

AN INVESTIGATION INTO THE PROBLEM OF EDUCATIONAL  
WASTAGE AND INTERNAL EFFICIENCY OF THE SYSTEM  
OF PRIMARY EDUCATION IN NAGALAND



BY

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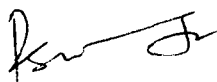
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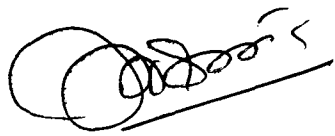
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I, Mrs. Rukhono Khate, Iralu hereby declare that the subject matter of thesis is the record of work done by me, that the contents of this thesis did not form basis of the award of any previous degree to me or to the best of my knowledge to anybody else, and that the thesis has not been submitted by me for any research degree in any other University/Institute.

This is being submitted to the North-Eastern Hill University for the award of degree of Doctor of Philosophy in Education.

  
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## A C K N O W L E D G E M E N T S

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## CONTENTS

	Page
Declaration	
Acknowledgements	
List of Map	
List of Tables	
List of Diagram	
List of Appendices	
CHAPTER-I THE PROBLEM ; ITS BACKGROUND	1 - 18
1.1. Introduction	1 - 5
1.2. Need and importance of the study	5 - 8
1.3. The problem	8 - 9
1.4. Statement of the problem	9
1.5. Objective of the study	9 - 11
1.6. Definition of the terms used	11 - 14
1.7. Questions posed	14 - 16
1.8. Delimitation of the study	17
1.9. Scope of the study	17 - 18
CHAPTER-II THEORETICAL FOUNDATIONS OF THE STUDY	19 - 67
2.1. Introduction	19 - 20
2.2. Concept of educational wastage	20 - 21
2.3. Types of educational wastage	21 - 24
2.4. Indicators of educational wastage	24 - 25
2.5. Consequences of educational wastage	26 - 29
2.6. Method of determining educational wastage	29 - 33
2.7. Concept of efficiency	33 - 36
2.8. Indicators of internal efficiency	36 - 39

2.9.	Patterns and Trends in educational wastage	39 - 46
2.10.	Nagaland at a glance	46 - 49
2.11.	Education in traditional Naga society	49 - 50
2.12.	Development of formal education in Nagaland	50 - 53
2.13.	Development of education in Nagaland	53 - 56
2.14.	Primary education in Nagaland	57 - 58
2.15.	Wastage in primary education in Nagaland	58 - 65
2.16.	Conceptualisation of the study	66 - 67
CHAPTER-III REVIEW OF RELATED LITERATURE		68 - 129
3.1.	Introduction	68 - 69
3.2.	Studies done abroad.	
	(A) The extent of the incidence of educational wastage	69 - 78
	(B) Causes of educational wastage	78 - 97
3.3.	Studies done in India	
	(A) The extent of the incidence of educational wastage	97 - 109
	(B) Causes of educational wastage	109 - 128
3.4.	Present status of research studies	128
3.5.	Justification of the study	129 - 130
CHAPTER-IV DESIGN OF THE STUDY		131 - 149
4.1.	Introduction	131
4.2.	Population	131
4.3.	Sample	132 - 134
4.4.	Tools used	134 - 137
4.5.	Method of the study	137 - 145
4.6.	Data collection	145 - 149
4.7.	Statistical techniques used	149

CHAPTER-V	ANALYSIS AND INTERPRETATION OF THE DATA	
5.1 Section I	Analysis and interpretation of the flow rates such as promotion rate, repetition rate and dropout rate for the different districts and for whole Nagaland with respect to grade, sex, school location and total Nagaland.	150 - 210
5.2 Section II	Analysis and interpretation of the educational wastage data due to dropout, repetition and overall (i.e, due to both dropout and repetition) in terms of pupil years wasted for the different districts, and for whole Nagaland with respect to sex, school location and total Nagaland.	211 - 260
5.3 Section III	Analysis and interpretation of the extent of educational wastage in terms of the percentage of pupil years spent in excess for the different districts and for whole Nagaland with respect to sex, school location, and for Total Nagaland.	261 - 268
5.4 Section IV	Analysis and interpretation of the data of internal efficiency of the system of primary education for the different districts and for Nagaland as a whole with respect to sex, school location and for total Nagaland.	269
5.4.1	Analysis and interpretation coefficient of efficiency for the different districts and for whole Nagaland with respect to sex, school location and for total Nagaland.	269 - 278
5.4.2	Analysis and interpretation of educational wastage ratio for the different districts and for whole Nagaland with respect to sex, school location and for total Nagaland.	278 - 288
5.4.3	Analysis and interpretation of the average number of pupil years spent by per successful graduates for the different districts and for whole Nagaland with respect to sex, school location and for total Nagaland.	288 - 299
5.4.4	Analysis and interpretation of retention/survival rate for the different	

	districts and for whole Nagaland with respect to grade, sex, school location and for total Nagaland.	299 - 314
Section V	Analysis and interpretation of the data on the causes of educational wastage.	315 - 333
Section VI	Analysis and interpretation of the data of the opinions for reducing educational wastage.	334 - 351
CHAPTER-VI	FINDINGS, ACTION PROGRAMES, CONCLUSIONS AND SUGGESTIONS.	351 - 399
VI.A	Major findings	
6.1 Section I	Findings of the flow rates such as promotion rate, repetition rate and dropout rate for the different districts and for whole Nagaland with respect to sex, grade, school location and total Nagaland.	352 - 368
6.2 Section II	Findings regarding educational wastage data due to dropout, repetition and overall (i.e, due to both dropout and repetition) in terms of pupil years wasted for the different districts and whole Nagaland with respect to sex, school location and for total Nagaland.	368 - 373
6.3 Section III	Findings of the extent of educational wastage in terms of the percentage of pupil years spent in excess for the different districts and for whole Nagaland with respect to sex, school location and for total Nagaland.	373 - 376
6.4 Section IV	Findings regarding internal efficiency of the system of primary education for the different districts and for whole Nagaland with respect to sex, school location and for total Nagaland.	376 - 389
6.4.1	Findings regarding coefficient of efficiency for the different districts and for whole Nagaland with respect to sex, school location and for total Nagaland.	377 - 379

## List of Tables

Table NO.	Title	page
2.1.	Average median repetition and dropout by region for primary schools.	41
2.2	Different districts, their population and Headquarters.	48
2.3	Growth of education in Nagaland	53
2.4	Educational Institution established between 1963- 1973	54
2.5	Government and private Institutions after 20 years of statehood	55
2.6	Government and private Institutions of different categories and their enrolment in 1990- 1991	56
2.7	Number of districtwise primary schools in Nagaland	57
4.1	Districtwise population of schools	131
4.2	Sampled schools	132
4.3	Sample of related persons for finding out the causes of educational wastage	133

Table NO.	Title	Page
4.4	Sample of related persons for seeking suggestions for reducing educational wastage	134
4.5	Areas on the causes of educational wastage and number of items	135
4.6	Areas and items for seeking suggestions for reducing educational wastage	136
4.7	Flow rates in percentage	141
5.1	Pupils enrolment for two consecutive years (i.e, 1991 & 1992) and repeaters for 1992 with respect to sex for the different districts.	152
5.2A	Promotion rate in percentage with respect to grade and sex for the different districts	154
5.2B	Repetition rate in percentage with respect to grade and sex for the different districts.	156

Table No.	Title	Page
5.2.C	Dropout rate in percentage with respect to grade and sex for the different districts.	157
5.3.	Pupils enrolment for two consecutive years that is 1991 & 1992 and repeater for the different districts with respect to school location.	175
5.4.A	Promotion rate in percentage with respect to grade and school location for the different districts.	177
5.4.B	Repetition rate with respect to grade and school location for the different districts.	178
5.4.C	Dropout rate in percentage with respect to grade and school location for the different districts.	179
5.5.	Enrolment in different grades for two consecutive years and number of repeaters for whole Nagaland with respect to sex.	197
5.6.A	Promotion rate in percentage with respect to grade and sex for whole Nagaland.	198
5.6.B	Repetition rate in percentage with respect to grade and sex for whole Nagaland.	198
5.6.C	Dropout rate in percentage with respect to grade and sex for whole Nagaland.	199
5.7.	Enrolment in different grades for two consecutive years 1991 & 1992 and repeaters for 1992 for whole Nagaland with respect to location.	202
5.8.A	Promotion rate in percentage with respect to grade and school location for whole Nagaland.	203

Table No.	Title	Page
5.8.B	Repetition rate in percentage with respect to grade and school location for whole Nagaland.	204
5.8.C	Showing dropout rate in percentage with respect to grade and school location for whole Nagaland.	204
5.9.	Showing Total pupil enrolment in different grade for two consecutive years and repeaters for total Nagaland.	208
5.10.	Promotion rate, Repetition rate and dropout rate for total Nagaland.	209
5.11.	Educational wastage in terms of pupil years with respect to sex for the different district.	226
5.12.	Educational wastage in terms of pupil years wasted due dropout, repetition and overall with respect to school location.	246
5.13.	Educational wastage for whole Nagaland in terms of pupil years wasted due to dropout, repetition and overall with respect to whole Nagaland.	257
5.14.	Percentage of pupil years spent in excess for the different districts with respect to sex.	262
5.15.	Percentage of pupil years spent in excess for the different districts with respect to location.	265
5.16.	Percentage of pupil years spent in excess for whole Nagaland with respect to sex, school location and total Nagaland.	267
5.17.	Coefficient of efficiency for the different districts with respect to sex.	271

Table No.	Title	Page
5.18.	Coefficient of efficiency for the different districts with respect to location.	274
5.19.	Coefficient of efficiency for whole Nagaland with respect to sex, school location and for total Nagaland.	277
5.20.	Educational wastage ratio (1/0 ratio) for the different districts with respect to sex.	281
5.21.	Educational wastage ratio for the different districts with respect to school location.	284
5.22.	Educational wastage ratio for whole Nagaland with respect to sex, school location and for total Nagaland.	287
5.23.	Average number of pupil years spent by per successful graduate with respect to sex.	291
5.24.	Average number of pupil year spent by per successful graduate with respect to school location.	294
5.25.	Average number of Pupil years spent by per successful graduate for whole Nagaland with respect to sex, school location and total Nagaland.	297
2.26.	Retention rate for grade II, III and IV for the different districts with respect to sex.	300
5.27.	Retention rate for grade II, III, and IV for the different districts with respect to school location.	306

Table No.	Title	Page
5.28.	Retention rate for grade II, III, IV for whole Nagaland with respect to sex, school location and for total Nagaland.	312
5.29.	Showing the responses, their percentage value, significance value of ranking of the responses related to economic factor.	316
5.30.	Responses, their percentage value, score value, significance value and ranking of the responses with regard to the cause related Educational practice.	318
3.31.	Responses, their percentage value, score value, significance value and ranking of the responses with regard to the cause related to educational management.	323
5.32.	Responses, their percentage value, score value, significance value and ranking of the responses with regard to the cause related to poor and unattractive holding power of the school.	327
5.33.	Responses, their percentage value, score value, significance value and ranking of the responses with regard to the cause related to social factor.	330
5.34.	Comparative study of the causal factors.	332
5.35.	Responses, their percentage value, score value, significance value and ranking of the responses with regard to the opinions related to educational practice.	335
5.36.	Responses, their percentage value, score value, significance value and ranking of the responses with regard to the opinions related to educational management.	338

Table No.	Title	Page
5.37.	Responses, their percentage value, score value, significance value and ranking of the responses with regard to the opinions related to poor and unattractive holding power of the school.	343
5.38.	Responses, their percentage value, score value, significance value and ranking of the responses with regard to the opinions related to teacher training.	345
5.39.	Responses, their percentage value, score value, significance value and ranking of the responses with regard to the opinions related to social factor.	347
5.40.	Comparative study of the opinions.	350

## LIST OF DIAGRAMS

Diagram Number	Title	Page
2.1.	Pupils enrolment in a School System	31
2.2.	Pupils flow chart.	32
5.1.	Theoretical Pupils Flow and Cohort Reconstruction for male in Kohima.	212
5.2.	Theoretical Pupils Flow and Cohort Reconstruction for male in Mokokchung	213
5.3.	Theoretical Pupils Flow and Cohort Reconstruction for male in Tuensang.	214
5.4.	Theoretical Pupil's Flow and Cohort Reconstruction for male in Zunheboto.	215
5.5.	Theoretical Pupil's Flow and Cohort Reconstruction for male in Mon.	216
5.6.	Theoretical Pupil's Flow and Cohort Reconstruction for male in Wokha.	217
5.7.	Theoretical Pupil's Flow and Cohort Reconstruction for male in Phek.	218
5.8.	Theoretical Pupil's Flow and Cohort Reconstruction for female in Kohima.	219
5.9.	Theoretical Pupil's Flow and Cohort Reconstruction for female in Mokokchung.	220
5.10.	Theoretical Pupil's Flow and Cohort Reconstruction for female in Tuensang.	221
5.11.	Theoretical Pupil's Flow and Cohort Reconstruction for female in Zunheboto.	222
5.12.	Theoretical Pupil's Flow and Cohort Reconstruction for female in Mon.	223
5.13.	Theoretical Pupil's Flow and Cohort Reconstruction for female in Wokha.	224

Diagram Number	Title	Page
5.14.	Theoretical Pupil's Flow and Cohort Reconstruction for female in Phek.	225
5.15.	Theoretical Pupil's Flow and Cohort Reconstruction for Urban Schools in Kohima.	232
5.16.	Theoretical Pupil's Flow and Cohort Reconstruction for Urban Schools in Mokokchung.	233
5.17.	Theoretical Pupil's Flow and Cohort Reconstruction for Urban Schools in Tuensang.	234
5.18.	Theoretical Pupil's Flow and Cohort Reconstruction for Urban Schools in Zunheboto.	235
5.19.	Theoretical Pupil's Flow and Cohort Reconstruction for Urban Schools in Mon.	236
5.20.	Theoretical Pupil's Flow and Cohort Reconstruction for Urban Schools in Wokha.	237
5.21.	Theoretical Pupil's Flow and Cohort Reconstruction for Urban Schools in Phek.	238
5.22.	Theoretical Pupil's Flow and Cohort Reconstruction for Rural Schools in Kohima.	239
5.23.	Theoretical Pupil's Flow and Cohort Reconstruction for Rural Schools in Mokokchung.	240
5.24.	Theoretical Pupil's Flow and Cohort Reconstruction for Rural Schools in Tuensang.	241
5.25.	Theoretical Pupil's Flow and Cohort Reconstruction for Rural Schools in Zunheboto.	242
5.26.	Theoretical Pupil's Flow and Cohort Reconstruction for Rural Schools in Mon.	243
5.27.	Theoretical Pupil's Flow and Cohort Reconstruction for Rural Schools in Wokha.	244
5.28.	Theoretical Pupil's Flow and Cohort Reconstruction for Rural Schools in Phek.	245

Diagram Number	Title	Page
5.29.	Theoretical Pupil's Flow and Cohort Reconstruction for male total in Nagaland.	252
5.30.	Theoretical Pupil's Flow and Cohort Reconstruction for female total in Nagaland.	253
5.31.	Theoretical Pupil's Flow and Cohort Reconstruction for Rural total in Nagaland.	254
5.32.	Theoretical Pupil's Flow and Cohort Reconstruction for Urban total in Nagaland.	255
5.33.	Theoretical Pupil's Flow and Cohort Reconstruction for Grand Total in Nagaland.	256

LIST OF APPENDICES

Page

1. Appendix - A  
List of sample schools, their enrolment data for two consecutive years, i.e, 1991 & 1992 and repeaters of 1992 for the different districts with respect to sex and school location. I - XXVII
2. Appendix - B  
School Information Blank. I - II
3. Appendix - C  
Teachers Inventory on the Causes of Educational Wastage. I - IV
4. Appendix - D  
Opinionaire for Seeking Suggestions for Reducing Educational Wastage. I - V

## CHAPTER - I

### THE PROBLEM : ITS BACKGROUND.

#### I : I      INTRODUCTION :

Our country, in its constitutional provision, has provided universalisation of primary education for all the children within the age group of six to fourteen years. Therefore, the provision of universal primary education is the concern of all in the country. But evidences reveals that our efforts for universalising the primary education are being defeated because of the lack of efficiency of the primary education system which is resulting in huge educational wastage caused by repetition and dropouts. In order to achieve the objective of universalisation of primary education, there is a need to eliminate these educational wastage. If this objective is to be achieved, it becomes necessary to increase the efficiency of the system of primary education. Hence, the dilemma facing the educational planners is how to increase the flow of pupils through the educational system by reducing the educational wastage, while simultaneously maintaining the quality of the system at reasonable per pupil cost. This can be done only when the problem of educational wastage is probed in depth.

The problem of educational wastage at the level of primary education has been a major concern for educators and administrators all over the country for the past several decades. All the developing countries of the world are facing a crisis in their educational system with a problem of educational wastage at the school level in general and primary level in

particular. Although considerable disparities in the level of educational wastage exist between the countries due to regional variations, differential educational variations in structures and provisions and so on, certain patterns and trends have been observed across regions of the world. From the extensive research on wastage and repetition that has been carried out by UNESCO (1977, 1982) and the International Bureau of Education (1971, 1972), it is evident that the problem of dropout and repetition of grades is serious throughout the developing world. (Psachoropoulos and Woodhall, 1985)<sup>1</sup>

According to UNESCO (1977)<sup>2</sup> survey of repetition in developing countries, repeaters constitute about 15 percent of the total enrolment of primary education in Latin America, 15 percent in Africa and 18 percent in South Asia. In other words, if there had been no repetition, the number of children of primary schools could have increased by some 15 to 20 percent without extra expenditures. Dropout and repetition have been identified as the principle cause of internal efficiency of primary education system in developing countries (Psachoropoulos and Woodhall 1985)<sup>3</sup>. According to the latest

- 
1. Psachoropoulos and Woodhall, (1985) Education for Development An Analysis. A world Book Publication, Oxford University Press 1985, pp- 208.
  2. UNESCO (1977) Survey of Repetition in Developing Countries. Division of Statistics on Education, Office of statistics. UNESCO, Paris.
  3. Psachoropoulos and Woodhall, (1985) Education for Development An Analysis. A world Book Publication, Oxford University Press 1985, pp - 208 - 209.

estimate by UNESCO (1980)<sup>1</sup> the overall primary school wastage rate for less developed countries is about 27 percent as compared to 3 percent for developed countries.

In India, the problem of educational wastage first came to light with the report of Hartog Committee (1929)<sup>2</sup> which remark that "throughout the whole educational system, there is a waste and ineffectiveness". The First Five Year Plan (1951- '56)<sup>3</sup> has also drawn attention to the educational wastage that occurs in various forms at different stages of education. Of the total number of students entering school in 1945-'46, only 40 percent reached class IV in 1948-'49. The expenditures on the remaining 60 percent was largely wasted.

The first ever study in this area seems to have made in the begining of 1940s, when a report on wastage and stagnation was brought out by the Bombay Provincial Board of Primary Education.<sup>4</sup> The first effort to study the problems of wastage and stagnation at the National level was made by NCERT,

- 
1. UNESCO (1980) Wastage in Primary and Secondary Education : A Statistical Study of Trends and Patterns in Repetition and Dropouts. LSR-E-37. Division of statistics on education. Office of Statistics, UNESCO, Paris.
  2. Hartog Committee (1929) Report of Hartog Committee. Calcutta Superintendent. Government Printing, India 1929.
  3. First Five Year Plan (1951-'56) New Delhi Planning Commission Government of India Publication. pp - 527.
  4. Bombay Provincial Board of Primary Education (1940) Report of Wastage and Stagnation in Primary Education. Primary Education Department, Bombay.

