our enquiry into the factors for the widespread occurrence of wastage, we attempted analysis of the quality of education defined in terms of school facilities, teacher residence and the like and their link to the extent of dropout and stagnation. Our results for all the four districts failed to show any strong association between school quality and wastage in education (Chapter III).

The exception to this were the most interior villages situated at large distance from urban centres. Since these villages were typically backward in all respects and were also associated with poor school facilities it was doubtful if we could treat school quality as independent casual factor explaining high incidence of wastage.¹

We also analysed the impact of family characteristics on educational outcome of children. In this exercise, our particular emphasis was to study in detail the impact of socio-economic status of the family on the decision to participate or not participate in primary education, with a view to enquire on the extent of quality of educational opportunity in the rural setting (Chapter IV).

We considered the number of children in school per family to reflect the degree of participation and the number of children who never joined school per family to reflect the extent of non-participation and examined how these vary with the socio-economic status of the family.

Our estimates for Guntur and Mahbubnagar districts showed that the average number of children in school per family was higher than either the number of dropouts or children never attended school. In other words, participation in education was discernable in these districts. However, for Kurnool and Medak districts, it was found that the number of children never joined school per family was much higher than the number of children currently in school showing clearly that poor participation in education is a widespread phenomenon in these areas.

We found that the number of girls in school per family to be lesser than the number of boys therein, exhibiting an aspect of inequality in participation in education among children, the girls obviously being at a disadvantage. We also found that the participation of scheduled caste families in education to be lesser than the other castes in our data. A larger number of school dropouts or children never joined school and lesser number of children currently in school seemed chronic of scheduled caste families in rural Andhra Pradesh and Telengana.

Turning attention to the source of inequality in participation determined first through tabulations and then through multi-variate analysis, we found the level of income and caste as very important factors in this connection. Other significant factors were the occupational status of the father, parental educational achievement and the number of illiterates in the family.

1. For an alternative interpretation see Eswara Prasad, KV 'Village Society and Educational Backwardness', unpublished manuscript, 1982.

Since low income, caste, illiteracy, and low parental educational achievement are all correlated, our central findings in Chapter IV emphasize "poverty" as a very important factor contributing to inequality of opportunity in education in the rural settings of Andhra Pradesh.

The implication of the present study are clear. There is no one cause of the problems facing

primary education, especially educational backwardness in rural areas in Andhra Pradesh. But two basic facts emerge. The first, namely, that 'educational backwardness is largely a symptom of economic backwardness'² as concluded in an earlier study decade ago is much valid even today. Secondly, any policy aimed at amelioration of educational backwardness need to go beyond educational reform to include a wide range of social policy.

2. Agricultural Economic Research Centre, *Primary Education Rural India Participation and wastage* (New Delhi : Tata McGraw Hill, 1971).

CHAPTER VI

THE STATE AND PRIMARY EDUCATION IN ANDHRA PRADESH : SOME AFTER-THOUGHTS

This study has highlighted the fact that high incidence of wastage through dropouts on one side and inequality of educational opportunity on the other as the major problems that plague primary education in rural Andhra and that the progress in the spread of primary education indeed is tardy. At this rate what has been envisaged by the farmers of the constitution, namely, universalization of primary education by 1960 is almost unlikely by 1990, i.e. even four decades after framing the constitution. What could be the major reason behind the failure? To answer this one needs to go beyond the framework presented in the early part of the study and what comes to the forefront is the clear lack of political will on the part of the State. In what follows, an attempt is made to focus on the role of the State in contributing (i) to the extremely poor performance of primary schools in their ability to effect greater participation of the village in the educational process; and (ii) not ensuring equal access to education to all households with examples drawn from Andhra Pradesh.

In order to situate primary education in a development perspective I begin with examples of the general nature of backwardness in rural Andhra Pradesh. This is followed by a presentation of the actual 'education situation' in the villages during my field visits and my perceptions of the source of knowledge, namely, teachers, their efforts and the impact of these on the educational process. With the education situation set in the background, the role of the State in contributing to educational backwardness is discussed in the last section.