New Delhi (1964)<sup>1</sup>. However, it was restricted to the states of Maharashtra, Punjab, Rajasthan and the erstwhile Union Territory of Himachal Pradesh and Delhi. Looking at the seriousness of the problem, NCERT (1977)<sup>2</sup> further conducted one of the largest country wide sample survey of almost all the states. Unfortunately, the sample of Nagaland was not included in this study. The study which was reported in (1981)<sup>3</sup> revealed that for every 100 children enrolled in class I in 1971- '72 only 37 stayed in class V by the end of 1975- '76. It shows that about 60 percent children leaves school before completing their primary education upto class V. This huge wastage in education brings socio-economic waste in general and also effect the educational system in particular.

Realising this seriousness of educational wastage in the primary system of education, several institutions and individuals have conducted studies in this areas, identifying the extent and causes of wastage and stagnation. Besides that, studies were also conducted in relation to demographic variables of age, sex and location. These studies were mainly

1. NCERT (1964) The Problem of Wastage and Stagnation in Primary Education. NCERT, New Delhi, 1964.
2. NCERT (1977) Wastage and Stagnation in Primary and Middle Schools. NCERT, New Delhi, 1977.
3. NCERT (1981) Stagnation and Dropout at Primary stage - A Sample Survey. NCERT, New Delhi, 1981.

confined to the sample of either of their own state or certain region, block, division and district within the state.

However, no such studies has been conducted in the state of Nagaland at state level or district level. Although, the problem of educational wastage seems to be very serious in the state yet, due to lack of much research studies done in this area, the problem of educational wastage in the state still remain unprobed. The present study therefore, is an attempt in this direction, where an effort has been made to determine the extent of educational wastage, its causes and possible solution.

## 1 : 2 NEED AND IMPORTANCE OF THE STUDY.

Education in Nagaland has made phenomenal progress since it became a full fledged state in 1963. Since then, the number of schools at all levels have increased considerably, as the people of Nagaland foresee that social progress can be possible only through school education. The people (Nagas) went ahead on their own in starting schools in places where the Government could not start one. Thus, today, in almost all the villages in Nagaland, there is at least one primary school. The Government of Nagaland has been doing a considerable job in providing facilities for the upliftment and continuous growth of the schools in all the corners of the state. Presently, Nagaland has 1304 primary schools, 357 middle schools and 170 High schools, which are run by both



two studies which have been conducted at the post graduate Dissertation level and are based on sample of a block or town with limited objectives (Akono, 1985<sup>1</sup>, Koratuden, 1985<sup>2</sup>)

Thus, there is an urgent need to conduct a research study on educational wastage at the level of primary education on the sample of Nagaland state. This will provide the full picture of educational wastage for the whole state which may go a long way for the educational planners, administrators and teachers in adopting certain measures to reduce the educational wastage and thus, pave the way for universalisation of primary education in the state.

It is a fact that the problem of educational wastage in the state is very serious, but due to the lack of research studies done in this area, the magnitude of the evil could not be ascertained. An urgent study is therefore, needed so as to find out the extent of educational wastage in the state and its causes, so that measures can be taken up to reduce this problem. Further, no studies have been conducted on the basis of sex (i.e, male and female) and location, (i.e, rural and urban). As a result of which we are still

- 
1. Akono (1985): Study of the Factors affecting the Dropouts at Elementary stage of Southern Angami in Nagaland. Unpublished M.A Dissertation submitted to NEHU, 1985.
  2. Koratuden (1985): An investigation into the causes of Wastage and Stagnation in Primary School at Mokokchung Town. Unpublished M.A Dissertation submitted to NEHU, 1985.

ignorant about the comparative status of male and female in rural and urban schools of the state. Also, no studies have been conducted with regard to the internal efficiency of the educational system in primary education which determine the magnitude of the problem of educational wastage.

For the reasons indicated above, the investigator felt a great need to conduct a depth study of the problem, so as to ascertain the extent of educational wastage at different grades (i.e, I - IV), sex (i.e, male and female) and location (i.e, rural, urban) for the different districts of Nagaland and for Nagaland as a whole. Hence, the study "INVESTIGATION INTO THE PROBLEM OF EDUCATIONAL WASTAGE AND INTERNAL EFFICIENCY OF PRIMARY EDUCATION IN NAGALAND", has been undertaken.

### 1 : 3 THE PROBLEM.

The problem of educational wastage at the stage of Primary Education is indeed of great concern for the states in general and for the whole nation as a whole. This is so because this phenomenon is not only coming in our way to provide the minimum education to all children of the age group 6-14 years as enlisted in our constitution but also resulting in wastage of time, money and human efforts on a large scale. This problem is existing in almost all the states in our country and so Nagaland is no exception. Rather, it seems

that this problem is much more severe in Nagaland as compared to other states.

Due to lack of much research in this area, there is no clear cut picture with regard to the magnitude of this problem in Nagaland. The investigator, therefore, decided to conduct a research study on the problem of educational wastage and the internal efficiency of the system of primary education in Nagaland. The problem will be explored by determining the promotion rate, dropout rate, repetition rate and retention rate with respect to the variables of grades (I - IV) sex (male, female) school location (rural, urban) for the different districts of Nagaland and also for Nagaland as a whole. The study further aims to determine the internal efficiency of the primary education on the basis of the data obtained on educational wastage. Finally, the study also aims to examine the various causes of wastage and suggest action programmes to reduce its incidence.

#### 1 : 4 STATEMENT OF THE PROBLEM.

The problem under study is stated as follows :  
"AN INVESTIGATION INTO THE PROBLEM OF EDUCATIONAL WASTAGE AND INTERNAL EFFICIENCY OF THE SYSTEM OF PRIMARY EDUCATION IN NAGALAND".

#### 1 : 5 OBJECTIVE OF THE STUDY.

The following are the objective of the study :

- I. To determine the promotion rate, dropout rate and repetition rate in primary schools in Nagaland with respect to grade, sex, school location for the different districts and for whole Nagaland.
- II. To compare the promotion rate, dropout rate and repetition rate among different grades (i.e, I - IV) for different districts and for whole Nagaland.
- III. To compare the promotion rate, dropout rate and repetition rate of male and female pupils for different districts and for whole Nagaland.
- IV. To compare the promotion rate, dropout rate and repetition rate of rural and urban schools for different districts and for whole Nagaland.
- V. To find out the educational wastage due to dropout, repetition and as a whole in terms of pupil years wasted with respect to sex and school location for different districts and for whole Nagaland.
- VI. To compare the educational wastage due to dropout, repetition for male and female for different districts and for whole Nagaland.
- VII. To compare the educational wastage due to dropout, repetition for rural and urban schools for different districts and for whole Nagaland.
- VIII. To determine the extent of educational wastage in terms of (a) percentage of pupil years spent in excess (with respect to sex and location) for different districts and for whole Nagaland.

- IX. To find out the internal efficiency of the system of primary education in Nagaland with respect to sex and school location by determining (a) Coefficient of efficiency (b) Input-output ratio (c) Average number of pupil years spent per successful graduate and (d) Rate of retention (survival rate) for different districts and for whole Nagaland.
- X. To compare the internal efficiency of the system for male and female for different districts and for whole Nagaland.
- XI. To compare the internal efficiency of the system for rural and urban schools for different districts and for whole Nagaland.
- XII. To identify the causal factors of educational wastage as viewed by primary school teachers.
- XIII. To find out the opinion of various personnel for reducing educational wastage.
- XIV. To suggest action programmes for reducing educational wastage.

1 : 6 DEFINITION OF THE TERMS USED.

The problem under study involves some key words which are defined operationally as follows :

- (i) Cohort : A group of persons who experience a certain event in a specified period of time. For the purpose of this study 'cohort' will refer to a group of pupils joining the beginning grade of a course in a given year.

(ii) Educational wastage : It is an economic term which is defined as the total number of pupil years wasted by dropout and repeaters. Thus, educational wastage is due to both dropout and repeater which are further defined as below :-

(a) Dropout - Dropouts are those who leave school before the end of the final year of an educational cycle in which they are enrolled. The extent of the incidence of dropout is determined by dropout rate.

'Dropout rate' is the percentage ratio, for a grade 'g' between the number of pupils who dropout between the year 't' and 't+1' and enrolment in year 't'.

$$\text{Dropout rate (d) for grade 'g' in the year 't'} = \frac{\text{No. of pupils dropping out from grade 'g' in year 't'}}{\text{Total No. of pupils in grade 'g' in year 't'}} \times 100$$

(b) Repeater - Repeaters are those, who in a given school year remain in the same grade as in the previous year. The extent of the incidence of repetition is determined by repetition rate.

'Repetition rate' for grade 'g' in year 't' is the percentage ratio between the number of repeaters for the year 't+1' and enrolment in the year 't' in the same grade.

$$\text{Repetition rate (r) for grade 'g' in year 't'} = \frac{\text{No. of pupils repeating grade 'g' in year 't+1'}}{\text{Total No. of pupils in grade 'g' in year 't'}} \times 100$$

(iii) Promotion - Promotion is defined as the total number of pupils who successfully completed a particular grade by the end of the final year and move on to the next higher grade.

'Promotion rate' is the percentage ratio between the number of pupils who enter grade 'g+1' in year 't + 1' and the number of pupils in grade 'g' in the previous year 't'.

$$\text{Promotion rate (p) for grade 'g' in year 't'} = \frac{\text{No. of pupils promoted to grade 'g+1' in year 't+1'}}{\text{Total No. of pupils in grade 'g' in year 't'}} \times 100$$

(iv) Internal Efficiency - The internal efficiency of the educational system is defined as the ability to educate the greatest number of pupils who have entered the system in the year 't' in the shortest stipulated period of time. This is determined by analysing the flow of pupils through a school system for a duration of its educational cycle.

The following are the indices of internal efficiency :

(a) Coefficient of efficiency : It is the ratio between the theoretical number of pupil years that would have <sup>been</sup> taken by the graduates to complete the cycle of education, had there been no repetition or dropout and the number of pupil years actually spent by cohort. Thus, Coefficient of efficiency is calculated as follows :

$$\text{Coefficient of efficiency (CE)} = \frac{\text{No. of pupils who successfully completed the full educational cycle X normal length of schooling.}}{\text{Pupil years actually spent by school completers.}} \times 100$$

This Coefficient varies between '0' (complete inefficiency) and '1' (maximum efficiency).

(b) Input-output ratio : It is one of the measures of the internal efficiency of education. When pupil input years are divided by the students output years, the resulting ratio is known as input-output ratio.

$$\text{Input-Output ratio} = \frac{\text{Pupil input years}}{\text{Pupil output years}}$$

The input is measured by actual pupil years spent and the output as those students who complete the cycle successfully (i.e, school completers X normal length of schooling). Thus,

$$\text{Input-output Ratio} = \frac{\text{Actual pupil years spent}}{\text{School completers X normal length of schooling (i.e, 4 years).}}$$

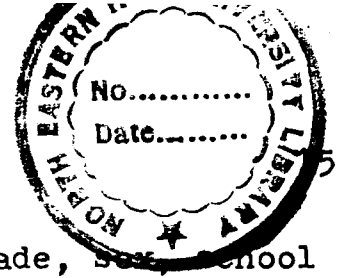
A ratio of 1 indicates maximum efficiency. A ratio of greater than 1 indicates the extent of inefficiency and wastage.

#### 1 : 7 QUESTIONS POSED.

The present study is aimed to answer the following questions :-

(1) What is the promotion rate, repetition rate and dropout

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rate in primary schools with respect to grade, sex, school location for the different districts and for whole Nagaland.

- (2) What is the comparative status of the promotion rate, repetition rate and dropout rate among different grades (i.e, I to IV) for different districts and for all Nagaland?
- (3) What is the comparative status of promotion rate, repetition rate and dropout rate of male and female pupils for the different districts and for whole Nagaland ?.
- (4) What is the comparative status of the promotion rate, repetition rate and dropout rate of rural and urban schools for the different districts and for whole Nagaland ?.
- (5) What is the educational wastage due to dropout, repetition and overall (i.e, due to dropout and repetition) in terms of pupil years wasted with respect to sex and school location for the different districts and for whole Nagaland ?.
- (6) What is the comparative status of educational wastage due to dropout, repetition and overall (i.e, due to both dropout and repetition) for male and female pupils for the different districts and for whole Nagaland ?.
- (7) What is the comparative status of educational wastage due to dropout, repetition and overall (i.e, due to both rural and urban schools) for the different districts and for whole Nagaland ?.
- (8) What is the extent of educational wastage in terms of percentage of pupil years spent in excess with respect to sex and school location.

- (9) What is the internal efficiency of the system of primary education for the different districts and for whole Nagaland with respect to sex and school location in terms of (a) Coefficient of efficiency (b) Input-output ratio (c) Average number of pupil years spent by per successful graduates and (d) Rate of retention ?.
- (10) What is the comparative status of internal efficiency of the system for male and female for the different districts and for whole Nagaland ?.
- (11) What is the comparative status of the internal efficiency of the system of rural and urban schools for the different districts and for whole Nagaland ?.
- (12) What are the important causal factors of educational wastage as viewed by the primary school teachers, headmasters, Deputy Inspector of Schools, sub-inspector of schools and teacher educators ?.
- (13) What are the opinions of primary school teachers, headmasters, Deputy Inspector of Schools, and teacher educators for reducing educational wastage ?.
- (14) What action programmes can be formulated for reducing educational wastage on the basis of the opinions sought ?.

### 1 : 8 DELIMITATION OF THE STUDY:

The study is delimited in the following ways :-

- (1) The sample of the study is confined to primary schools of Nagaland run by the state Government only.
- (2) With regard to educational wastage, the study is limited to educational wastage due to dropout and repeaters only.
- (3) Determination of the internal efficiency of the system of primary education is restricted to the time factor only, i.e, pupil years wasted and pupil years actually spent, as against expected.
- (4) Data collection to find out the causes of educational wastage is limited to the sample of primary school teachers, headmasters, DIS, SIS and teacher educators.
- (5) Data collection to find out the opinion for reducing educational wastage is limited to the sample of primary school teachers, headmasters, sub-inspectors of schools and teacher educators from SCERT and Nagaland College of Education, Kohima.

### 1 : 9 SCOPE OF THE STUDY :

The present study is very comprehensive in the sense that the data has been collected from the sample of government primary schools of the whole state district wise. Further, the analysis of the data will reveal many different aspects of the problem of educational wastage such as, promotion rate, repetition rate, dropout rate - sex-wise (male and female), location-wise (urban and rural). The study also aims to find out the in-

ternal efficiency of the system in terms of coefficient of efficiency, input-output ratio, average number of pupil years spent by per successful graduate and rate of retention.

Thus, the findings of the study may go a long way in revealing the exact picture of the problem of educational wastage on a large scale for the whole state district wise. It will give an idea to the educational planners and administrators about the seriousness of the problem which need their immediate attention.

As the study will also probe into the causes of educational wastage, teachers, parents and educational administrators will also come to know about the various reasons for school dropout and failure which will finally help in solving the problem to some extent.

The study also aims to seek opinions or suggestions from school teachers, headmasters, Deputy Inspector of Schools, sub-inspector of schools and teacher educators for reducing educational wastage. Their opinions will help the investigator in formulating the appropriate action programme which can be launched in schools for reducing educational wastage.

THEORETICAL FOUNDATIONS OF THE STUDY.2 : 1 INTRODUCTION :

During the sixties, most nations of the world experience the need of continuous expansion of their educational systems. Since then, in developing countries particularly, there has been growing awareness that investment in education is one of the key factors in a nation's economic and social development. Educational statistics reflect this worldwide struggle for more and better education. Thus, developing countries have spent huge amount of public budget on the expansion of education, especially the primary education in spite of the limited financial resources.

Education represents one of the largest industry in India with more than 100 million pupils on roll involving huge expenditure. Thus, huge material and non material resources go to education yielding some output. As we speak of wastage of resources in other industries, we can also speak of wastage of resources in the educational process. Wastage in education takes different forms which are discussed in the following pages of the chapter. It is of much importance to study the problem of wastage because wastage reduces the efficiency of the system. UNESCO (1980)<sup>1</sup> estimates that roughly 25 %

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1. UNESCO (1980): Wastage in Primary and Secondary Education: A statistical survey of trends and patterns in Repetition and Dropout. CSR - E - 37. Division of Statistics on Education - Office of Statistics, UNESCO- Paris.

of all primary schools placed in the developing world are lost to educational wastage. In the context of education in India, the Education Commission (1964-'66)<sup>1</sup>, while discussing the problem of expansion of education, observed in its report that, the most important problem during the following 10 (ten) years to improve the quality of education and to reduce the wastage and stagnation due to dropout and failure to the minimum. The Commission further, had commented that, there is a need to study the problem of wastage scientifically at regular intervals along with the causes of wastage and strategies to minimise the same. In this chapter, we shall discuss the problem of educational wastage in detail so as to conceptualise the problem in depth.

## 2 : 2 CONCEPT OF EDUCATIONAL WASTAGE :

Educational Wastage<sup>2</sup> is an economic term defined as the total number of pupil years spent by repeaters and dropouts. A 'repeater' is a pupil, who in a given school year, remains in the same grade as in the previous year, while, dropouts are those who leave school before the end of the final of an educational cycle in which they are enrolled. As a summary measure, wastage ignores both the benefits afforded the

1. Education Commission (1964-'66): Report of the Education Commission, India (1964-'66) Govt. of India, New Delhi; p-157, 723.

2. Torsten Husen et al : The International Encyclopedia of Education, Volume 9, 1985.

repeater by spending an extra year in school and the benefits accruing to dropout before school. Total wastage, then, merely reflects the drag of repetition and dropout on the flow of promotion within an educational system.

Of the two components, repetition is thought to be more wasteful because repeaters (a) stay in school longer than normal duration, thereby, reducing the intake capacity. (b) cause the loss of investment in educational services and increase unit costs and (c) contribute to dropout while having a regression effect on equity in the educational system.

## 2 : 3 TYPES OF EDUCATIONAL WASTAGE :

Wastage in education results in direct wastage of investment resources in education, pushing up the input-output ratio in the educational industry or pushing down the contribution of education to the economy. Wastage in education can be classified into two categories such as :-

(i) External wastage.

(ii) Internal wastage.

### (i) External wastage :-

While Internal wastage results in direct wastage of investment resources in education, External wastage is that which we observe outside the educational industry. While internal wastage reduces the net output of educational system, external wastage reduces the rate of return to education. i.e, it reduces the contribution of educational system to socio-economic growth of the economy. It is a problem concerned

with the utilization of the output of the educational process. If there is wastage in the use of human capital (i.e., acquired through investment in education), the investment resources put in the process of producing the human capital can be considered as having been wasted.

(ii) Internal wastage :

Internal wastage refers to wastage of resources within the educational system and reduction of the output of this industry with a given level of input resources. Output shall be produced at less than optimum level, or simply the input-output coefficient will be high because of internal wastage of resources. In other words, net output could have been maximised with the same input. Internal wastage is of the following three kinds :-

(a) Stagnation.

(b) Dropout.

(c) Under utilization of resources.

(a) Stagnation : Wastage may be caused by failure of students in the final qualifying examination. This is familiarly known as wastage due repetition or stagnation. Investment made on the pupil who do not qualify in the final examination can be called waste. So, stagnation leads to an increase in the required period to complete the course and thus, results in wastage.

(b) Dropout : Secondly, wastage may also arise due to dropout. Pupil may quit school or withdraw themselves from the



constitute wastage.

(c) Under utilization of resources : The third type of internal wastage which we most often observed relates to under-optimum use of resources. The concept of 'optimum' use of resources in education can be meaningfully interpreted with respect to the size of the educational institution (in terms of enrolment), the amount of working hour, etc. Suppose, a school can accommodate 500 pupils, given other things and if it is run with enrolment below 500 pupils, this can be called inefficient or under optimum use of resources. Similarly, if teachers are having less number of hours of work, it amounts to under utilization. Thus, under utilization amounts to wastage of educational resources.

For the purpose of the present study, wastage due to dropout and stagnation has only been considered and the wastage due to the under utilization of resources does not fall in its scope.

## 2 : 4 INDICATORS OF EDUCATIONAL WASTAGE :

The following are the indicators of educational wastage :-

(i) Promotion rate : The promotion rate is determined by the following formula :-

$$\text{Promotion rate (p) for grade 'g' in year 't'} = \frac{\text{No. of pupils promoted to grade 'g+1' in year 't+1'}}{\text{Total No. of pupils in grade 'g' in year 't'}} \times 100$$

(ii) Dropout rate : The formula for determining dropout rate is as follows :-

$$\text{Dropout rate (d) for grade 'g' in the year 't'} = \frac{\text{No. of pupils dropping out from grade 'g' in year 't'}}{\text{Total No. of pupils in grade 'g' in year 't'}} \times 100$$

(iii) Repetition rate : The rate of repetition is determined in the following formula given below :-

$$\text{Repetition rate (r) for grade 'g' in year 't'} = \frac{\text{No. of pupils repeating grade 'g' in year 't+1'}}{\text{Total No. of pupils in grade 'g' in year 't'}} \times 100$$

(iv) Percentage of pupil years spent in excess : It is expressed as follows :-

$$= \frac{\text{Total pupil years spent in excess}}{\text{Total pupil years actually spent}} \times 100$$

(v) Pupil years spent in excess attributable to graduate (through repetition). It is expressed as follows :-

$$= \frac{\text{Pupil years wasted due to repetition}}{\text{Total pupil years wasted}} \times 100$$

(vi) Pupil years spent in excess due to dropout : It is expressed as follows :-

$$= \frac{\text{Pupil years wasted due to dropout}}{\text{Total No. of pupil years wasted}} \times 100$$

## 2 : 5 CONSEQUENCES OF EDUCATIONAL WASTAGE :

The high rate of wastage in educational system at all levels such as; primary, high school and even at collegiate, education has drawn the concern of educational planners and administrators as it has effected the whole educational system in particular and the society as a whole. The effect of educational wastage can be viewed from three diamensions:-

- (a) Loss of man power resources.
- (b) Loss of material resources.
- (c) Loss of time.

### (a) Loss of man power resources :

The concept of education today is no longer limited to character building, development of personality and sharpening of intellectual faculties. It is used to mean something more than that. The modern concept of education is that, it is a process of modifying behaviour by increasing knowledge, the skills and the capacities of all the people in the society, so that they become productive member of the society. Education thus, has a very great responsibility in developing the human resources. Realising this importance, the constitution of India has guranted for free and compulsory primary education to all the children within the age group of 6 - 14 years and to provide education to all the children of the country of this age group within a stipulated period of time. However, this objective has not been achieved even after a lapse of almost 49 years of independence. One of the reasons

for not achieving this objective is the problem of huge wastage and stagnation at primary stage of education. According to one of the latest study conducted by Arun C. Mehta (1994)<sup>1</sup> out of the students who were admitted in class I in 1984-'85, 56.75 percent boys and 52.03 percent of girls dropped out of the educational system before they reach grade V in the year 1988-'89. The school system has not been able to generate sufficient competency to hold all the children admitted till the end of the schooling. As a consequence, large number of children left school and remain illiterate through out. The abilities, talents and skills of these children are not developed to the optimum level. Hence, their human resources or man power is wasted in one way or the other. The cumulative effect of this wastage of human resources or man power indicates a colossal irreparable loss to the society which determine to strive for all round economic and human development. A developing society or democracy can ill afford to suffer such huge amount of human resources.

(b) Loss of material resources :

Every year, Government, both central and state is allocating a large sum of money for the development of education. The expenditure can be classified into two types such

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1. Arun C. Mehta (1994) : Efficiency and its Correlates: A Cross-State Analysis. Perspective in Education. 1994  
Vol. 10, No. 2 Page - 115-120.

as :-

(i) Recurrent expenditure.

(ii) Capital expenditure.

(i) Recurrent expenditure :

The aspect of expenditure like, salaries and allowances of teaching and non-teaching staff, school text books, libraries, instructional materials, scholarships and grants for studies, lodge and boarding, canteen, transport, sports welfare services, maintenance of building and equipments, operation of buildings, fuel, light etc. are recurrent expenditure.

(ii) Capital expenditure :

In capital expenditure, we refer to the expenditures made on purchase and development of land, school buildings, classrooms, laboratories and equipments, also other desirable instructional equipments like radio, television, microscope and welfare services like auditorium, residence, halls etc.

The government as well as private bodies spent large amount of money and material resources with the expectation that the investment made on education will yield greater return, that is, in the form of qualified and efficient manpower. However, with this large expenditure made on education we find that the rate of wastage is alarmingly high (as cited before). Children are not been able to retain in schools due to one reason or the other, thus, the investment made on school leavers are deemed to have wasted. Thus, this brings loss

to money and other material resources.

(iii) Loss of time :

The third important effect of educational wastage is the loss of time. The two most important determinants of educational wastage are dropout and repetition. Both these brings loss of time in the educational process. For example, a child should have completed the primary level of education within four years. However, it happens that some students fail or stagnate and remain in the same grade as in the previous year. When this continuous for two or more years, the student loss interest in his studies and left the school. This brings wastage of time to the student concerned in particular and to the whole educational system as a whole.

The present study is concerned with the educational wastage in terms of the loss of time only. The loss of human resources and material resources does not fall under the scope of the present study.

2 : 6 METHOD OF DETERMINING EDUCATIONAL WASTAGE.

Educational wastage can be determined by either of the following methods :-

- (i) True cohort method.
- (ii) Apparent cohort method.
- (iii) Pupils flow analysis by cohort reconstruction method.

(i) True cohort method :

Under this method, longitudinal data on single

group of pupils are collected following up the group in subsequent years till they reach the final grade. It would be known that how many dropouts and on what points how many migrate to outside, how many repeat and in what frequency, etc. Then the rate of wastage due to stagnation and dropout are easily estimated. The true cohort method is the most appropriate one, but, it requires data in minute details starting from initial grade and year until the grade and year of completion.

(ii) Apparent cohort method :

In this method the enrolment in grade I in a particular year is compared with the enrolment in successive grade during successive years and it is assumed that the decrease from each grade to the next corresponds to wastage. This is the most commonly used method. It produces very approximate estimates of dropouts, but its main weaknesses is that, it assumes that children are either promoted or else dropout of the school system. Repetition is thus ignored and therefore, a factor, very often of paramount importance is overlooked. A still more questionable application of this method consist of using cross-sectional year grade data (i.e, enrolment in all grade in a single year).

An alternative approach suggested by J.D. Chesswas, mainly consist of calculating the ratio of the enrolment in a grade in a given year to the enrolment to the previous grade in the previous year (defined as the progression rate) for all

the grades and for all the years in a time series data.

In spite of the limitation mentioned above, (namely the ignoring of the repetition) in those cases where data on repeaters are not available, the apparent cohort method can naturally provide some indications as to the working of the education system and particularly with regard to transition.

(iii) Pupil flow analysis by cohort reconstruction method:

This method was used in world-wide survey of educational wastage by UNESCO (1967). In this method, the position of pupils enrolment and repeaters under the given educational cycle for two consecutive years is taken to begin with.

Essentially, pupils enrolled at any grade in a school system can be represented as shown in diagram I.

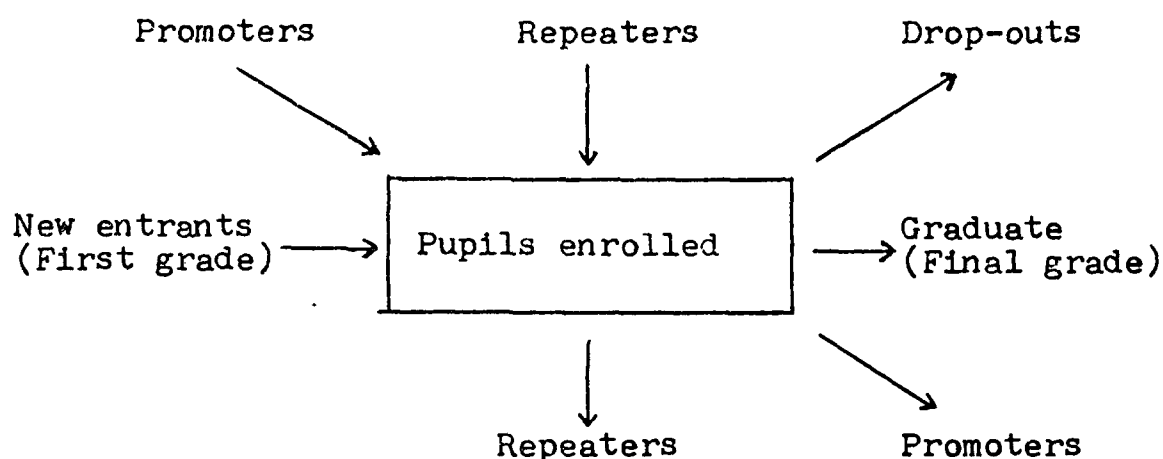


Diagram - I

The above diagram shows that the enrolment at any grade consist of promotees from a lower grade of previous year

or new entrants if this is the first grade, plus repeaters from the last year in the same grade.

At the end of the school year, a number of them will be promoted to the next higher grade, while some will repeat the same grade. A few may have dropped out of the school in the mean time due to various reasons. If this grade happens to be the final grade, the promotees are actually the graduates.

Thus, if we have the data of pupils enrolment and repeaters for two consecutive years, then promotion, repetition and dropout rates can be calculated as described earlier in chapter I.

Further, on the basis of promotion, repetition and dropout rates so calculated, the pupil flow chart can be constructed to show what will happen to a cohort of 1000 pupils entering grade I in a certain year as given below in the example presented in diagram NO. 2.

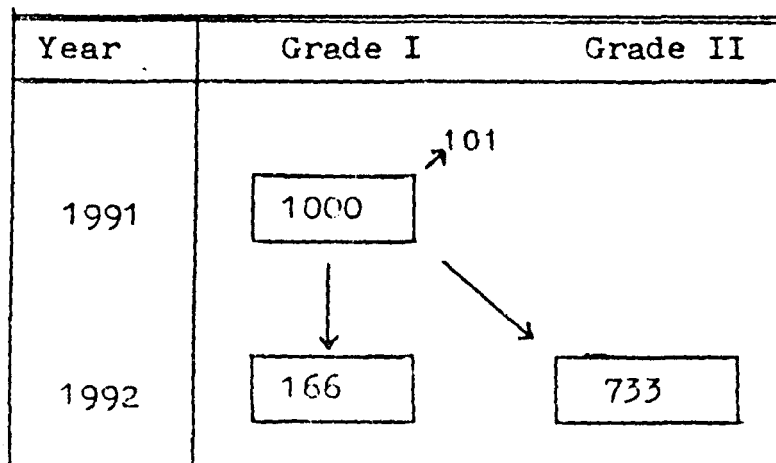


Diagram NO. 2.

This process is called a reconstruction of theoretical cohort.

For this a few assumptions are made to simplify the matter.

1. Promotion and repetition rates are assumed constant throughout the period.
2. All pupils are considered to have the same likelihood of promotion or repetition, whether they have never repeated or have repeated once or more.
3. The possible number of times a class is repeated is limited to four years.
4. There are no other entrants to the system apart from the original 1000 pupils admitted.
5. There are no dropouts from the final grade.

## 2 : 7 CONCEPT OF EFFICIENCY.

Efficiency is a term used to describe the relationship between inputs and outputs. Efficiency may be of two types:

(i) External efficiency.

(ii) Internal efficiency.

(1) External efficiency :- When the efficiency of the educational system is judged on the basis of external criteria, it is known as external efficiency. For example, objective of the society is the external criteria which is used to measure the external efficiency. Thus, the external efficiency of the system depends on how efficiently the system meets

the social and economic needs of the society. More specifically, external efficiency of schools may be judged by, how well the school prepare pupils for their role in the society as indicated by the employment prospect and earning of the students. Further, external efficiency can have two aspects :-

(a) Qualitative aspect and

(b) Quantitative aspect.

(a) Qualitative aspects :- The qualitative aspect of efficiency of educational system deals with the problem whether man power released by the education system satisfies the specific requirements of the jobs it is intended to perform in the economy. It may be that, the system is able to meet the quantitative needs of the economy, but the candidate may not be able to answer successfully the requirement of certain placement for a specific type of knowledge and skills. Such a situation would indicate the need for a change in the structure and content of education.

This point can also be well illustrated from the experience in India. In India, there is a general tendency that the number of application are in excess of the number of vacancies advertised. However, from amongst the applicant called for interview (who are called in a number exceeding that of vacancies) it becomes difficult to secure suitable candidates in strength adequate enough to fill the vacancies.

Thus, while the internal efficiency of educational

system relates to what happen within the system, the external efficiency links it with the quantitative and qualitative man power needs of economic system.

(b) Quantitative aspects :- The quantitative external efficiency rest on how efficiently the system is able to supply the quantitative needs for man power such as, engineers, doctors, technicians, economists etc. Thus, the quantitative aspects will provide a guideline for determining the intake capacity especially in different faculties and branches of knowledge. If, it is that the system is unable to meet the need of the economy, for example, engineers, more resources should be diverted for engineering education from other sectors of the economy or from other tiers of the system.

For example, in the case of Indian system, it is sometimes argued that the programmes of compulsory primary education involves tremendous waste. For if, from primary tier, the pupil donot migrate to the secondary and there from higher levels the educational expenditure yields much less by way of supply of high level man-power.

(ii) Internal efficiency :- When the efficiency of the educational system is judged on the basis of internal criteria, it is known as internal efficiency. For example, the objective of education is the internal criteria which is used to measure internal efficiency. Thus, the internal efficiency of the system depends on how efficiently the given educational inputs are utilised to produce the desired output.

Internal efficiency refers to this simple input and output of the pupils. It therefore, deals with possible waste in the educational system owing to dropout and stagnation.

This issue of internal efficiency further, has two dimensions:

(a) Qualitative

(b) Quantitative.

(a) Qualitative internal efficiency : It is concerned with acquisition of skills, knowledge and attitudes to be measured either by means of examination scores or by specially administered test of non-cognitive and cognitive achievement. But it is extremely difficult to measure this type of efficiency. The scope of the present study does not include the qualitative internal efficiency of the system.

(b) Quantitative internal efficiency :- It is concerned with the flow of students through the system with minimum waste, i.e, dropout and repetition rates. From this context, the internal efficiency of primary education can be studied by the process of children from grade to grade and the number of years it takes to produce a specified number of primary school graduate. Thus, the phenomena of educational wastage owing to dropout and stagnation are the main pointer to show the quantitative internal efficiency of the educational system.

The present study is concerned with the internal efficiency only and that too, quantitative internal efficiency.

## 2 : 8 INDICATORS OF INTERNAL EFFICIENCY (QUANTITATIVE).

Though, the rate of educational wastage owing to

dropout and stagnation provide us some evidences about the quantitative internal efficiency of the educational system, but more specifically, the following four indicators are used to designate it in direct terms.

- (a) Coefficient of Efficiency.
- (b) Educational wastage ratio (Input-output ratio)
- (c) Average number of pupil years spent per successful graduate.
- (d) Retention Rate.

(a) Coefficient of Efficiency :- It is a ratio between the theoretical number of pupil years that it would have been taken by the graduates to complete the cycle of education, had there been no repetition or dropout and the number of pupil years actually spent by cohort. Thus, Coefficient of Efficiency is calculated by :

$$CE = \frac{\text{NO. of pupils who successfully completed the full educational cycle} \times \text{Normal length of schooling}}{\text{Pupil years actually spent by school completers}} \times 100$$

Perfect efficient educational system will have a coefficient of 100 %.

(b) Educational wastage ratio (Input-output ratio) :- It is one of the measures of internal efficiency of education. When pupils input years are divided by pupils output years, the resulting ratio is known as input-output ratio. This is also known as educational wastage ratio.

$$\text{Input-output ratio} = \frac{\text{Pupil input years}}{\text{Pupil output years}}$$

The input is measured by actual pupil years spent and the output as those students who complete the cycle successfully, that is, (school completers x normal length of schooling).

Thus,

$$\text{Input-output years} = \frac{\text{Actual pupil years spent}}{\text{School completers} \times \text{normal length of schooling}}$$

A ratio of 1 indicates maximum efficiency and a ratio of more than 1 indicates the extent of inefficiency and wastage.

(c) Average number of pupil years spent per successful graduate:

It is calculated by dividing the total number of pupil years actually spent by the total number of graduates produced.

$$= \frac{\text{Total pupil years actually spent}}{\text{Total NO. of successful graduates}}$$

(d) Retention Rate :- It is the capacity of the system to retain the pupils i.e, holding power of the system.

The retention rate shows the proportion of pupils who entered at the same time in grade I and reached to the next grade say, II or III or IV.

$$\text{Retention rate} \\ \text{RR (g+1)} = \frac{\text{NO. of pupils promoted to grade (g+1)}}{\text{NO. of pupils enrolled in grade 'g' in the years 't'}}$$

## 2 : 9 PATTERNS AND TRENDS IN EDUCATIONAL WASTAGE.

### (1) World wide :-

Although, considerable disparities in the level of educational wastage exist between countries due to regional variations, different educational structures and so on, certain patterns and trends have been observed across regions of the world. For example, differences in repetition and dropout by sex generally favour girls. The fact that girls repeat less frequently than boys is assumed a consequence of higher initial preselectivity among girls.

By grade level, more repetition is found in the final grade of primary cycle in Africa where students often repeat until they pass the primary school leaving examination. In Latin America, as in Asia, higher rates of repetition are found in lower grade levels, while in East and West Europe and North America, little repetition and dropout exist at all. In addition, higher rates of repetition are commonly found in rural areas of the world nations, even though, transferring from rural and urban schools which is widespread, causes an over reporting of dropout rates in rural areas.

Data collected by UNESCO (1980)<sup>1</sup> over the 10 years period from (1966 - 1976) reveals that for all regions both

1. UNESCO (1980) : Wastage in Primary and Secondary Education: A Statistical study of Trends and Patterns in Repetition and Dropout - CSR - E - 3. Division of Statistics on Education. Office of Statistics, UNESCO - Paris.

repetition and dropout rates have remained stable despite massive growth in the world's educational system. However, absolute number of repeaters and dropouts have increased as a result of that growth.