1. The Background

Poor natural resources, inequality in the distribution of land and other productive resources, widening gap between the rich and the poor, widespread incidence of poverty, illiteracy and malnutrition, development programmes implemented only in paper and ever rampant corruption affecting all aspects of village life including education so typical of rural India is generally true for Andhra Pradesh as well. Also, what is true for most of Andhra Pradesh holds for the districts studied, the blocks selected, the villages I surveyed in particular and perhaps to a number of other villages. More specifically, the way corruption has affected primary education are especially glaring as can be observed from the following instances:

In the village *Kogilathotta* situated in the extremely backward Alur block in Kur-

nool district, the grant for school building under National Rural Employment Programme is said to have been disbursed and the building completed as per the block Development Office records. However no such building exists.

In the nearby village *muddattamagi* at Alur block, the approach road exists only on records. No road has been laid over three years since the disbursement of funds to the Panchayati Samiti President.

In the village *Chinna Hayata*, situated near main road, a pucca school building constructed collapsed due to poor quality of construction material, two years after completion. Now classes are supposedly held in a temple in the village.

The protected drinking water tank in *Mallikarjuna Halli*, a village with no access road, not even cart tracks is highly contaminated with tadpoles, algae and fungi. In this village, communal clashes have resulted in a virtual abandonment of the scheme to construct pucca school building, thanks to a local politician. The existing single teacher primary school run on a semi kutchra hut has not been visited by either the Extension Officer, Education or Deputy Inspector of school for over two years.

Such are the examples of true situations typical to many villages in both Karnool and Guntur districts of Andhra Pradesh.

2(a) The School

Of the five villages selected and surveyed in Adoni taluq, three had pucca school buildings recently constructed under the National Rural Employment Programme; in the other two, one had a semi-finished structure and in the other the school had no building and was run in a hut which was also used as the church. At Alur taluq, among the five villages selected only one had a pucca school building; the rest had no building and schools were generally run in temples, some with roof and others without.

What facilities did these schools offer to both pupils and teachers? The question appeared relevant since mere physical construction itself did not imply adequacy in every way.

A typical school (with a building) had (i) a few black boards usually embossed on the wall;

others had a wooden plank painted black or alternatively black fibre sheets; (ii) a few dust laden maps/charts; (iii) record boxes to keep all school records; and (iv) chalk pieces. There were exceptions to this: in village Aarekhal the school functioned without a blackboard; in the schools of villages Jumaldinne, Mallikarjuna Halli, Muddattamagi and Chirumandoddi, respectively, teachers 'taught' without chalk pieces!

The boards embossed on the walls were made of stone and were not usable due to either paint having peeled off or prolonged use or not having been used at all. On the other hand the black boards made of wooden planks with the exception of a very few cases were found unusable.

Some black boards remained unused for want of chalk pieces. School records more than a year old were in a tattered conditions or at times damaged or even moth eaten. In schools having sanctioned record boxes, the records were generally stuffed together with broken clips, torn charts, and some of the teacher's belongings. Where record boxes were not sanctioned, school records were either with the personal custody of the teachers or placed in damaged cardboard cartons.

Lastly, the schools with a pucca building had maps and charts it possessed hung on the wall. Others had them rolled and placed some where because they were torn. By and large these bore signs of non-use as could be observed from their dilapidated conditions.

School Attendance

The actual attendance during the day(s) of my investigation was between 20-30 per cent of the impressive number of children found in the school records in most of the villages. There were exceptions to this:

In the school of village Pandavagallu attendance was less than 20 per cent; in village Jumal Dinne having a two-teacher school, only 5 children out of a roll of 76 (or 6.5 per cent) were attending school. Finally, in village Kogilathotta only 4 boys and 2 girls that too belonging to class I were attending school having a roll of 46.

However the school records were manipulated to show over 60 per cent attendance, usually through two practices: first, teachers were not taking attendance for weeks together; secondly there were teachers who visited schools only two or three times a week. Both these allowed them to fill the registers at their convenience to show as though the school functioned regularly with large attendance.