Finally, it might be mentioned that wastage rates for general secondary education, when compared to primary rates, are lower in Africa and Latin America and higher in Europe and Asia. But because the meaning of general secondary educational wastage is dissimilar to that found for primary schools and the data is less reliable, secondary school wastage is not dealt with in this article.

The overall primary school wastage rate for less developed countries is reported by UNESCO (1980)<sup>1</sup> to be about 27 percent, divided by regions as follows; Africa 34 percent, Latin America 28 percent and Asia 22 percent. This compares to only 3 percent for the developed regions. The estimate of total wastage means that on average, nations will spend one quarter of all pupil years invested in a given cohort on repetition and dropout. When educational wastage is broken down into constituent parts, the impact of repetition and dropout in wastage by region can be noted. Table NO.2.1 presents the breakdown by region of the world based on 1976 data published by UNESCO (1980)<sup>2</sup> and measured in pupil years due to repetition and dropout as a percentage of total pupil years.

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1,2 UNESCO (1980) : Wastage in Primary and Secondary Education. A Statistical study of Trends and Patterns in Repetition and Dropout - CSR - E -3. Division of Statistics on Education. Office of Statistics, UNESCO, Paris.

Table NO. 2 . 1

Showing average median repetition and dropout rates (1975) by region for primary schools.

Region	Repetition rate		Dropout rate	
	Percentage	NO. of countries	Percentage	NO. of countries
1. Africa	16.5	40	22.0	36
2. Latin America	11.0	24	28.0	23
3. Asia	10.0	33	16.0	32
4. Europe	.2	22	3	18

It appears that about 15 percent of primary school pupils are repeaters in the developing countries which suggest that the number of primary school children admitted to school could have been increased by some 15 percent without increasing the cost, had there been no repetition. Disparities are largest in Africa, (e.g. Tanzania 0.4 percent versus 47 percent in Sao Tome and Principe). There are wide variation in Asia also, but since data of some of the larger Asian Nations are absent, it is likely that the 10 percent figure is under reported.

Table NO. 2.1 also conceals high level and large dispersions within and between regions for dropouts. For example, the dropout rate for French speaking African nation is 28 percent, while for English speaking African countries, the level is

19 percent.

In conclusion, wide differences in the rate and dispersions of educational wastage between countries suggest that each nation will have to formulate its own policy to eliminate primary school wastage in the future. But such strategies, however, organised, will surely pay dividends if, as a result, widespread literacy, universal primary educations and increased educational opportunities are forthcoming.

(ii) National Scene :-

India is one of the largest democratic country in the world. For the success of democracy, it is necessary that her citizens be educated. According to 1991 census, the total population of India is 843,930,861, and the literacy percentage being 52.11. This shows a very little progress in the field of education over a period of almost 44 years. What is more alarming is that, the number of illiterates goes on increasing in spite of all the possible steps taken by the government, which is due to explosion of population. Again, there is a great disparity in the literacy percentage of male and female. Presently, the literacy rate among male and female is 63.86 and 39.42 percent respectively. This shows that females are far behind males, while about 40 percent of males are still illiterate. Similarly, there are large differences in the matter of literacy among different regions and states of India, for example, Kerala is credited with the highest

percentage of literacy i.e, 90.59 percent. (94.45 male literacy and 86.93 percent female literacy as per 1991 census), while Arunachal has the lowest percentage, that is, 41.22 with 51.10 male and 29.37 female literacy percentage respectively.

The Constitution, under the Directive Principle of State Policy under Article 45 guarantees free and compulsory primary education for all children until they complete the age of 14 years. According to the constitutional directives, the target of universal free and compulsory education should have been achieved by 1960. However, due to immense difficulties involved - such as, explosion of population, widespread general poverty of the people, illiteracy and apathy of the parents, it was not possible to show adequate progress even after almost 40 years of independence and thus, this provision has not been achieved even today.

It does not mean that there has been no progress in education after independence. In fact, there has been a colossal expansion of education at all levels. What is wrong with the educational system is that, it still continues to benefit mainly the upper and middle classes of Indian society. It makes only a marginal contribution to the education of the lower strata of people who need it most. About 20 percent of the children, mostly the lowest of the low do not enter school at all. The formal system of education as it were, bypasses them altogether. Of those children who

happen to enter school, nearly 70 percent of them dropout by class V and nearly 80 percent dropped by class VIII. Only 15 percent are fortunate enough and reach class XII and less than 1 percent get the first degree of University. It is a well known fact that, among the dropouts an overwhelmingly large portion is of those who belongs to the lower socio-economic strata.

One of the latest studies conducted by Arun C. Mehta<sup>1</sup> (1994) on National level reveals that out of total pupils admitted in the first grade in 1984 - '85, 56.75 percent boys and 52.03 percent girls dropped out from the educational system before they reach to grade V in the year 1988 -'89. Results at the state level further indicates that dropout rate in many states is higher than the all India level and nearly half of the dropout occurs in grade I and II. In some states such as Rajasthan, 65.5 percent of the total girls in grade I in 1989 dropped out before they reached to grade II. The main reason of the high dropout rate is that the costs and efforts involved in primary education are not matched by the quality and benefits of the education offered.

Khraih (1969) found the largest dropout in class I and II. This is further supported by other research studies. Masavi (1971), Adisesniah (1974), Kaelehar (1975) and Misra (1978) reported that the percentage of detention was highest

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1. Arun C. Mehta (1994) : Efficiency and its correlates : A cross-state Analysis. Journal of Perspective in Education, 1994, Volume 10, NO. 2. Page 114 - 125.

at primary stage that is, class I - IV. Pillai Benjamin and Nair (1980) have arrived at similar conclusions.

Another category of studies points out the differences in wastage of education in relation to demographic variables of age and sex. Pimpley (1975), Shah (1976) found more dropout rate in case of female, while Singh (1969) and Gore (1974) found that wastage of education is not less than 80 percent in lower age group. Another set of studies also refer to wastage of education in relation to the place of living. Chaudhary (1970), Gore (1974) and Mehta (1976) found that the children belonging to rural areas have high rate of dropout than in urban children.

Although, there is huge amount of wastage in primary system of education with wide variations in regard to sex (i.e, male and female), location (i.e, rural and urban) and age. It is gratifying that certain practical measures are now being adopted to improve the situation in regard to universalization of primary education.

What is more disturbing than the huge wastage of national resources involved in such incidence of dropout particularly at elementary stage is due to the fact that the content, techniques and programmes of education has created little awareness of the inequalities of the existing social order, not to speak of the measures needed for removing these inequalities.

The present educational system as pointed out above

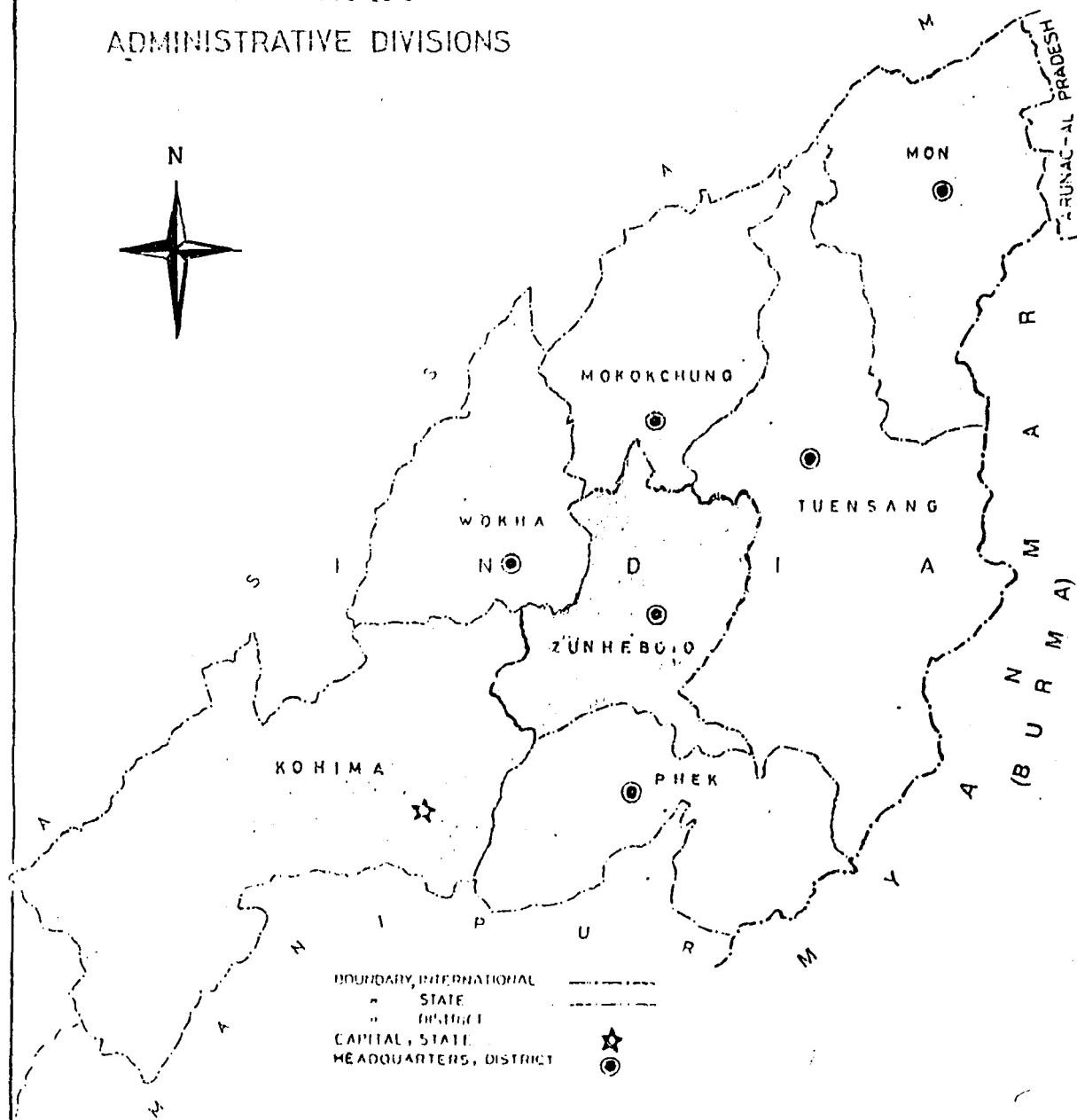
accords low priority to programmes of mass education, i.e., Adult education and Elementary education. On the contrary, it gives high priority to secondary and higher secondary education, whose beneficiaries are mostly the top 30 percent of the population. This is evidenced by the fact that about 60 percent of the total amount allocated for education is spent on secondary and higher education. This shows that, development in India continues to be lopsided - a legacy of British rule which sought to promote and strengthen the upper classes of Indian society which hardly contributes to the social and economic development of the country. On one hand, it accentuates the already existing social disparities and on the other hand, it is infructuous in developing material resources of the country, because it is predominantly theoretical and irrelevant to the national needs.

## 2 . 10. NAGALAND AT A GLANCE.

Nagaland is the sixteenth state of Indian Union, situated in the North-Eastern part of the country, bounded by Assam in the North and West, Burma in the East and Manipur in the south. Nagaland attained her statehood on 1st December 1963. Nagaland lies between the longitude 93.20 east and 95.15 east and latitude 25.6' and 27.4'. The altitude vary between 914 metres to 3,048 metres. It is a hilly state, beautiful inspiring country. The mountains are high and rugged. Its rolling mountains, enchanting valleys, swift flowing streams and evergreen forest peaks are the scenic beauty of the land. The highest peak is Saramati in Tuensang district which is 12,553

# NAGALAND

## ADMINISTRATIVE DIVISIONS



feet high. Nagaland does not have much plains. Dimapur, having an area of 150 square kilometres is the largest plain in Nagaland. Dhansiri is the largest river in the state.

Climate : The climate is pleasant and healthy. It is warm in summer and cold and bracing in winter. Days are generally bright and clear. Rain generally starts from April and continue upto October. Rainfall is well distributed throughout the state having averages between 177 cm and 254 cm. Kohima district being sheltered by lofty mountain summits such as, Japfö in the centre, Kepamedzö in the south and Saramati in the North-East, the climate is very pleasant. The hottest part of the year is July and August.

Population : According to 1991 census, Nagaland is having a total population of 1,215,573 out of which 643,273 are male and 572,300 are female. The density of population is 73 per square kilometres.

Area and division :

Nagaland has a total geographical area of 16,527 square kilometres or 6,366 square miles. For administrative convenience, the state is divided into seven districts.

Table NO. 2 . 2 shows the different districts with its population and district headquarters.

Table NO. 2. 2

Showing the different districts, their population and district headquarters :

	Districts	Population	Headquarter
1.	Kohima	394,179	Kohima
2.	Phek	101,823	Phek
3.	Zunheboto	97,933	Zunheboto
4.	Wokha	82,394	Wokha
5.	Mokokchung	156,207	Mokokchung
6.	Tuensang	232,972	Tuensang
7.	Mon	150,065	Mon
	Nagaland	1,215,573	Kohima

Literacy rate : The literacy rate in the state is 61.30 per cent. 66.09 percent for male and 55.72 percent for female.

Tribes : Nagaland is the home of sixteen major tribes such as, the Angamis, Aos, Lothas, Semas, Rengmas, Chakhesang, Phom, Yimchangers, Zeliangs, Kukis, Changs, Sangtams and others. All these tribes have their own distinguished languages named after themselves. For instance, the Angamis speak Angami, Semas speak Sema, Ao speak Ao and so on. Originally, Nagas follo-

wed the religion of animism. But with the advent of christianity, almost all were converted to embracing christianity.

They also gives equal status to women and becomes more sociable. They love songs and dances. They have their own form of local self government based on customary laws.

Food and drinks : Rice is the staple food of the Nagas. Meat is also an important item of Naga food. They take almost all kinds of meat. Besides, they take vegetables which are grown in their fields and gardens. Nagas also preserve pieces of meat and vegetables which are dried in the sun or by fire. Dry fish, soyabeans, pikled bamboo are also taken by the Nagas. In general, Nagas are fond of hot food and one sees the Nagas taking fresh chillies with pleasure. The chief drinks of the Nagas today is tea. However, before the coming of christianity rice beer was the chief drinks, which is prepared from pounded rice with yeast.

Occupation : Most of the Nagas lived in rural areas and agriculture is their main occupation. The educated people live in cities and towns and they are engaged in office work, teaching, business, industry and the like.

## 2 . 11. EDUCATION IN TRADITIONAL NAGA SOCIETY :

There was no formal system of education before the coming of the American Missionaries in Nagaland. However, education was carried out in an informal way. Young people were trained and taught in a place called 'Morungs', which is a dormitory for young unmarried man. Everything that they need

to know for their future life such as, respect for elders, discipline in the society, training in craft, basket making, carpentry, dancing, singing and other recreational activities are learned from these institutions. The art of fighting with the enemies were also taught in these institutions. Thus, the young man learns all that he need from the morungs and prepare himself for the adult life.

Girls, unlike boys, recieved their education from their home, particularly through the mother and also through scial contact. Cooking, spinning,weaving, behaving, discipline etc. are all learned from the home.

## 2 . 12. DEVELOPMENT OF FORMAL EDUCATION IN NAGALAND:

The American missionaries were the first who brought formal education in Nagaland. Their main aim was to convert the Nagas into christianity. In order for the work to be successful, they felt the need of educating the people of the land.

The first christian who entered the Naga country was an Assamese named Godhula, who settled in Molungyimchen in 1872. After four years, that is, in 1876, Reverend E.W.Clark, a western christian missionary came to the same village. Two years later in 1878 Reverend E.W. Clark started an informal school with the help of Godhula in Molungyimchen. The first school in Nagaland was thus, started in this village in 1878.

Later, in 1882, the missionaries started another

school at Mopungchukit as they came and stayed in that village. The place where the missionaries settled is presently known as Impur, which is also the present Mission Compound. Education was thus, started first in Ao area. In the beginning the Nagas did not like the new religion as well as formal education and therefore, strongly opposed to it. But gradually, began to realise the value of education and thus, welcomed both the education and the new religion (christianity). They started helping the missionaries by way of man-power, money and materials. They freely donate their land for the construction of school building.

A Government school was also started at ChUmukedi-ma (the then Samaguting) by the British Government in 1876. It was attended by the officer's children only for, the Angamis in whose area it was opened were apathetic to send their children to school. In 1881, C.D. King was permitted to reside in Kohima and in that same year, he started a school for the Angami children, yet, the medium of instruction was done in Assamese.

Reverend and Mrs. W.E. Witter were the first to educate the Lothas in 1885. Within their short stay, Reverend Witter produce the outline of grammar in Lotha dialect and also prepared a premier for use in schools.

By 1908 - '09 there was a total of 21 Government schools. The total number of pupils being 561 boys and 550 girls. In 1909 -'10 the schools increased in number to 25, but

due to one reason or the other it later dwindled to 22. Meanwhile, the mission and the people started more schools such as, Bible schools, technical schools etc. The public was enthusiastic in having more of higher standard schools. In 1931 there was a total number of 42 schools in Kohima Sadar sub-division alone. The Mission M.E. School by 1936 had 180 students on the enrolment out of which two third were non-christian. The school was also provided a hostel. The missionaries later asked the government to start a high school. Thus, with their persistent effort the Government M.E. School was raised to the present Government High School, Kohima.

The great impediment to the spread of education was the absence of higher standard schools. Thus, the Naga students were compelled to prosecute high schools and college studies in distant places like Gauhati, Jorhat, Golaghat, Imphal, Shillong etc.

In 1931 - '32 the disadvantages of having to learn the second language in all classes at primary stage to pass Assamese for M.E. and High School examinations handicapped the Naga students in their race for high school education. In government schools Assamese was included, whereas, in private and mission schools it was excluded.

Thus, prior to 1947 there were 161 government primary schools, three middle schools and one government high school. These schools were supervised by the inspector of schools, Upper Assam circle with Headquarter at Jorhat. These

inspector of schools were assisted by one assistant inspector of schools posted at Shillong and two other inspecting pandits.

2 . 13 DEVELOPMENT OF EDUCATION IN NAGALAND AFTER INDEPENDENCE:

After the independence, many more schools were opened although, after some years due to internal trouble in the state many of the schools were closed down. Yet, despite disorders and disturbances enthusiasm on education was not waning. After the Interium, the Government was set up in Nagaland and as a result the need of education was felt more and thus, schools went on increasing by leaps and bounds.

Table NO. 2.3 shows the growth of different categories of different educational institution in Nagaland since 1963.

Table NO. 2.3

Showing the growth of education in Nagaland.

Category of Institution	Government	Private	Total
Primary schcols	582	6	588
Middle schools	70	14	84
High schools	14	4	18
I.T.I.	1	-	1
Colleges	1	1	2
Teacher training institutions	2	-	2

Source : Directorate of school education, Nagaland, Kohima.

There was tremendous growth in terms of schools and enrolment during the first decade of statehood. Subsequently, the literacy rate increased to 24.40 percent in 1973 from 15 percent in 1951. There has been fast development in education in the growth of literacy, that in 1981 the literacy rate increased to 42.54 percent.

Table NO. 2.4 shows the number of different educational institutions established between 1963 - 1973.

Table NO. 2.4

Showing the different educational institutions established between 1963 - 1973.

Institutions	Government	Private	Total	Total enrolment
Primary	932	49	981	28,754
Middle	144	58	202	36,236
High school	40	23	63	11,692
I.T.I.	1	-	1	NA
Polytechnique	1	-	1	NA
Teacher trg. institute	3	-	3	NA
Colleges	2	4	6	1,318

Source : Directorate of School Education, Nagaland, Kohima.

The table below shows the number of Government and Private institutions in 1983-'84 that is, after twenty years of statehood.

Table NO. 2.5

Showing the number of Government and Private institutions after twenty years of statehood.

Types of institutions	Government	Private	Total	Total enrolment
University	1	-	1	71
Colleges	3	7	10	3,951
Nagaland College of Education	1	-	1	90
Polytechnique	1	-	1	192
J.T.T.I.	3	-	3	134
I.T.I.	1	-	1	294
Law College	-	2	2	136
High school	59	49	108	45,747
Middle school	214	118	332	54,302
Pry. school	1,103	122	1225	1,39,713
U.G.T.T.	-	1	1	NA

Source : Statistical Hand book of Nagaland, 1990. Directorate of Economics and Statistics. Government of Nagaland, Kohima.

According to 1991 census, the literacy rate of the state rose to 61.30 percent as against 42.54 in 1981. There has been considerable growth in all levels of education.

The table below represents the number of Government and Private institutions of different categories and enrolment in 1990 - '91.

Table NO. 2.6.

Showing Government and Private institution of different categories and their enrolment in 1990 - 1991.

Types of institutions	Government	Private	Total	Enrolement
University	1	-	1	130
Law College	-	2	2	180
General College	8	8	16	8089
Nagaland College of Education	1	-	1	110
Polytechnique	1	-	1	275
U.G.T.T.	1	1	2	86
I.T.I.	3	-	3	35
High school	72	107	179	10,2062
Middle school	235	122	357	79,892
Pry. School	1216	88	1297	1,18,258

Source : (i) Respective institutions.

(ii) Directorate of Higher and Technical Education,  
Nagaland, Kohima.

(iii) Directorate of School Education, Nagaland, Kohima.

2 . 14. PRIMARY EDUCATION IN NAGALAND :

Education in Nagaland has made tremendous progress since it became a full fledged state. The Nagas now fully realised the value of education and so, both government as well as the public give all possible help for the expansion of primary education in the state. The state has now achieved considerable success in universalization of elementary education, if we consider merely the percentage of enrolment and number of primary schools opened. The number of Government primary schools as in 1991 was 1216 and 88 private primary schools. In all, we have 1299 primary schools. This clearly shows that education at primary stage was within easy reach of all children. However, there is regional disparity in the educationally developed areas.

Table NO. 2.7 shows the number of districtwise primary schools in Nagaland in 1991.

Table NO. 2.7.

Showing the number of districtwise Primary schools in Nagaland in 1991.

Districts	NO. of Govt. primary schools	NO. of private primary schools	Total
Kohima	337	48	385
Mokokchung	176	8	184
Tuensang	250	13	263
Mon	127	-	127

Table NO. 2.7.

Districts	NO. of Govt. primary schools	NO. of private primary schools	Total
Phek	92	6	98
Wokha	104	4	108
Zunheboto	130	4	134
Total	1216	83	1299

Source : Directorate of School Education, Statistical Branch,  
Kohima, Nagaland.

2 . 15. WASTAGE IN PRIMARY EDUCATION IN NAGALAND :

The problem of wastage in educational system in Nagaland is very serious. As the number of primary schools increased, the number of enrolment also increased. With the increased in enrolment, there is huge increase in the rate of dropout and stagnation. In Nagaland, out of 100 pupils admitted in class 'A', hardly 25 percent complete the elementary course, or continue in school till they attain the prescribed age of 14 years.

(a) Magnitude of the educational wastage :-

Accurate and up-to-date data of wastage of dropout and stagnation are not available for the state of Nagaland. This is due to the fact that, studies have not been carried out so far to highlight the problem. Still worse is that, sufficient awareness of the existing of this evil in our system of education has not yet been aroused in any quarter of

the state Department of Education. No report have been received from the inspecting staff so far about the high rate of wastage of dropout and stagnation. However, the evil exists so much in our system of education from primary to college level. Dr. L.R. Srivastava in his article, universalization of primary education in Nagaland pointed out that, the dropout rate in class V in 1973 was as high as 77.77 percent against the all India rate that is, 68.65 percent.

According to S.M. Royshila<sup>1</sup> (a retired Director Education, Nagaland) about 30 percent of the students of elementary school fail in the school annual examination every year. Out of them only 5 percent repeat the class in the same school and a very few other managed to get admission in other schools to the next higher class, or the same class, but majority of them leave the school. The students do not have study habits, therefore, just before the examination they try to fully concentrate in their study thus, straining themselves mentally and physically, as they lack study habits before exam. As a matter of fact, they could not do well in their examination. If they fail in the examination, they do not like to study in the same institution. Mathematics and English takes the heaviest toll of failures in elementary school examination. Most of the parents and guardians desired that their children pass the examination, but they never care to see that, they study and attend class regularly.

Royshila S.M. : Problem of Elementary Education. School Education in Nagaland. Thinkers Forum, Nagaland, Kohima, 1981  
Page - 24.

The above discussion on the issue of educational wastage have highlighted the seriousness of the problem in the state. Unless major steps are taken to check the growth of this problem in the primary system, the objective of universal primary education can not be achieved, as this problem has greatly hampered the efficiency of the school system.

In spite of the alarming growth in the rate of educational wastage in the form of dropout and repetition, there does not seemed to be any major steps taken to check this growing problem in the state. Hence, the need of the hour is to take some drastic steps to curb the rate of educational wastage, if not altogether wipe out the high incidence of educational wastage.

(b) Causes of educational wastage :-

The causes of the educational wastage vary from individual to individual, school to school and from place to place. For example, in a particular locality, children may dropout of the school, because their parents need their helping hand to assist them in their work on the farm or at home and their parents see more value in immediate gain than in long term investment in education. In another locality, children may dropout of their school because their parents cannot afford to give them proper food, cloths, books etc. Yet in another locality, children may prefer joining classes held in religious places than to continue their primary education in a school as their parents might think that children get better

education there. Also, the lack of attracting and holding power of the school may be one of the potential reasons for the educational wastage in most of the schools.

A study conducted by the Department of Educational Administration of the NCERT<sup>1</sup>, revealed certain significant causes of wastage and stagnation in primary and middle schools in India in terms of school variables, pupil variables and family variables.

(i) Causes in relation to school variables :

1. The rate of dropout is related to the shift system in schools. The rate is higher in double-shift than in single-shift schools. Among double-shift schools the rate is lower in morning shift than in evening shift schools. As the result is based on the data collected from the Union Territory of Delhi only, the sample is too small to permit any generalisation on a large scale.
2. The rate of dropout is negatively related to the qualifications and the higher the per capita income of the teachers posted in a school, the lower the rate of dropout.
3. Similarly, the rate of dropout is negatively associated with the cocurricular activities provided in the schools. This implies that the larger is the provision of cocurricular activities in a school, the lower is the rate dropout.

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1. Wastage and Stagnation in Primary and Middle School.  
NCERT, New Delhi.

4. The rate of dropout is positively related to the distance of teacher's residence from school. Also the lower teacher-pupil ratio, the lower the rate of dropout.

(ii) Causes in relation to pupil variables :

1. The academic performance of stay-ins is superior to that of dropouts.
2. Dropouts have lower attendance in school than that of stay-ins. A pupil who has less than 60 percent attendance is a potential dropout.
3. At the time of admission to school, more dropout than stay-ins are of the age higher than the one prescribed by the state Department of Education.
4. Stay-ins are more interested in education than dropouts.
5. More stay-ins than dropouts are rewarded by their parents as kind and competent.
6. More stay-ins than dropouts are rewarded by their parents on educationally relevant activities.
7. More stay-ins than dropouts are punished in the school on educationally relevant activities.
8. More stay-ins than dropouts hold leadership assignments and monitorial position in school.
9. More stay-ins than dropouts perceive that their parents attach high significance to education.

(iii) Causes in relation to family variables :

1. More dropouts than stay-ins come from small-sized families.
2. More dropouts than stay-ins are the only children.
3. More dropouts than stay-ins are the first born children.

4. More dropouts than stay-ins come from homes which have suffered the loss of one or both parents.
5. More dropouts than stay-ins come from nuclear families.
6. More dropouts than stay-ins belongs to scheduled caste/scheduled tribes and other backward classes.
7. More dropouts than stay-ins come from families which are engaged in occupation like agriculture, labour and artisanship.
8. More dropouts than stay-ins comes from families having lower educational status.
9. More dropouts than stay-ins come from families having lower income level.
10. Parents of relatively large number of stay-ins are younger in age than those of dropouts.
11. Parents of stay-ins are more satisfied with the academic performance of their children than the parents of dropouts.
12. More parents of stay-ins than those of dropouts feel satisfied with the provision of physical facilities in school.
13. More parents of stay-ins than those of dropouts percieve the need for educating their children as greater.
14. More parents of dropouts than those of stay-ins percieve the burden of the cost of education as heavier.

It seems that the causes of educational wastage are interrelated with each other to a great extent. For example, irregularity in attendance has something to do with the

poverty at home where the child has to be detained occasionally to assist the parents. Moreover, some causes of educational wastage are such that, immediate remedy is not possible in the country. For example, the most important programme to reduce educational wastage in the primary school is to improve the general economic condition of the parents so that they can maintain their families well and are not tempted to retain their children at home for their economic stringencies.

If we analyse the causes as revealed by different studies, we find that by and large, the following are the causes of educational wastage for which some action plan is possible.

1. Heterogeneity of age-groups.
2. Fresh admission throughout the year.
3. Irregularity of attendance.
4. A wrong system of examination.
5. Stagnation or failure.
6. Lack of emphasis on teaching beginning reading.
7. Lack of books and stationaries with children.
8. Large classes (high teacher-pupil ratio).
9. Defective curricula.
10. Improper techniques of teaching primary classes.
11. Parental difference to education (lack of programmes of social education)
12. Lack of attracting and holding power of school.
13. Incomplete school and single teacher school.

14. Poor relationship between educational system and the needs of the community.
15. Lack of competence and social as well as economic status of teachers.
16. Ineffective and inadequate co-curricular activities in the schools.
17. Lack of motivation for learning in pupils.
18. Excessive involvement of the pupils in domestic work for assisting the parents.
19. Ineffective inspection and supervision.
20. Lack of instructional materials suitable for primary schools.

These causes may be applicable to one school or the other. Yet, there may be schools for which the causes of educational wastage may be unique to them and those may not be found in the above list.

Before planning an action programme for reducing educational wastage in a particular school, it is essential that the causes of educational wastage applicable to that school may be determined first of all.

With regard to Nagaland, Some causes may be same but, some causes may vary. It is still not explored in depth. Therefore, the present study aims to seek the causes and suggest action programmes for reducing the incidence of educational wastage in the state.

## 2. 16. CONCEPTUALISATION OF THE STUDY :

The theoretical background of the study as discussed in the foregoing pages reveals that, the problem of educational wastage is of great concern for all those who are associated with the development of primary education in Nagaland. The problem is also of great concern for the educational administrators and planners who are always blamed for the inefficiency of the primary educational system in the state.

It seems that the rapid expansion of primary education with high enrolment has resulted in huge amount of educational wastage, which has drawn the concern of all who are in the field of education. Unless certain drastic measures are taken to check this growing problem, the state cannot achieve its objective of universalization of primary education.

The problem of educational wastage in the form of dropout and repetition has greatly affected the qualitative development of the whole educational system. The educational system has become inefficient and ineffective as it does not have the ability to retain and graduate all the pupils who entered the educational system and thus, brings wastage to the individual in particular and to the society as a whole.

It is a well known fact that, in order to educate a child we make some kind of investment on him with the expectation that his education will yield more return in future. However, it happens that before completing the course of study, the child leaves the school. Thus, investment made on them does not give commensurate returns. The money spent on him,

his time and his resources are all wasted. Thus, in short it brings wastage of time, money and human resources.

A suitable solution to this problem is therefore very necessary. However, without knowing the extent of the incidence of educational wastage and the root cause of the problem, the solution cannot be possible. Studies in this area to find out the causes of educational wastage at different times and different places in the country confirms that, much of the educational wastage is due to low economic status of the parents where, children are withdrawn from schools so as to help their parents in the home or to supplement the family income. Other major factors are, illiteracy of parents, low educational status of parents, Parents apathy towards education, social taboos, lack of educational facilities in schools etc.

Regarding educational wastage, Nagaland is no exception. Rather, the problem seems to be more serious in this part of the country. According to one study in Nagaland, out of every 100 pupils admitted in the first grade hardly 25 complete the elementary course. However due to lack research studies in this area, the accurate data is not available. Hence an intensive and indepth study in this area in Nagaland is very much necessary.

Thus, it is quite justified at this stage to take up a research study to find out the extent of educational wastage and internal efficiency of primary schools in Nagaland which may go a long way in highlighting the gravity of the problem for the educational planners and administrators, so as to bring improvement in the educational system in the state.

## CHAPTER - III.

### REVIEW OF RELATED LITERATURE.

#### 3 : 1. INTRODUCTION :

To grasp the present problem in depth, it is necessary to have the conceptual understanding of the problem which is quite impossible without reviewing the work done by researchers and the comment given by them in the past. The review of related literature is thus, an essential component of research work as it throws light on the whole problem.

Review of related literature helps the researcher to acquaint himself with the current knowledge in the field or area in which he is going to conduct his research. It also enable the researcher to define the limit of his field and brings him up to date on the work which others have done and thus, to state the objectives clearly and concisely. It also helps the researcher to select those areas on which positive findings are likely to result and his endeavours are likely to add knowledge in a meaningful way. It helps the investigator to avoid unintentional duplication of the well established findings.

In education, the problem of educational wastage and stagnation is of paramount importance. As such, it has commented the attention of researchers, policy makers, planners and educators who are trying to understand the nature of the problem better, so that some ways and means for reducing

the problems can be sought for.

It is apparent that the problem of educational wastage is not the same everywhere even in the same country. Its incidence vary considerably from state to state, from community to community and even from school to school in the same district. Many kinds of studies have been done on the assumption that the rate of educational wastage could be reduced if we once trace the cause and incidence of this problem.

Thus, it is in this background, the present study is devoted to the review of related literature in the area of educational wastage at primary education level. The review of the studies conducted on the area of educational wastage has been clustered under two sections : (1) Studies done abroad and (2) Studies done in India.

3 : 2. STUDIES DONE ABROAD:

The review of related literature done abroad on the problem of educational wastage can be broadly grouped under two heads :

(A) The extent of the incidence of educational wastage.

(B) The causes of educational wastage.

(A) The extent of the incidence of Educational Wastage.

Koratuden<sup>1</sup> (1985) quoted the study of the Public school of Philippines 1952-'55, which reported that 10 percent

1. Koratuden (1985) : An Investigation into the causes of Wastage and Stagnation in Primary Schools at Mokokchung Town. Unpublished M.A. Dissertation, Submitted to NEHU, Shillong, 1985, Page - 71.

of the children in the age group did not enter school and that 75 percent of the enrolment in grade I left school before reaching the last grade of elementary stage and showing a dropout rate of 62 percent for boys (almost twice as high as that of girls). In the investigation conducted by Segal and Schwarn as quoted by Koratuden, fourteen cities were included. Voluntary and involuntary withdrawals were carefully distinguished. In general, it was found that most of the dropouts occurred in the tenth grade. The rate of dropping out was higher for boys than girls and the number of dropouts was greater in larger cities. Among the withdrawals which occurred during four years period of study (1952-'55), 82 percent were voluntary dropouts. Out of this it was further classified as to reason for leaving. The largest group 54.5 percent of voluntary withdrawals consisted of those who entered employment. In this group boys outnumbered girls by 2 to 1. The next largest group 16.9 percent withdraw because of lack of interest in schools and here, boys outnumbered girls and it was 5 to 3. The third largest group include 10.4 percent who left for a variety of reasons that did not fit easily into various categories used. Various other small groups were also identified as, 3.1 percent were needed at home, 3.3 enlisted in the armed forces, 4.1 percent (largely girls) left because of marriage and 7.5 percent because of inability to adjust.

Mc Creary and Kilch<sup>1</sup> (1953) also conducted a study in Orange County California and reported that only 50 percent of 427 dropouts were working and many of them were working in part time jobs such as, baby sitting, lawn mowing and car-washing. Dresher<sup>2</sup> (1954) in his study in Detroit schools, studied 622 pupils out of which 311 boys and girls were found withdrawn voluntarily. Seymour<sup>3</sup> (1941), conducted a study in which he interviewed 161 girls and 235 boys who had dropped out from the school during the period 1952 - 1937. The study reveals that a greater percentage of boys than girls dropped from school.

U.S. Office of Education<sup>4</sup> (1962) found that 13 percent of all dropouts left school in grade 12. In Orange County, California, the dropout percentage was 24.9, whereas in Louisiana it was 9 percent.

In Ohio, the study done by Nachman and others<sup>5</sup> (1963), it was revealed that 44 percent of the boys dropout and 36 percent of girls dropout were below average in emotional maturity.

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1. McCreary, Harold and Kilch Donald E. (1953): Now Hear Youth. Bulletin of California State Department of Education. Volume 22 October, 1953. Page, 27 - 44.
  2. Dresher, Richard H. (1954): Factors in Voluntary Dropouts. Personal and Guidance Journal, xxxii, January 1954. Page- 287 - 289.
  3. Seymour (1941): Survey of School leavers in Rochester, New York.
  4. U.S. Office of Education (1962): Holding Power of U.S. Schools Rises in School Life. U.S. Office of Education(1962).
  5. Nachman Leonard R. and others (1963): Pilot study of Ohio High School dropouts, 1961-'62. Ohio State Department of Education, 1963, Page - 53.

Maryland<sup>1</sup> (1963) revealed that 40 percent of dropouts had never gotten out of Junior High Schools and had dropout in the 7th and 8th grade. The study also revealed that one half of the dropout had been compelled to repeat a grade at least once in elementary or junior high school.

Jones<sup>2</sup> (1964), in his study in Louisiana revealed that 1,436 left school in grade 7th, 1,897 left in grade 8th and 3,173 left in grade 9th. A total of 6506 or 40 percent dropped out of school to enter the world of work, with less than 9 years of schooling. In several other studies, as many as 70 percent had been retained at least once and 40 percent twice or more. Schreiber<sup>3</sup> (1964), conducted a study in Project school dropouts, involving more than 500,000 High school pupils in 128 cities with the population of over 90,000. It was found that 15.1 percent of the High school dropouts left school in grade 12. Carventes<sup>4</sup> (1965), studied two groups similar in terms of sex, age, I.Q school attendance and socio-economic backgrounds. One group consisted of dropouts and the other of students who continued their education through high school graduation. He concluded that the greater the number of negative factors working within the pupils total envi-

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1. Maryland Study (1963): Our School Dropouts, What can the school do?. The State Department of Education, 1963. pp-48.
  2. Jones (1964): The School Dropout in Louisiana, 1963-'64. Bulletin NO. 1026. Louisiana Department of Education, 1964.
  3. Schreiber (1964); The School Dropouts. Washington DC.
  4. Carventes (1965): The Dropouts: Ann Arbor. University of Michigan, Michigan Press, 1965.

ronment, the greater the chance of dropout.