Given that actual school attendance was extremely low, the question that naturally arises is why were attendance registers manipulated. The answer could be found in the demand of the education department to report greater enrolment and evaluating the viability of schools primarily on the basis of enrolment alone:

Thus I found, according to Government Order a single teacher school had to show 40 or more children as enrolled—if not the school faced the threat of extinction and the teacher punishment transfer. Furthermore, a two-teacher school had necessarily to show 1 : 40 teacher pupil ratio implying that atleast 80 children or more enrolled, no matter whether they attended school regularly or not.

Most of the teacher claimed that the incidence of children withdrawing from education was not particularly significant in their school. According to them school dropouts was not a major problem in their village. However on examination of the attendance register, it was found that several children were marked 'absent' for days and many for weeks. Also a large number of children were marked 'absent' for months and in some cases for years but yet were retained in the rolls and counted for enrolment figures.

Such a situation arose once again because of the government's drive for enrolment figures. One could identify large enrolment and low attendance from the following three typical situations:

First, some schools admitted children when they were 6 years of age and continued to retain their names on the rolls whether they attended schools or not. Their names were scored off the registers after they attained 11 years of age and marked on "dropout due to household work." Retaining their names in the register is considered as keeping in with the spirit of the Constitution of India which provides every eligible child primary education till it attains 11 years age.

In other words the State deems it having 'provided' every eligible child primary education by merely including its name in the school register and not ensuring that it participate in education. In this manner, it is also after the teachers to show improvement in enrolment figures. Secondly:

Other schools which functioned for the sake of functioning, especially those which were run in temples or huts in a way fudged enrolment as a matter of policy and continued to show false enrolment. The typical situation was that in June the number of rolls was usually less due to 'promotion', 'withdrawals' etc. "Admitting" children began in July and used to go on till the end of September. One could observe larger and larger number of children being "admitted" during the months of August and September and the teachers were usually asked not to "admit" children after the 31st October. There were exceptions to this where a teacher continued to "admit" children even during November and December.

In two schools children were found being "Admitted" during February as there was government order to boost up enrolment.

Finally,

Sudden Government Order to boost up the enrolment of Scheduled Caste and Scheduled Tribe children implied the teacher add names to both the admission and the attendance registers whether the children or the family really care about sending children to school. This again meant a large number on roll.

At this juncture another question that came was why are school admission details so fuzzy? The answer to this could be found and as a requirement of the State Education Department on the one side and typically not providing facilities to the teachers to meet the same, on the other.

The teachers are instructed to admit all children using a specific application form and after obtaining the permission of the parent or at least their thumb impression. Those schools not provided with the admission applications were asked to maintain a hand-book of new admissions including there the information of the child's name and the father's/mother's name and occupation, caste and the child's date of birth together with the thumb impression of the parent implying his/her acceptance. Of the 10 schools that we surveyed in Kurnool only three schools had registers of new admissions while the other schools wrote the names of children admitted during any particular year in the usual admission register. This is done for want of application forms or a hand-book etc. according to the teachers.

2(b) School Teachers

We have thus far dealt at length with the physical form of rural primary schools and what facilities they offered to children. We shall now turn to the role of the most important agent of knowledge, namely, the teachers.

One found teachers of a variety of sorts. First, there were a minority genuinely concerned with not attendance alone but more with the participation of the whole village in the educational process. They were consistently making endeavours to improve the participation of children in education with a personal touch.

Case 1: The teacher at village Sultanpur knew every family in the village and their social-economic status. He was also proficient in first-aid and treatment of minor ailments in children. He was administering these at *his personal cost*. His concern for the children seemed genuine and in turn the villages appeared to have immense respect for this young teacher. This was perhaps a major reason for our seeing a large number of children attending school during the days of our visit.

Case 2: In village Kuravalli, the school teacher although was not residing in the village could yet make a dent in children's participation in education. The teacher was rearing a small garden around the school both with the help of villagers and by making the children participate in gardening activities. Also, he was using the garden as a teaching aid there by drawing the children's interest in the learning process. It was no surprise that this school had large attendance in all the classes during our visit.

Both these schools had pucca buildings, usable black boards, record boxes and chalk pieces. With these basic facilities available all it required was teachers interest towards effecting greater participation of children, and both seemed to be committed. The records appeared well maintained indicating thereby other dimensions of teachers performance.

The second variety of teachers belonged to a category of the "helpless" ones as perceived by themselves. They were interested in improving school attendance and in particular greater participation of the village in the educational process. However, some of them were either ignorant or ill-equipped about how to do so; on the other hand, a few others were afraid if not uncertain about the implications of their initiatives given the village social environment. Most of them claimed they could achieve little due to the lack of both basic facilities like school building and teaching aids such as black board and chalk pieces, etc. In terms of their attitudes to work however, these teachers were mere 'receivers' of what was being given to them, be it instructions from the Extension Officer, Education or through certain Government Orders regarding say boosting of enrolment figures or items such as maps/charts and carrying out such instructions mechanically without having and drive to perform better with whatever is available.

Case 3: The school at village Manekurthy was run in the temple (with stone roof and mud floor) and a young teacher although living outside and village was genuinely expressing the difficulties of not having school building, enough funds for the purchase of chalk pieces etc. The school records were well-maintained and the teacher was following Government Orders and distributing grants or kinds (Shirts or Skirts, pencils, slates, books, etc.) to Scheduled Caste children. The records pertaining to these grants were complete and the recipients of the aids acknowledged having received the same. Yet his Black board remained unused due to lack of chalk pieces and some of the recipients of aid refused to be at school after having received the same. Furthermore, the teacher complained about less attendance of female children. He was however, surprised at the idea that a door-to-door survey especially with a request to the parents to send children to school would work. He was equally afraid to complain about inadequacy of school facilities to anyone.

Case 4: In village Aarakkal, a female teacher taught in a hut which was also used as a Church. She was living miles away in another taluk headquarters and had been teaching in this school for over 8 years continuously.

The school had no belongings worthy of mention—not even a black board. Using slate for demonstration the teacher taught children. Despite several complaints written in the visitors book by the Inspectors of Schools regarding essential requirements the school received no attention at the block office. Although teacher would like to request BDO for help she found herself at disadvantage being a woman and hence reduced the work at school to following orders by the Government. She would work only during school hours and was not keen to spend any time outside school hours in the village to improve villagers awareness on the need for better school facilities due to her family circumstances.

In a few other cases belonging to this category we found interest in wanting to improve participation in schooling was hampered by "other circumstances" beyond the control of the teacher. At least some teachers drew our attention to the role of Government Departments to issue orders to supply kind to SC/ST children at the inappropriate time, namely, end of the year by which time the children would have become long absentees.

The third variety of teachers were the "disinterested" ones and formed a majority in all my encounters. While the degree of disinterest varied only marginally between each other, one could gauge its intensity in terms of several indicators: ill-kept class rooms be it a pucca building, or a hut or a temple premise; poor or non-maintenance of school properties such as records, record box etc. What was so typical about these teachers were: their inability to identify with the village and its people to improve educational situation there; greater interest in personal affairs rather than education related activities; irregularity of attendance; clumsy personal behaviour and in short a total lack of initiative in their vocation.

The school records of such teachers bore signs of damage and were mostly fudged. Children's participation in such schools were very low and well reflected in the very poor attendance during my visits be it a single teacher or multiple teacher school. On being asked about the affairs there, most of them generally resorted to saying that they were new to that school and blame the previous teacher for the current ills of the school. The following cases depict this variety of teachers.

Case 5: At Jummal Dinne, a very interior village with no facilities of any kind (approach road; water or electricity), the school consists of a pucca building run by two teachers, a couple. On the second day of our visit (the first being public holiday) we found 6 children attending classes while the rolls showed more than 60. Furthermore, the school record box was broken and

most school records were in tatters including those pertaining to the current year. The Head Master explained that it is only three months since he took over along with his wife and this period was insufficient to set the records right.