Los Angeles City School District<sup>1</sup> (1965), revealed that the subject marks of dropouts during their last school years were substantially below those of the graduates. The dropouts had a grade point average of 1.19 (D). The graduates had a grade point average of 2.63 (B-). Yet, 30 percent of dropouts were making (C) average. Even at Junior High school level grade 7th, the difference in school marks are quite apparent. The future dropout had (C) averages (passing), while the future graduates had (B) averages. The study also revealed that 43 percent of the dropouts were not living with both natural parents.

Loyd<sup>2</sup> (1978) collected third grade information from 788 boys and 744 girls, of whom 24.8 percent and 18.5 percent respectively eventually left school without graduating. The study revealed that there were significant difference found in the third grade in terms of course grade, grade retention, and standardised achievement scores. Covill Servo and Rosen<sup>3</sup> (1978), found that the greatest percent of non graduates

1. Los Angeles City School District Study (1965): Dropouts versus Graduates. Report NO. 266. The District.
2. Loyd D.N. (1978); Prediction of School Failures from III Grade Data. Journal of Educational and Psychological Measurement. Volume 38, pp - 1193-1978.
3. Covill Servo and Rosen (1978): Analysis of Dropouts in Various Districts in New York State.

in Ohio were found in rural countries. It is apparent however, that administrators of larger districts report early dropouts as a problem more frequently than do administrators of smaller districts.

Neill<sup>1</sup> (1979), in his study revealed that the number of dropouts from secondary schools, as a proportion of the total rise from 2.9 percent in 1954 to 33.2 percent in 1978. In 1976, almost 91 percent of the counties, 17 years old were enrolled as compared with 75.6 percent in 1960 and 68.2 percent in 1950. These students brings increasing diversity of backgrounds and abilities. Many who entered and completed high school in 1970's would never have gone beyond 8th grade in prior decade. Some of those who constitute the dropout group would certainly have not entered high school or even junior high school. He also reported that about one million adolescent girls nearly one in ten conceive each year, and 600,000 young women carry their pregnancies to full term. An estimated 400,000 pregnant teens are under 17 year of age. Eight out of ten of these mothers under the age of 17 (seventeen) never finish high schools. For these students keeping up with school becomes impossible and many female dropout reports pregnancy as a reason for dropping out. This study was also supported by Peng et al<sup>2</sup> (1983)-

1. Neill S.B. (1979): Keeping Students in School, Problems and Solution. Washington DC. American Association of Administrators, Critical issues , Report Arlington, Va: 1979, pp- 32.
2. Peng et al (1983): High School Dropouts. Preliminary Result from the High School and beyond. Survey paper presented at the anual meeting of American Research Association, Montreal (1983).

The Census Data<sup>1</sup> which have been computed on a yearly basis for more than 20 years show no long term increase in the aggregate dropout rate. Only short term increases. The dropout rate for persons 16 and 17 years old, increased from 7.8 in 1968 to 8.8 percent in 1980 and then declined to 6.8 in 1994. The dropout rate for persons 18 and 19 years old increased from 15.7 percent to 16.7 percent between 1968 to 1982 and then dropped to 15.2 percent in 1984. State Level Attrition Data shows that average dropout rate for the nation increased from 22.8 percent in 1972 to 27.2 percent in 1982 and then remain steady between 1982 and 1984. This same data shows that dropout rate increased quite substantially in some states such as, Arkankas and Vermont.

U.S. Census Bureau<sup>2</sup> computes the dropout rates as the proportion of a given age cohort that is not enrolled in school and has not completed high school. The figure available are for October 1984. They show a dropout rate of 15.2 for persons 18 and 19 years old.

The other widely cited national dropout statistics is also based on Attrition data. It shows the proportion of a given entering high school class, usually the 9th grade that

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1. The Census Data (1986): U.S. Department of Education. State Education Statistics, Washington DC. U.S. Department of Education, January 1984 and 1986.
  2. U.S. Census Bureau : U.S. Department of Census, School enrollment, Current Population Report Series - Page, 20. Washington DC. U.S. Government Printing Office.

graduate four years later. The figure show an average attrition rate of 29.1 percent for a high school class of 1984 in United States, with state level attrition rates varying from a low of 10.7 percent in Minnesota to a high of 43.3 percent in Louisiana.

Brown, Rosen, Hill and Olivas<sup>1</sup> (1980), in their study reveals that dropout rates are higher for American Indians and particularly Cubans and Mexican Americans. Kolstad and Owings<sup>2</sup> (1986), also reported that the incidence of dropping out concerns variations among social groups and social systems. There is a wide variation of dropout rates among social groups. The study revealed that, dropout rates are higher for members of racial ethnic and language minorities for men and persons from lower socio-economic status. A national survey of 1980 high school Sophomores shows an overall dropout rate of 13.6 percent. But dropout rate computed with this data varied from 12.2 percent for whites to 18.7 percent for Hispanics, from 12.6 percent for women to 14.6 percent for men and from 8.9 percent for students from the higher socio-economic levels to 22.3 percent for students from the lowest socio-economic levels.

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1. Brown, G.H, Rosen, N.L, Hill, S.T and Olivas (1980): The Condition of Education for Hispanics Americans. Washington DC. U.S. Government Printing Office.
  2. Kolstad, A.J, Owings J.A (1986): High School Dropout who change their minds about school. A paper presented at annual meeting of the American Educational Research Association, San Francisco. (April 1986).

Trends in dropout rate based on census data also shows variations among social groups. Dropout rate for persons 18 and 19 years old declined from 23.8 percent in 1968 to 19.7 percent in 1984 for black males and from 24.7 percent to 14.5 percent for the black females and from 14.6 percent to 14.0 percent for white females. For white males, the dropout rate increased from 14.3 percent in 1968 to 17.9 percent in 1981, although it declined to 15.8 percent in 1984. Dropout rates for Hispanics show little change over the last decade, except for Hispanics males 18 to 19 years old for whom the rate decline from 35.5 percent in 1972 to 26.2 percent in 1984. Toles, Schultz and Rice<sup>1</sup> (1986) in their study found that in Chicago dropout rate from 63 high schools, range from 10 percent to 62 percent. Some of these differences in the population of students enrolled in educational system. But even after controlling for the differences in students population, widespread differences among school system remained. Differences that more clearly illustrate the ability of school to educate and graduate their students. In Chicago schools observed dropout rate were 50 percent higher to 50 percent lower than the rate expected, given the composition of the students in the schools. A study of Chicago sc-

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1. Toles, T., Schultz, E.M and Rice, W.K. Jr. (1986): A Study of Variation in Dropout attributable to effect High Schools. Metropolitan Education. Volume 2, Page- 30-35.

hool system by Rumberger<sup>1</sup> (1985) found that 47 percent of students enrolled 9th grade in 1980-'81 graduated by 1984. But only 15 percent graduated who could read at or above national average.

(B) Causes of educational wastage.

There is not a single factor that can be made responsible for the educational wastage. The investigator after careful review of researches done in abroad has grouped the causes under several heads as follows :

(i) Age :

McCreary and Kitch<sup>2</sup> (1953) revealed that 26 percent of dropouts were 17 years old or older. Connecticut commission on Civil Rights<sup>3</sup> (1959) found that 41 percent of dropouts were 17 years old or older. Miller<sup>4</sup> (1963), in his study done in Syracuse, New York, found that 45 percent of dropouts were 17 years old or older. Jones<sup>5</sup> (1964) found the

1. Russell W. Rumberger (1985): Design for Change, The Bottom line. Chicago Failing Schools and How to save them. University of California, Santa Barbara, CA 93106.
2. McCreary William H, and Kitch Donald E. (1953): Now Hear Youth, Bulletin of the California State Department of Education, (Vol.) xxii, October 1953 pp, 27 - 44.
3. Connecticut Commission on Civil Right (1959): Comparative Study of Negro and White Dropout in selected Connecticut High Schools. The Committee 1959.
4. Miller S.M.(1963): The Syracuse Dropout. The Syracuse Youth Development Centre, 1963.
5. Jones (1964): The School Dropout in Lousiana, 1963 - '64. Bulletin NO. 1076. Louisiana Department of Education, 1964.

percentage in that group was to be 41 percent. Whitmore and Chapman<sup>1</sup> (1965) found that 52 percent of the dropout were 17 years or older.

(11) Intellectual :

Investigators are not in agreement concerning the importance of intelligence as a factor in dropping out, but some studies have found that intelligence is not particularly important, while others show that low scholastic aptitude is one of the characteristics of potential dropouts.

Several studies are of particular interest in this point. Dillon<sup>2</sup> (1949), in his studies revealed that 40 percent of school leavers were normal or above intelligence. Akono<sup>3</sup> (1985) quoted the study conducted by Haeker (1953) on the problem of dropout who revealed that 40 percent of Kentucky pupils who dropout before high school graduation were average or above average in intelligence. U.S. Department of Labour<sup>4</sup> (1960) study of dropout in seven communities found that, nearly three times as many dropouts as high school graduates had IQs under 85 and that nearly three times as many graduates as dropouts had IQs of 110 and over.

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1. Whitmore P.M. and Chapman P.W. (1965): Dropout Incidence and Significance at Modesto High Schools, 1964-'65. Modesto, California, 1965.
  2. Dillon Harold J. (1949): Early School Leavers, A Major Educational Problem. Publication NO. 401 (National Child Labour Committee). 1949.
  3. Akono (1985): Case Study of some Dropouts at Primary Stage. Unpublished M.A. Dissertation, Submitted to NEIU, Shillong, 1985. Page, 19.
  4. U.S. Department of Labour (1960): School and Early Employment Experience of Youth. A Report of Seven Committees (1952-'57) Bureau Labour Statistics. Bulletin NO. 1277. Washington DC, U.S. Government Printing Press, Page- 89.

Bowman and Mathew<sup>1</sup> (1960) found a range of 60 to 115 in IQ with a mean of 83 and they found that 75 percent of dropouts fell in the lower half of the distribution of intelligence score. Maryland Study<sup>2</sup> (1963) also revealed that 50 percent of the dropouts were below average in intelligence.

Woollatt<sup>3</sup> (1961) reported that in New York city state holding power project 12.1 percent of the dropout had IQs of 110 and above and 30.4 percent had IQs below 90. Approximately 10 percent have enough intelligence to pursue college education. McCreary and Kitch<sup>4</sup> (1963), found that 60 percent of dropouts in Orange City had IQ of 90.

Los Angeles City School District<sup>5</sup> (1965), found that 34 percent of the graduates had IQ of 108 or above, only 10 percent of dropouts were in this range, yet, 50.9 percent of dropouts had IQ of 90 or above. Whitmore and Chapman<sup>6</sup> (1965) also revealed in their study that most dropouts had IQ

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1. Bowman H and Mathew Charls V.(1960): Motivation of Youth for Leaving Schools. USOE Cooperative Research Project NO. 200. University of Chicago, Chicago Press 1960, page, 137.
  2. Maryland State Department of Education(1963): Our Dropouts, What Can The School Do?. Maryland Department of Education, 1963. page - 48.
  3. Woollatt Horne H.(1961): Why Capable Students Dropout of High School? 1961. Page - 45.
  4. McCreary William H. and Kitch Donald E. (1963): Now Hear Youth. Bulletin of California State Department of Education. Volume xxii, October 1953. pp, 27 - 44.
  5. Los Angeles City School District (1965): Dropout Versus Graduate. Report NO. 266. The District, 1965.
  6. Whitmore P.M. and Chapman P.W. (1965): Dropout Incidence and Significance at Modesto High Schools, (1964 - '65). Modesto, California, 1965.

above 90. Havighurst et al<sup>1</sup> (1962), Stroup and Robins<sup>2</sup> (1972), Combs and Cooley<sup>3</sup> (1968), Moritz<sup>4</sup> (1977), Loyd<sup>5</sup> (1978) all reported that overall level of intellectual ability in the dropout has been found to be lower.

(iii) Reading ability

Penty Ruth<sup>5</sup> (1956) revealed that there is a relationship between reading ability and withdrawal from school. Three times as many poor readers as good readers dropout of school and the likelihood of a poor reader's dropping out was greater when other factors pressuring a student towards withdrawal were present. Bledsoe<sup>7</sup> (1959) found that the drop-outs from ninth and tenth grade had a mean reading comprehension score of 7.9 and the rest of ninth graders, a mean score of 8.9.

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1. Havighurst et al (1962): Growing up in River City. New York, Weley, 1962.
  2. Stroup A.L. and Robins N.L. (1972): Elementary School Predictors of School Dropout among Black Males. Journal of Sociology of Education, 1972. Volume-45, pp, 212 - 222.
  3. Combs and Cooley W.(1968): Dropout in High School and After School. Journal of American Educational Research, 1968. pp, 343 - 363.
  4. Moritz D.M. (1977): Socio-economic and Related Factors as Predictors of High School Dropouts Categorized by Race and Sex. Unpublished Doctoral Dissertation. Univ.of Kansas.1977.
  5. Loyd D.M.(1978): Prediction of School Failures from III grade Data. Journal of Educational and Psychological Measurement. Volume 38. pp, 1193-1200.
  6. Penty Ruth (1956): Reading Ability and High School Dropout. Teachers College, Columbia University, 1956. pp, 93.
  7. Bledsoe (1959): An Investigation of Six Corelates of Students Withdrawal from High School. Journal of Educational Research, L III, September 1959. pp, 3-6.

Nachman and others<sup>1</sup> (1963) found that 75.4 percent of the dropouts from whom reading test information was available, score below the median for their grade level. 53.4 percent were in the bottom quartile. Penningroth<sup>2</sup> (1963) examine selected characteristics of disable readers who dropout of school and those who remained to graduate. Both groups were matched in reading scores, intelligence, school attendance, attitude towards peers, parents and teachers. There was significant differences between the two groups in reading ability or in intelligence. However, there was a marked difference in their primary grade experience. The retarded junior high school readers who stayed on to graduate were significantly better readers in primary grades than the dropouts. They had had a successful school experience early in their school life while the dropouts had encountered failures.

(iv) Extra Curricular Activities :

The statistical result in Maryland Study<sup>3</sup> (1963) found that children who did not feel that they belong are less apt to participate in the total life of the school. The

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1. Nachman Leonard R. and others (1963): Pilot Study of Ohio High School Dropouts, 1961 to '62. Ohio State Department of Education, 1963, page- 53.
  2. Penningroth M.P. (1963): A Study of Selected Characteristics of Disabled Readers in the Ninth Grade of a Large Urban Population in Gorgia. Doctoral Dissertation, University of Gorgia, 1963.
  3. Maryland Study (1963): Our Dropout, What can the School Do? Maryland State Department of Education. 1963. Page, 48.

dropout unfortunately seem to feel this way. Gillingham<sup>1</sup> (1964) who conducted a study in Dade County, Florida showed that 91.9 percent of dropouts were not participating in extra curricular activities at the time of withdrawal and that 34.2 percent of the graduates were not participating in such activity. Los Angeles City School District Study<sup>2</sup> (1965), found that only a small minority of dropouts had participated in such programmes while in school. 83 percent had records of little or no participation. The record was equally poor for both boys and girls.

(v) Discipline :

McCreary and Kitch<sup>3</sup> (1953), in their Study in Orange County, California, found that 18 percent of the dropouts were such serious discipline cases that the school initiated the process of early school leaving. Dresher<sup>4</sup> (1954) in Detroit schools also reported that the factors associated with school leaving being discipline case. Kinney<sup>5</sup> (1962) in Hibbing Minnesota, a city with a population of almost 18,000

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1. Gillingham John (1964): A Study of Dropout in Dade County, Florida Public School, 1960 - '63. The Department of Research, Dade County Florida, 1964. Page, 124.
  2. Los Angeles City School District Study (1965): Dropout versus Graduates. Report NO. 266. The District, 1965.
  3. McCreary William H. and Kitch Donald E. (1953): Now Hear Youth. Bulletin of the California State Department of Education. Vol. 22, October 1953. Page, 127 - 144.
  4. Dresher Richard H. (1954): Factors in Voluntary Dropouts. Personal and Guidance Journal, Vol. 32, January 1954. pp- 287 - 289.
  5. Kinney Paul (1962): Study of Hibbing, Minnesota High School Dropout, 1956-'61. Hibbing Board of Education, 1962.

in North Eastern part of the states, showed that 53 percent of the boys dropout and 28 percent of girls dropouts have five or more such notation on their records as truancy, class misconduct and breaking of school rules. Yet, only 17 percent of the boys dropout and 4 percent of girls dropout. Approximately one fifth of all the dropouts were forced to leave school as a result of disciplinary action. Pearl<sup>1</sup> (1962) found that the pattern of delinquency was not limited to himself but appeared to be a constant of family behaviour. He found that 43 percent of the families of dropouts had some involvement with crime or delinquency.

A follow up study done by Schneller<sup>2</sup> (1962) of potential dropouts in a single high school in Seattle, Washington, found that whereas the rate of delinquency defined as involvement with juvenile court was 3 percent for the total youth population, it was 7 percent for those youngsters, tentatively identified as dropouts but who did not succeed in graduating and 35 percent of those who in fact, did dropout. Nachman and others<sup>3</sup> (1963) found that discipline was

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1. Pearl Aurthur (1962): The School Dropout Problem, Rochester. Part 1, New York State Division for Youth. 1962.
  2. Schneller Pete (1962): Unwilling Learner and Dropout Study, 1958 - '61. Ballard High School, Seattle, Washington. 1962.
  3. Nachman Leonard R. and others (1963): Pilot Study of Ohio High School Dropouts, 1961 - '62. Ohio State Department of Education, 1963. Page, 53.

a frequent problem for 10 percent of boys and 3 percent of girls during their elementary school years. At the secondary school level, discipline was reported as being a frequent problem for 27 percent of boys and 11 percent of girls, a threefold increase. Silverstone and Hoyt<sup>1</sup> (1963), in Bridgeport Connecticut, a study of court records revealed that 24 percent of high school dropouts had personal court records. In addition, referral for other members of the dropout families showed that one-third of the families of these youngsters had members with court records. Here too, the area figure for juvenile offences is approximately three percent of the total juvenile. In the above both studies, the percentage of dropout, who became involved with the court was extremely high i.e, 35 and 24 percent respectively. In other words, the delinquency rate among Seattle dropouts was 12 times that of the stayins, while in Bridgeport it was 8 times as great. Thus, while the majority of the dropouts tends to be law abiding, they are clearly more susceptible to delinquency and more often in trouble with law enforcement agencies than the average child.

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1. Silverstone and Hoyt C.G. (1963) : Bridgeport Connecticut School Dropout Study. A Preliminary Report. Bridgeport Board of Education, 1963, Page, 53.

Los Angeles City School District<sup>1</sup> (1965), study based on the responses of the Vice Principals found that one in five boys and one in ten girls had been in custody of law enforcement agency during the year preceeding the dropping out. Havighust et al<sup>2</sup> (1962), Combs and Cooley<sup>3</sup> (1968), Tse-  
ng<sup>4</sup> (1972) also found that poorer social, personal adjustm-  
ent are manifested by aggressive behaviour, early drinking etc. Maryland Study<sup>5</sup> (1963) reported that only one quarter of the dropouts have previously been suspended from school and that one fifth had been considered serious behaviour problems by school authorities. Bachman Green and Wirtanen<sup>6</sup> (1971) also reported that behavioural problems in school are associated with dropping out include absentism, truacy and discipline problem.