Of the two black boards, one was unusable and the other had not been used at all since their arrival three months ago. Also, the teachers had been 'teaching' without chalk pieces. The populations census records bore signs of ill-maintenance and the teacher expressed complete ignorance regarding its importance despite 10 years service. Also the only child in Class V was found very weak in his ability to read and write Telugu alphabets.

On further conversations, the Head Master (a mechanic in a tinker shop turned to teaching) confessed that he and his wife were not interested in this school. So he was attempting all the time to get a transfer to a road-side village as that it would be easier commuting for them. This village was far too interior and he appeared keen to run away after school hours to his home whenever the school functioned. Neither was he interested to interact with the villagers or even get to know them. Despite three months in the school, the teachers knew nothing about what ails the village.

Case 6: At Muddattamagi, the primary school teacher was also a successful quack. The school was run in a temple premise and he was resident of the village until recently. Having repaid his debts through medical practice in this village, he has now shifted his residence to a nearby larger village to practice there.

His school is very poor, ill attended and he conducts classes on the average for about 2 days a week. His school records however were neat and complete.

In this village two private teachers conduct classes and more children were said to be attending there than the Panchayathi Samithi school. What usually happens is that this Head Master shows children on roll who are actually attending classes in private schools. Finally at the end of the year he takes an amount of money from these households to issue the successful candidates in the private schools record sheets (transfer certificates) so as to enable them to attend other schools or go for the public examination on completing class VII.

Case 7: In village Kegilathota the teacher on the day of our visit was at the school not having brought the daily attendance register. The school functioned in an ill-lit hut with wasps swarming all over.

Only 6 children in all (4 boys and 2 girls) belonging to the first standard were found attending. Despite 6 months of exposure to school they were only learning telugu alphabets. As the Extension Officer, Education explained, none of the school records were proper and he was maintaining the names of children in the private school situated in the same village as though

they were attending his school. This was in line with the common practice: he could issue them finally school leaving certificates, for a price.

On further conversation it was found not that this teacher wanted to take a transfer as quickly as possible to his native village and had been busy since his arrival two year ago to effect the same without success. He was living in another village and would visit this school only once a week.

The last inspection report on this school conducted 6 months ago clearly had a warning to the teacher to take more care and concern to keep school records properly. Despite this he seems to have no initiative to keep them clear or to attempt sincerely towards any self-reform.

Case 8: In Mallikarjunapalli the school has not been inspected by either the Extension Officer, Education or Deputy Inspector of Schools since the last two years. The school is run by two teachers and one of them has been there for over 5 years. The school is situated in a semi-pucca hut. The Head Master appeared considerably ignorant about the need to maintain records properly; most records were incomplete including the census register which was compiled in 1979. The school records showed regularity of the functioning of the school, attendance of children, teachers etc. My survey of households however in this village confirmed the irregularity of the working of the school. Many families in general and harijan families in particular complained that the school functioned only for a few days or sometimes even less than a week. Of the many here on the roll, the children really never attended school at all. It appeared that the Head Master belonged to this village and it meant a lot for him to look after his agricultural activities. An assistant teacher in the same school was found more proficient regarding school information and details of villagers than the Head Master himself.

Two points emerge from the above description on school facilities, teacher types and their bearing on the educational processes in rural areas. First, basic facilities such as school building, teaching aids etc. together with the school teachers staying in the same village and a high level of professional commitment in them affect school attendance and village participation in the educational process. Conversely lesser attendance or participation of the village in education, seems to converge with total lack of schooling facilities, the teacher staying outside the village and his/her total lack of professional commitment. Secondly, it is not fully clear from the above description, what factors could be the correlates of teacher commitment to work.

3. The State and educational backwardness in rural Andhra Pradesh

We now move from the village situation to the Block level to examine how the State's apparatus, namely, the bureaucracy contributes to educational backwardness. We shall focus in particular on the role of the Extension Officer, Edu-

cation (EDE) and how the Block office views primary education at the field level. This is important since the extension officer forms the crucial link between the block office and primary school in a particular range.

An Extension Officer's jurisdiction is called a 'range' and comprises of about 30 primary schools in a particular block plus two or three upper primary schools. The Extension Officer's, duty consists of formal inspection of each of these schools once a year plus two visits by surprise on other occasions. In addition to such visits, he is expected to perform his administrative duties at the Block Office as well. He is responsible for the supervision of travel bill of all teachers, the provident fund and also maintenance of teachers personal records. He also distributes CARE food supplies to selected schools in his range and supervises mid-day meals programme for students of selected schools. Besides, he compiles the statistics of the monthly returns on which teaching grant and annual maintenance grants to private aided schools are made. In addition to this, he is constantly asked by his supervisors, namely, District Education Officer or the Deputy Inspector of Schools to perform special functions or tasks; for example, attending meetings, conducting examinations, organisation of grants or fund raising drives, participating in projects sponsored by Central Government and compiling extra-ordinary statistics. Most Extension Officers spend a considerable amount of their time on administrative duties and much less on education related matters.

By inspection of each school, the Department of Education attempts to set standards on the quality of education and also its efficient management. When any officer inspects a school, he usually visits class rooms, watches lessons in progress, gives advise to teachers and looks at records on attendance and performance. He also spot checks accounts and collects statistics on which to base his recommendations for Government teaching or maintenance grants.

In actual practice the Extension Officer, Education is expected to travel 20 days for in a month for which he is paid Rs. 80/- consolidated as his travel bill. If he does not show 20 days of travel, an amount proportionate to the number of days not travelled is deleted from this Rs. 80/-, that is his due. Most often he is expected to travel by bus to interior villages and in practice, we found that in addition to long bus journey they have also to walk long distances before reaching villages. In effect the Extension Officers, are able to travel to road-side villages more often than to the interior ones and even among the road-side villages some of them are so far away that the actual travel grant given to them proves to be inadequate.

Given the existing work at the block office of administration as a part of the demand from the supervisors, although the Extension Officers are interested in their field visits, it is unlikely that they would be able to do justice in their visits. There are several reasons for this: first inaccessibility to remote villages implies that they need

to complete a fixed number of visits in a split time. This means that they would spend in practice very little time at the school to (i) inspect all the records to see if they are properly maintained; (ii) gauge quality of instructions of teachers; (iii) test if his children have had any benefit from the instructions of teachers; and *finally to interact with villagers to infer if they found schooling facilities adequate.*

Thus, the villages are so backward in Alur block and the bus facilities so poor that many times the EO requests the teachers to bring the records to the block headquarters to inspect them and sign them and inform his supervisors that he has visited X number of schools in the fixed period.

At other occasions he is able to just visit the school and spend very little time there because he may have to return by the same bus. In the event of his not doing so, it is likely that he would be stranded there for a night without any facilities.

These instances can be multiplied and most of the Extension Officers stressed that if they are not given the administrative work at the Block Office, they would be able to do more justice to their work. They pointed out that although they are aware about the schools situation in the Block or taluk *their opinions are never sought excepting to show greater and greater enrolment by compiling statistics.*

The Extension Officer although has the power to punish any teacher on various grounds, often his attempts to do so are usually frustrated. It is likely that he may complain about a teacher to the BDO. However, his complaints are seldom seriously looked into by the BDO. This is so since the teacher can use their access to the Panchayathi Samithi President to win him by greasing his palm. In turn, the Samithi President would not implement any decision about the punishing the teacher. It follows then that no matter how far an Extension Officer, Education tries to instill some order in the working of the teacher to ensure some quality it only ends up much contrary to his expectations.