Spivak and Cianci<sup>7</sup> (1987), reporting on a longit-  
udinal study of 611 inner city school children found signifi-

1. Los Angeles City School District(1965): Dropout Versus Gr-  
aduates. Report NO. 266. The District. 1965.
2. Havighust et al (1962): Growing up in River City. New Yo-  
rk, Weley, 1962.
3. Combs and Cooley W. (1968): Dropout in High School and af-  
ter School. American Educational Research Journal, 1968,  
page, 343 - 363.
4. Tseng M. (1972): Comparisons of Selected Familial Perso-  
nality and Vocational Variables of High School Students  
and Dropouts. Journal of Educational Research. Vol. 65,  
page, 462 - 466.
5. Maryland Study (1963): Our Dropout, What can the School  
do?. Maryland State Department of Education, 1963, pp-42.
6. Bachman J.G. Green and S.Wirtanen I.D.(1971): In Rumber-  
ger High School Dropouts. Review of Educational Research,  
1987. Volume 57, NO. 2. Page, 110 -119.
7. Spivak G. and Scianci N. (1987): High Risk, Early Behavi-  
our pattern and later Delinquency.In J.D. Burchand & S.N.  
Burchand (Eds) Prevention of delinquent behaviour, pp, 44-  
74. Beverley Hills, CA Sage Publication.

cant relationship between behaviour rating in kindergaten through grade III and misconduct in classroom at age 14 and 15, school disciplinary measures and police contacts by age 17. The more significant early readings included, classroom disturbances, impatience, disrespect, defiance, irrelevant responsiveness and inattentiveness withdrawn. The longer diagnosis and intervention are delayed, the greater the barriers to change are likely to become.

(vi) Family background :

The study conducted by Seymour<sup>1</sup> (1941) revealed that students dropout from school in order to help and pay expenses at home. Johnson<sup>2</sup> (1947) also found that there is frequent dropout because of lack of money. Hollinghead<sup>3</sup>(1949) in his classic study, Elmtowns Youth, found that in the middle social class all boys and girls finished their eight grade and 11 out of 12 of those who eventually dropout had entered high school. But 75 percent of children from the lower social class had dropped out before they were 16 years of age.

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1. Seymour (1941): Survey of School Leavers in Rochester. New York.
2. Johnson (1947): Employment Problem of out of School Youth.
3. Hollinghead August B. (1949): Elmtowns Youth. The impact of Social Classes on Adolescent, Wiley 1949. Page, 480.

Young<sup>1</sup> (1954) conducted a study in Tucson, Arizona and reported that majority of dropouts came from low income families who lived in sub-standard housing and belong to racial minority. Children from such a background find it hard to feel that they belong, or that what they learned in school will ever be of any use to them.

Bowman and Mathew<sup>2</sup> (1960), found in their River City that 87.7 percent of dropout were in lower class and 1.4 percent were in upper and middle classes. In Rochester, New York, Pearl<sup>3</sup> (1962) revealed that one out of every three dropouts came from families on welfare. The Maryland State Department of Education<sup>4</sup> (1963) found that 52 percent of the parents of dropouts were either unskilled workers or unemployed. It can be safely assumed that a large proportion of the remainder were low skilled or semi-skilled workers. These are people who generally occupy the lowest rungs of social and economic ladder. Nachman and others<sup>5</sup> (1953) in their study in Ohio, found that 55 percent of the fathers of dropout were classified as

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1. Young (1954) : Lost, Strayed or Stolen. Clearing House 29; 82 - 92; 1954.
  2. Bowman, Paul H and Matthews, Charles V. (1960) : Motivations of Youth for Learning School. USOE Cooperative Research Project NO. 200 U Chicago Press, 1960. 137 p.
  3. Pearl, Arthur (1962) : The School Dropout Problem, Rochester, Part I. New York State Division for Youth, 1962.
  4. Maryland State Department of Education (1963) : Our School Dropouts: What can the School Do? The Department, 1963. 48 p.
  5. Nachman Leonard R. and others (1953) : Pilot Study of Ohio High School Dropouts, 1961-1962. Ohio State Department of Education, 1963, 56 p.

unskilled or semi-skilled. However, according to Ohio Census only only about 30 percent of the employed males over 25 years were holding unskilled or semi-skilled jobs. It was also found that fewer than two percent of the fathers of dropout were classified as professionals, whereas, the census data indicated that 10.9 percent of the employed males over 25 held professional positions. The study also indicated that 44 percent of dropouts came from home which were below the average economic level of their community and only 2.7 percent came from homes which they rated as being above average. Graves<sup>1</sup> (1964), in a study of dropout done in White Plains found that 52 percent of the chief wage earners in families of dropout were classified as unskilled. Alabama State Department of Education<sup>2</sup> (1964) found that 78 percent of the dropouts came from the two lowest classes and only 2 percent came from the two highest classes. Greathouse<sup>3</sup> (1964) found in his study done in 9 Appalachian Counties, 3 in Kentucky, Tennessee and West Virginia and found that 30.9 percent of the fathers of dropouts were unskilled workers. Koratuden<sup>4</sup> (1983) quoted Alvi study done in D.B. Khan

1. Graves, M.F. (1964) : Dropout Study, White Plains. New York Public Schools. White Plain Board of Education, 1964.
2. Alabama State Department of Education (1964) : Facts and Figures of Dropout in Alabama. The Department. 1964.
3. Greathouse, L.M. (1964) : The Southern Appalachian Dropout Study, 1962-1963. Berea College, 1964.
4. Koratuden (1983) : Investigation into the Problem of Primary Education in Mokokchung District. Unpub'ished M.A. Dissertation submitted to NEHU, Shillong, 1983.

District of Pakistan who reported that, the most important single factor was poverty of parents and employment of children in agriculture, besides, unfavourable attitude to woman education. Whitmore and Chapman<sup>1</sup> (1965) found that more dropouts are coming from broken families, not living with both natural parents. The Los Angeles Study<sup>2</sup> (1965) found that almost one fourth of the parents of dropouts encouraged their children to dropout and another one fourth were indifferent, fewer than one half of the parents of dropout encouraged their children to stay in school. Combs and Cooley<sup>3</sup> (1968) revealed that the lower socio-economic status often manifested by lower educational attainment of parents has usually been found. Havighust et al<sup>4</sup> (1962), Kelly Veldman and Mcquire<sup>5</sup> (1972), Stroup and Robins<sup>6</sup> (1972), Tseng<sup>7</sup> (1972), Moritz<sup>8</sup> (1977), Loyd<sup>9</sup> (1978), all supported this finding.

1. Whitmore, P.M. and Chapman, P.W. (1965) : Dropout Incidence and Significance at Modesto High Schools 1964-1965. Modesto, California, 1965.
2. Los Angeles City School District Study (1965): Dropouts versus Graduates. Report NO. 266. The District, 1965.
3. Combs and Cooley (1968) : Dropout in High School and after School. Journal of American Educational Research 1968, page 343 - 363.
4. Havighust et al (1962) : Growing up in River City. New York. Weley, 1962.
5. Kelley Veldman, D.J. and Mcquire (1972) : Multiple Discriminant Prediction of Delinquency and School Dropout. Journal of Educational and Psychological Measurement, 1972.
6. Stroup and Robins, N.L. (1972) : Elementary School Predictors of School Dropouts among Black Males. Journal of Sociology of Education. Volume 45, page 212-222, 1972.
7. Tseng, M. (1972) : Comparisons of Selected Familial Personality and Vocational Variables of High School Students and Dropout. Journal of Educational Research. Volume 65. pp-462-466, 1972.
8. Moritz, D.M. (1977) : Socio-economic and Related Factors as Predictors of High School Dropout, Categorized by Race and Sex. Unpublished Doctoral Disertation, University of Kansas, 1977.
9. Loyd, D.M. (1978) : Prediction of School Failures from III grade Data. Journal of Educational and Psychological Measurement. Volume 38. pp 1193 - 1200, 1978.

Rumberger<sup>1</sup> (1983) revealed that the family related factors associated with dropping out include low educational and occupational attainment level of parents, low family income, speaking a language other than English in the home, single parent families and the absence of learning materials and opportunities in the home. This is also supported by Steinberg, Blinde and Chan<sup>2</sup> (1984), Ekstrom et al<sup>3</sup> (1986).

(vii) Parents Education :

The educational level of parents has been found to be the most significant factor in dropping out. This is understandable in the light of parents occupational, economic and social level. Bledsoe<sup>4</sup> (1959) found an almost perfect inverse ratio between parents educational level and percentage of dropouts. He found that those students whose parents had had some collegiate education did not dropout. Those whose parents had completed high school education dropout to the smallest extent. Next ranked those parents with one to three years of high school, than those parents with one to four years of school had the largest proportion of dropouts among the children.

1. Rumberger, R.W. (1983): Dropping out of High School: The influence of Race, Sex and Family Background. American Educational Research Journal. Volume 20 pp 199 - 220. 1983.
2. Steinberg, Blinde and Chan (1984): Dropping out among Language Minority Youth. Review of Educational Research. Vol. 54. pp 113 - 132. 1984.
3. Ekstrom, R.B. et al (1986): Who Dropout of School and Why? Findings from National Study. Teachers College Record, Volume 87, pp 356 - 373, 1986.
4. Bledsoe Joseph C. (1959): An Investigation of Six Correlates of Students withdrawal from High School. Journal of Educational Research, Volume III September 1959.

Maryland Study<sup>1</sup> (1963) found that 78 percent of mothers and 80 percent of fathers of dropouts had themselves never finished high schools. Also, 25 percent of mothers and 30 percent of fathers had never gotten beyond sixth grade. In rural schools 70 percent of dropouts had quit before grade 10 and that 90 percent of mothers and 93 percent of fathers had never finished high schools and 76 percent of these parents were either unskilled workers or unemployed. Nachman and others<sup>2</sup> (1963) found that almost 70 percent of mothers and fathers of dropouts were themselves dropouts and the percentage rose to 80 percent in those cases where the pupils dropout in grade 9. Also, more than one third of the mothers and almost two fifth of the fathers had completed fewer than 9 years of education. Fifield<sup>3</sup> (1964) in Pocatello Idaho, found that out of 107 dropouts, only one had a parent who was a high school graduate, whereas, 70 percent of the stay-ins had parents who were high school graduates. Interestingly enough, 30 percent of the graduates came from homes where the parents had fewer than 12 years of education. Gillingham<sup>4</sup> (1964) found that among the dropouts in Dade County, 69 percent had parents who were dropouts,

1. Maryland Study (1963): Our School Dropouts, What can the School Do? Maryland Department of Education, 1963, pp - 48.
2. Nachman and others (1963): Pilot Study of Ohio High School Dropouts, 1961-1962. Ohio State Department of Education. pp. 53, 1963.
3. Fifield, M. (1964): Pocatello Idaho, Dropouts Study. Pocatello Board of Education, 1964.
4. Gillingham John (1964): A Study of Dropout in Dade County. Florida Public School. 1960-'63. Department of Research, Dade County, Florida, 1964, pp. 124.

but that among the graduates only 37 percent of the parents had fewer than 12 years of schooling. To put the matter in a different way, 31 percent of the parent of dropouts had had 12 years or more of education. While, 63 percent of the graduates had parents who had graduated.

In Alabama<sup>1</sup> (1964), 85 percent of the fathers and 84 percent of the mothers of dropouts were dropout themselves and even more revealing is the fact that, almost one half of the fathers, i.e, 47 percent and two fifth of the mothers had never completed the seventh grade.

(viii) Educational causes:

Koratuden<sup>2</sup> (1983) quoted the study conducted by Johnson in 1947 who reported that the main causes of dropouts are dissatisfaction of the students with their school life. This dissatisfaction arises because of lack of different courses provided to them. They also felt that their teachers were not sufficiently interested in them as individuals. Dillon<sup>3</sup> (1949) made a study of 1360 individuals who left school early in five large cities. He found that major reasons related to school were: frequent grade failures in elementary schools, frequent transfer from school to school, evidence of feeling

1. Alabama State Department of Education (1964): Facts and Figures of Dropouts in Alabama. The Department. 1964.
2. Koratuden (1983): An Investigation into the causes of Wastage and Stagnation in Primary Schools at Mokokchung District. Unpublished M.A Dissertation, submitted to NEHU, Shillong-1983 pp. - 72.
3. Dillon Herold, J. (1949): Early School Leavers, A Major Educational Problem. Publication NO. 401 (National Child Labour Committee) October 1940.

insecurity or lack of belongingness in school, lack of interest in school work, could not learn, discourage and dislike of teachers or subjects are the symptoms of early leaving.

Dresher<sup>1</sup> (1954) conducted a study in Detroit Schools and reveals that the main factor associated with school leaving as; elementary school failure and low scholastic aptitude. Maryland Study<sup>2</sup> (1963) also reported that 70 percent of dropouts are irregular in attendance, had three or more failures, lack of interest, lack of scholastic success etc. were some of the important factors. Moos and Moos<sup>3</sup> (1978) found that students tend to be absent from classes as they perceived the school to be high in level of competition and teachers control and found that teachers perceived them as low in their support. Havighust et al<sup>4</sup> (1962), Stroup and Robins<sup>5</sup> (1972), Combs and Cooley<sup>6</sup> (1968), Moritz<sup>7</sup> (1977), Loyd<sup>8</sup> (1978), found that academic

1. Dresher, Richard, H. (1954): Factors in Voluntary Dropouts. Personal and Guidance Journal, xxxii, Jan. 1954. pp.287-289.
2. Maryland State Department of Education (1963): Our Dropouts, What can the School Do?. The Department, 1963, pp - 48.
3. Moos and Moos, B.S.(1978): Classroom Social Climate and Students Absence and Grade. Journal of Educational Psychology. Volume - 70, pp. 263 - 269. 1978.
4. Havighust et al (1962): Growing up in River City. New York. Weley, 1962.
5. Stroup, A.L and Robins, L.N.(1972): Elementary School Predictors of School Dropout among Black Males. Sociology of Education, 1972, U.S. pp. 212 -222.
6. Combs and Cooley (1968): Dropout in High School and after School. Journal of American Educational Research. 1968. pp. 343 - 363.
7. Moritz, D.M. (1977): Socio-economic and Related Factors as Predictors of High School Dropout, Categorized by Race and Sex. Unpublished Doctoral Disertation. Univ. of Kansas, 1977.
8. Loyd, D.M. (1978): Prediction of School Failures from III grade Data. Journal of Educational and Psychological Measurement. Volume 38. pp. 1193 - 1200, 1978.

achievement as reflected in grade point average, courses failed and achievement test scores has been uniformly found to be lower on dropouts. Neill<sup>1</sup> (1979), Robins and Ratcliff<sup>2</sup> (1980), Quay and Allen<sup>3</sup> (1982) found that dropouts are lower in socio-economic backgrounds, academic aptitudes and reading skills. They have higher rate of absentism and truancy and poorer personal adjustment.

Silberberg<sup>4</sup> (1971), Stroup and Robins<sup>5</sup> (1972), Kaplan and Luck<sup>6</sup> (1977) established that dropout behaviour is predictable in the elementary school years with frequent absentism and academic failure being the most viable signs. Eliot<sup>7</sup> (1978), Gold and Mann<sup>8</sup> (1984) also indicated that withdrawal of students from school is often a response to goal failure experienced primarily in the academic and social context of the school.

1. Neill, S.B. (1979): Keeping Students in School: Problems and Solutions. AASA Critical Issues Report. Arlington, Va: American Association of School Administrators, 1979.
2. Robins, L.N and K.S Ratcliff (1980): The Long term Outcome of Truancy. In Out of School: Modern Perspectives in Truancy and School Refusal, edited by L. Hersov and I. Berg. New York : John Wiley and Sons, 1980.
3. Quay, H.C and L.B Allen (1982): Truants and Dropouts. In Encyclopedia of Educational Research, Volume 5, 5th ed. edited by H.E Mitzel. New York: Free Press, 1982.
4. Silberberg, N.E and M.C Silberberg (1971): School Achievement Dilinquency. Review of Educational Research 41(1971):17-34.
5. Stroup, A.L and Robins, L.N (1972): Elementary School Predictors of High School Dropouts among Black males. Sociology of Education. 1972, U.S pp. 212-222.
6. Kaplan, J.L and E.D Luck (1977): The Dropout Phenomenon as a Social Problem. Educational Forum, Vol. 47 pp. 41-56, 1977.
7. Eliot, D.S (1978): Dilinquency and School Dropout. In Crime in Society, edited by L. Savitz and N. Johnson. New York. John Wiley & Sons, 1978.
8. Gold, M. and D.W Mann (1984): Expelled to a Friendlier Place. A Study of effective alternative schools. Ann Arbor. University of Michigan Press, 1984.

Natriello<sup>1</sup> (1982) has revealed that the connection between unsatisfactory students experiences with the school authority system which lead inevitably to a failure to attain goals are students withdrawal from school. He also stated that when students perceived school performance, standards as unattainable, they are more likely to become discouraged from school. Evidence of this disagreement lacks the form of apathy, participation in negative activities and absentism, all precursors of dropping out. Neill (1979) notes, 'students who fall behind their classmates dropout more readily than those who do not'. Peng, Takai, Fetters<sup>3</sup> (1983) found that poor performance is accompanied by expressed reasons to leaving such as 'I dislike school' or 'school was not for me'. Rumberger<sup>4</sup> (1983) found that expulsion and suspension from school are indicators of problems that students experience from school that lead to failure to complete high schools. Pallas<sup>5</sup> (1984) found that poor academic performances, truancy and in school delinquency, all are strong predictors of early school leaving.

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1. Natriello, G. (1982): Organisational Evaluation System and Student Disengagement in Secondary Schools. Final Report to the National Institute of Education. St. Louis: Washington University, 1982.
  2. Neill, S.B (1979): Keeping Students in School: Problems and Solutions. AASA. Critical Issues Report. Arlington, Va: American Association of School Administrators, 1979.
  3. Peng, S.S, Takai, Q.T and Fetters, W.B (1983): High School Dropouts: Preliminary Result from High Schools and Beyond. Survey Paper presented at Annual meeting of the American Research Association, Montreal, (1983).
  4. Rumberger, R.W (1983): Dropping out of High School. The influence of Race and Sex and Family Background. American Educational Research Journal. Vol. 20. pp. 199 - 220. 1983.
  5. Pallas, A.M (1984): Determinants of High School Dropouts. Ph. D. Dissertation. John Hopkins University, Department of Sociology. 1984.

Borus and Carpenter<sup>1</sup> (1984) found that school related factors associated with dropping out have received considerable attention particularly because many of these factors are ones that can be manipulated by practice and policy. It is fairly well documented that poor academic achievement in schools as measured by grades, test scores and grade retention is associated with dropping out. This finding is also supported by Ekstrom et al<sup>2</sup> (1986), Wehlage and Rutter<sup>3</sup> (1986). Fine<sup>4</sup> (1986) found that many dropouts attend school with poor facilities and inadequate teaching staff condition that could effect their performance in school and ultimately their decision to leave school. Toles, Schultz and Rice<sup>5</sup> (1986) found that school level dropout rates vary widely even controlling the differences in students population. This further suggests that school related factors exerts a powerful influence on students decision to leave school.