It was mentioned earlier that the EO is expected to compile extra-ordinary statistics on enrolment. He is also observer to the events that takes place at the Block office, especially concerning the disbursement of contingency grant towards schools. Although he is more proficient than others to suggest ways and means to spending this amount, his voice is usually unheard of. As a consequence the expenditure of the contingency grants for education is usually arbitrary and no priorities are set concerning aiding of the deserving schools at the Block level. Usually such grants are spent for purchasing of charts, maps, compounder's expenses, travel bill of teachers, school repair etc. However, stationeries and purchase of charts form a lion's share. At least three Extension Officers confessed this as the real situation. They also pointed out that

the maps and charts and also the kinds of stationery that is purchased are of not much use to the schools.

The real situation is that in the purchase of stationeries, a reasonably large amount of under-hand dealings exists and the BDO is able to enjoy this. Also, given the fact that large sums of money are at the disposal of the BDO, the sum allotted as contingency grant for education looks trivial, (although the returns for such deals are higher) and as long as he shows the expenses under several heads, requirements are satisfied. Thus, although the Extension Officer would genuinely have better suggestions to make concerning what type of expenditure can be made using the contingency grants, his advice is never sought.

Conclusion: The State and Limits to Educational Reform.

We began this essay by pointing out that one needs to go beyond the framework presented in the early part of the book to understand the causes behind the dismal performance of primary education in rural Andhra Pradesh. What has emerged is the role of the State in contributing to the problems facing primary education in a major way by giving importance to enrolment figures only and through both design of reforms and their indifferent implementation. The latter has been dealt with in detail so far. It is appropriate to examine in brief the State's education policy at this juncture.

Consider the State's policy of abolition of the detention of students in any school at any level with the exception of classes VII and X as a measure to combat the problem of wastage in primary education. This policy is silent on the issue of inequality of educational opportunity in rural areas. However, the State has assumed that by providing a 'school' in every village, all children will have equal access to participation in education. Given that development in rural areas have only benefitted the rich and has increased the incidence of rural poverty and that 50 per cent of the population are living below the Poverty Line Income for whom the opportunity cost of sending a child to school is substantial, is equality of educational opportunity assured by this effort or say even by the Constitutional provision? Ironically enough, the State seems to be aware of this situation and hence has translated equality or right to education as *equivalent* to only the right to have a child's name in the school roll, (where such a roll is reliably maintained), irrespective of whether he/she participate in the schooling process or not.

Again, the State assumes that once the child is in school 'non-detention' will take care of his/her interest to remain in the system and reach up to Class VII. Given that a majority of schools are ill-equipped, teachers not particularly professional in their attitude to work, facilities inadequate for supervision of the quality of educational instruction on the class room, and in short the block office controlling educational finances

unrealistically, what sort of equality do children enjoy in the class room? What incentives do they have to remain for 7 years in the system? The policy in short is clueless on such real issues.

Finally, the policy of 'non-detention' is indifferent to making education more participation oriented. The design of the policy and its implementation adopt typically top down approach where the rural households are deemed as 'receivers'. The implementation has been through the bureaucracy and we have seen the rule has been to chase targets and not improve quality within a given social structure. Therefore, similar to filling up figures on targets in the anti-poverty programmes of the State, in education too, the drive for enrolment or numbers has been the major yardstick.

What is required is participation of the rural poor in the educational process. The State in not recognizing this has contributed in a major way to the failure of non-detention policy. Here.

in lies the limits to educational reforms. Unless such reforms are people oriented, they are unlikely to succeed but only contribute to the maintenance of the status quo.

One way to achieve greater grass roots participation in the education process is to decentralize educational planning. Furthermore, the approach to implementation of policies needs to be more humanistic with an emphasis on quality at every level rather than the desperate drive for enrolment figures. Education could also be made more participatory in rural India by seeking the help of voluntary grass root organisation involved in promoting people's participation for development. In this way adult education could go simultaneously along the line of Freirean conscientization and not merely increasing literacy, with participation of children and adults in the schooling process. There are enough evidence to suggest that such an approach can succeed in rural areas, in India. The rest is all details.

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