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1. Borus, M.E and Carpenter, S.A (1984): Choices in Education. In M.E Borus (Ed.) Youth and the Labour Market. pp. 81-110. Kalamazoo, M.I, W.E, Upjohn Institute of Employment Reseach.
  2. Ekstrom et al (1986): Who Dropout of School and Why? Findings from National Study. Teachers College Record. Volume-87. pp. 356 - 373.
  3. Wehlage, G.G and Rutter, R.A (1986): Dropping out: How much do Schools Contribute to the Problem? Teachers College Record, Volume - 87. pp. 677 - 684. 1986.
  4. Fine (1986): Why Urban Adolescent Dropout of Public High School? Teachers College Record, Volume - 87. pp. 393-409.
  5. Toles, Schultz and Rice (1986): A Study of Variations in Dropout Rates attributable to the effect of High School Metropolitan Education. Page 30 - 38.

### 3 : 3. STUDIES DONE IN INDIA.

The review of related literature done in India on the problem of educational wastage can be broadly grouped under two heads :

(A) The extent of the incidence of educational wastage.

(B) The causes of educational wastage.

#### (A) The extent of the incidence of educational wastage.

In India, the problem of educational wastage first came to light with the Report of Hartog Committee<sup>1</sup> in 1929. which remarked that, "Throughout the whole educational system there is waste and ineffectiveness". The first five year plan (1951-1956) also drew attention to the large wastage that occurs in various forms at different stages of education. Of the total number of students entering school in (1945-'46) only 40 percent reached class IV in 1948-'49. The expenditure on the remaining 60 percent was largely wasted. Koratuden<sup>2</sup> (1983) quoted the study of Naik who carried out an investigation on wastage and stagnation in primary schools revealed that, 65 percent of the children are withdrawn from school long before completing the elementary course because they can work at home or on the farm, especially after the age of nine.

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1. Report of Hartog Committee Calcutta, (1929): Superintendent, Government Printing Press, 1929. page 48. Government of India Publication.
  2. Koratuden (1983): Investigation into the causes of Wastage and Stagnation in Primary Schools at Mokokchung Town. M.A Dissertation, NEHU, Shillong.

The Primary Education Department<sup>1</sup>, Bombay (1957) conducted a study on the incidence of dropout in Worli (Bombay). The study resulted that the incidence of dropout in class I is alarmingly high. Out of every one hundred children on rolls in the first grade, 23 percent dropout in the sixth month and one in every twenty four children in the class, either terminates his studies or has his studies interrupted within a period varying from one to seven months of the commencement of schooling. The percentage of dropout falls sharply from twenty three percent in grade I and fourteen percent in grade II and it goes on decreasing upto class IV.

The study conducted by NCERT<sup>2</sup> (1970) revealed that, out of one hundred students enrolled in grade I about 39 percent dropped or stagnate in grade I and II, 8 percent each in grade III and IV, 7 percent in grade V, 3 percent in grade VI and 24 percent passed in grade VIII. The percentage vary from region to region for example, in 1973-'74 to 1977-'78, there was a dropout rate of 65.8 percent at primary stage alone. Bihari<sup>3</sup> (1969) in his study revealed that in the Block selected for study 55.6 percent of the estimated number of children from 6 to 11 age groups were found enrolled in school against 79.1

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1. Bombay Municipal Corporation (1957): The extent and causes of non-attendance of children under compulsory age group in ten different localities in greater Bombay. Primary Education Department, Bombay. 1957.
  2. NCERT (1970): Action Programme for Reducing Wastage and Stagnation of Primary Level. NCERT, New Delhi. 1970.
  3. Bihari (1969): Wastage and Stagnation in Primary Schools among Tribals in Gujarat. In: Buch, M.B (ed.) Third Survey of Research in Education. NCERT. pp. 113.

percent in general population. Valod Block shows the highest percentage of enrolment with 78.14 percent and lowest 44.9 percent. In all the schools there were many children on the rolls who had never attended schools. In one Block about 46 percent of the village had no school. The exact rate of wastage in Block were 69.8 percent in Shabmalaji, 74 percent in Sukhar, 60.7 percent in Nanihiyal and 55.4 in Valod. The rate of wastage in tribal block taken together was 68.4. In actuality only 5.6 of the total enrolment completed grade IV. Only 31.6 children in grade I could move to grade II in the first attempt, which indicated that the rate of stagnation in grade I was 68.4 percent. The corresponding figure from grade II, III and IV were 27.9, 21.1 and 12.4 percent respectively.

Masavi<sup>1</sup> (1976) found that the rate of wastage in two selected base year of 1967 and 1968 were 40 percent and 34 percent respectively. First grade was found to be a stumbling block in the sphere of primary education. The rate of stagnation was high in the first grade. Ashram schools showed lower rate of wastage than Panchayat schools. Pratap D.R.<sup>2</sup> and others (1971) also revealed that the highest rate of absentism was observed in January, February, April and October. This is related to the cycle of agricultural operation, festival celebrations and marriage seasons. Government School represent the highest percentage of wastage.

1. Masavi (1976): Wastage and Stagnation in Primary Education amongst Tribals of Gujarat. Page 154.
2. Pratap, D.R (1971): Absentism, Stagnation and Wastage in Primary Schools of Tribal Areas of Andhra Pradesh. Tribal Cultural Research & Training Institute, Hyderabad. In: Buch M.B. (ed.). Third Survey of Research in Education. NCERT, page - 936.



Khan<sup>1</sup> (1972) in his study analysed the available information (1963-'64) and (1964-'65) data showed that the output per 1000 cohort enrolment came to 453. Only 473 for boys and 409 for girls. This indicated that 547 students out of cohort enrolment of 1000 pupils were dropping out in the period 1963-'64 to 1964-'65. This output varies from 682 to 224 in the states following 5 grade system. Besides this huge dropouts, if the phenomenon of stagnation was also considered, the input-output ratio came to be in order of 87 percent, 94 percent for girls and 71 percent for boys. The statewide wastage rate varies from one another considerably. Agarwal, H.N<sup>2</sup> (1972) in his study in Mahendragarh T.D. Block found that, wastage rate was about 98 percent in primary stage that is, from class I to IV in Government schools (tribal) and Tribal Welfare Department Schools. The overall percentage of wastage was 91.31 percent at primary stage. The study revealed that, the rate of wastage was highest at grade I i.e, 60.71 percent and lowest in grade V i.e, 17.91 percent. The indices of stagnation were 34.66 percent in class I, 17.34 percent in class II, 3.39 percent in class III and 7.59 percent in grade IV.

Masavi<sup>3</sup> (1974) in his study also found that overall enrolment figure in the first four years was 65 percent.

1. Khan (1972): Wastage in India. In: Buch, M.B. (ed.) Second Survey of Research in Education. NCERT. page - 460.
2. Agarwal, H.N. (1972): Wastage and Stagnation in Mahendragarh, T.D Block. In : Buch M.B (ed). Third Survey in Education, NCERT. Page 102.
3. Masavi (1976): Wastage and Stagnation in Primary Education among Tribals of Gujarat. 154 Tribal Research and Training Institute, Gujarat Vidhyapith, Ahmedabad.

However, only 9.1 percent of the total number enrolled in standard I was found to be the weakest point in the sphere of tribal education. In fact, the rate of wastage at this stage was 69.6 percent for the cohort of 1966-'67 and 1969-'70. Khandekar<sup>1</sup> (1974) also revealed in his study that as many as 69 percent of dropouts stopped their education on their own, while 31 percent on the suggestion of their parents. Majority of the dropouts and their parents reported that they were compelled to discontinue their studies. Only 38 percent of dropouts had jobs, but as many as 72 percent of the dropouts who had no job spent their time aimlessly. Venkata Subramanian<sup>2</sup> (1977) revealed in his study that the variation in enrolment were influenced by the school facilities provided, the literacy level attained by parents, the number of inhabited villages etc. The study shows that the coefficient of primary schools was found to be 0.55. The cost of wastage in Tamil Nadu was 211.05 lakhs.

Chandra Shekaran<sup>3</sup> (1978) in his study revealed that the retention rate was found to be very low for boys as well as girls. Girls being lower than boys. Less than 35 percent completed the lower primary stage and less than 22 percent comple-

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1. Khandekar (1974): A Study of Dropout. Journal of Social Change. Volume 34. page 367 - 385.

2. Venkata Subramanian (1977): Economic Aspects of Growth of Primary Education in Tamil Nadu. Ph. D. Economics, MS Univ. In: Buch M.B. (ed.) Third Survey of Research in Education. NCERT. page, 297.

3. Chandra Shekaran (1978): A study on measures taken by Government of Karnataka in the field of Primary Education during the specified period 1947-1972. Ph. D. Education. MS University. In: Buch M.B. (ed.) Third Survey of Research Education. NCERT.

ted the higher stage successfully. The scholastic achievement reflected in the rate of promotion, was not related to the presence or absence of the incentive scheme. The overall dropout rate was more for beneficieries than the non beneficieries. The study also shows that there is no relation between the presence of incentive scheme and the internal efficiency of the educational system.

Sarkar<sup>1</sup> (1980) conducted a pilot investigation and indicated that domestic work accounted for 70 percent of the female dropout. Inadequate income for living accounted to the third of female dropout and 80 percent of male dropout. ISEC<sup>2</sup> (1981) in its study in (Karnataka) found that the dropout rate is highest in class I. Similar findings were also reported by Pillai, G.V., Benjamin, J. and Nair, K.R.<sup>3</sup> (1980) who reported in their study that dropout percentage was highest in class I and lowest in class V. Setharamu<sup>4</sup> (1983) found that the incidence of dropout in slum areas in class I, II, III and IV were 46.20, 24.20 and 9.60 percent respectively.

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1. Sarkar (1980): A pilot Investigation of School Dropouts, Reasons. Demographic Research Unit, ISI Calcutta 1980. In: Buch MB Third Survey of Research in Education. page 948.
  2. ISEC (1981): A Study of Universal Primary Education in Karnataka. In: Buch, M.B (ed.) Third Survey of Research in Education. page 899.
  3. Pillai, G.V, Benjamin, J. and Nair (1980): A study of Dropout in Primary Education in Kerala. State Planning Board, Govt. of Trivandrum. 1980.
  4. Setharamu, A.S. (1983): Education in Slums: Ashish Publishing House 8/81. Punjabi Bagh, New Delhi 110026, 1983.

Jandhyala B.G. Tilak<sup>1</sup> (1982) found that the dropout problem is very severe. His study revealed that out of 100 pupils that entered grade I, only 37 pupils reached grade V and about 11 percent reached grade X. Out of 100 pupils entering grade VI, about 44 percent dropout or stagnate before reaching grade X. The study also revealed that the rate of wastage is at its peak at grade V, when the majority of pupils have to normally change from primary school to high school. Once the students cross grade V, a large number of pupil do not drop or stagnate untill grade VIII, when pupil have to appear for public examination in their student career. The rate of stagnation here is about 56 percent. Mathur, J.S., Jain, S.P. and Rahim, C.A.<sup>2</sup> (1982) in their study revealed that the rate of dropout in all the four states under study in primary school level was relatively high as compared to that of high school level.

SMIA ZAIDI<sup>3</sup> (1991) reported that in primary level that is, from class I to V, out of every 100 children taking admission in class I in 1973-'74, 61 students dropout before reaching class V in the year 1977-'78. The figure for scheduled caste is about 64 percent and for scheduled tribes it is

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1. Jandhyala, B.G. Tilak (1982): Wastage in Education in India. A Case Study of Andhra Pradesh. Indian Educational Review, Volume 17, NO. 2 April 1982.
  2. Mathur, J.S., Jain, S.P., Rahim, C.A. (1982): Rural Youth from Poverty Groups, Dropout and Non Students, A Study of four States. NIRD.
  3. SMIA ZAIDI (1991): Problems of Wastage in School Education. Dropout at Elementary Level. Journal of Educational Planning and Administration. Volume V, NO. 2 April 1991. page 173 - 183.

as high as 76 percent. It is a clear evidence that a high rate of dropout contributes to high level of wastage at primary stage of education.

Regarding the middle level, that is, from class VI to VIII out of 100 pupil taking admission in class VI in the year 1975-'76, about one fourth dropped before reaching class VIII. The figure of scheduled tribes are even more disappointing as it is as high as about 31 percent. It is further disheartening to note that over a period of 8 (eight) years the dropout for total children has increased marginally rather than decreasing.

Again in evaluating the level from class I to VIII, the study shows that out of every 100 children who took admission in class I in 1970-'71, as high as 77 percent dropped out without reaching class VIII. Thus, it is clear that despite a high coverage of enrolment in class I, the target of achieving universalization of elementary education does not seemed to be possible in the near future because of high dropout rates. The dropout rate at elementary level for scheduled caste is 81 percent and for scheduled tribes is 88 percent.

In analysing the classwise dropout ZAIDI revealed that; (a) At the elementary level, the highest dropouts takes place in class I. For the latest cohort i.e, 1974-'75 to 1981-'82, about 36 percent dropped out in class I which is nearly half of the total dropout upto class VIII. (b) As compared to primary classes the dropout rate at middle classes is quite less. Roughly, three fourth of the students taking admission in

class VI reached the final grade of middle level i.e, class VIII. (c) Out of the students taking admission in class I only about 38 percent reached class V and hardly 28 percent reached class VIII. (d) It is very disheartening to note that over a period of 15 years (i.e, from 1960-'61 to 1974-'75) the retention rates have reduced marginally. In 15 years dropout rates in class I have reduced from about 40 percent to about 35 percent. Thus, the progress in retention is almost negligible. (d) Transition from primary level to middle level seems to be better. The latest cohort data shows that out of 38.6 percent students reaching class V in the year 1978-'79, as high as 34.4 percent are enrolled in class VI in 1979-'80, which means that dropout from final class of primary stage to the first class of middle stage is only 4.4 percent. K.S. Chaulam<sup>1</sup> (1992) in his study reveals that the rate of enrolment to the corresponding age group of 6 to 14 years in the state of Andhra Pradesh was found to be 57.95 percent in 1956-'57 and has reached 76.51 percent in 1965-'66 and later declined to 64.55 percent in 1973-'74. It rose to 72.55 percent by the end of fifth plan and it is assumed that it would have reached 90 percent by 1984-'85.

Regarding the dropout rate, it was found to be highest at second standard among all communities and also among boys and girls in the different districts. This is true both in rural and urban areas. The dropout rate is found to be dec-

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1. K.S. Chaulam (1992): Rural-Urban Contrast in Primary Education. A Study of Selected Mandals in Visakha Patnam District of Andhra Pradesh. Journal of Educational Planning & Administration. Vol. VI, NO. 2 April 1992. pp. 161-179.

lining as one moves on from the second standard. The rate of dropout among different caste groups in the study is found to be highest (100 percent) among scheduled castes in urban area. Interestingly, dropout rate among scheduled tribes in the tribal area is found to be less than (17.64 percent) their rate in the urban and also in rural areas. On the contrary, the dropout rate among other communities is found to be highest (100 percent) in tribal areas. An interesting conclusion can be drawn from this observation. The children of tribals in the urban areas and the children of other communities in the tribal areas are found to be either frequent wanderers or nomads and as such, they do not allow their children to pursue their education. As a result of this behaviour the dropout rate of their children in the two settings are found to be high.

Arun, C. Mehta<sup>1</sup> (1994) in his study, *Efficiency and its Correlates*, reported that, though, 94 percent of the population in rural areas was served by primary school facilities within 1 kilometer, yet, 14.08 million boys and 9.84 million girls who had taken admission in grade I in the year 1984-1985 only 7.99 million boys and 5.12 million girls could reach to grade V in 1988-'89 which means that 56.75 percent boys and 52.03 percent girls dropped out from the educational system before they reach grade V. At the all India level in the year 1988-'89, the repetition rate was 4.40, 2.74, 3.11, 4.50 and

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1. Arun, C. Mehta (1994): Efficiency and its Correlates: A Cross - State Analysis. Perspective in Education, 1994, Volume 10, NO.2 pp. 115 -120.

5.19 percent respectively in grade I, II, III, IV, V as against 4.37, 2.78, 3.22, 4.24 and 4.90 percent for girls. R.L Bhat and Effat Yasmeen<sup>1</sup> (1994) in their study; Economics of Wastage in Primary Education: A Case Study of Kupwara District in Jammu and Kashmir, revealed that the total number of stagnation in 1987 and 1988 was 310 out of the total enrolment of 4,232 in 24 sampled schools. This shows a stagnation rate of 7.32 percent. The study revealed that the stagnation rate was higher in rural areas as compared to urban areas. The respective percentage being 8.16 and 4.10. The stagnation rate was also found to be higher in middle schools as compared to primary schools and high schools.

The study also found that stagnation rate was lower in schools with majority of untrained teachers as against 2.26 percent stagnation rate in schools with less percentage of trained teachers. The stagnation rate was as high as 12.71 percent in schools where the majority of teachers were professionally trained. On deeper consideration, it turned out that private schools, with majority of untrained teachers had lower stagnation rate, presumably due to greater accountability on the part of the teachers in such schools. The stagnation rate was 4.81 percent in private schools as compared to 8.12 percent in government schools.

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1. Bhat, R.L. and Effat Yasmeen (1994): Economics of Wastage in Primary Education: A Case Study of Kupwara District in Jammu and Kashmir. Journal of Educational Planning and Administration. Volume viii, NO. 4, October 1994. pp. 457 - 462.

The study also indicated that in the period under study (i.e, from 1984-'88) 133 students out of the total enrolment of 10,461 in the primary stage of 24 sampled schools had dropout, which revealed an average annual dropout rate of 1.27 percent.

(B) The causes of educational wastage.

There is not one single factor that can be made responsible for the educational wastage. The investigator, after careful review of the researches done in India, has grouped the causes under the following heads :-

(i) Age :

The Primary Education Department, Bombay<sup>1</sup> (1956), conducted a study on the incidence of dropout in primary schools in Worli and revealed that children who are older by two years than the average age of the class, leaves school in large number before completing the lower education. Sharma and Sapra<sup>2</sup> (1969) also reported that dropout are those, usually older in age and comes from families of low income groups. Khandekar<sup>3</sup> (1974) also reported that comparatively, children of illiterate parents started the education of their children at a late stage, at the same time, they were not helped to conti-

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1. Bombay Municipal Corporation (1956): The Extent and Causes of Non-attendance of Children under Compulsory Age Group in 10 different Localities in Greater Bombay. Primary Education Bombay, 1956.
  2. Sharma and Sapra (1969): A Study on Wastage and Stagnation in Primary and Middle School in India. NCERT, New Delhi.
  3. Khandekar, M. (1974): A Study of Dropout. Journal of Social Change, Volume 34. pp. 367 - 385.

nue their studies. Most of the children dropped out at the age of nine, ten and eleven years. Ramkumar<sup>1</sup> (1980) found in his study that parental disinterest and economic insolvency, resulted in numerous children joining school at a very late stage and students wastage increased with the increase in age. T.S. Nagamani and Y. Raja Rajeswari<sup>2</sup> (1988) in their study found that majority of the respondents, that is, 62 percent of girls joined school at the age of 8 years. (late school goers). This might be the reason, for most parents are illiterate and did not realise the need for sending their children to school at an early age.

(ii) Low achievement and lack of motivation.

Agarwal<sup>3</sup> (1972) pointed out in his study that low intelligence, poor in studies, lack of study habits, lack of interest in education were some of the causes of dropout. Khandekar<sup>4</sup> (1974) also reported that quite a few dropout has higher aspiration. Kundu and Chakraborty<sup>5</sup> (1977) reported that reading interest and reading habits among the dropouts and their parents

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1. Ramkumar, E.R. (1980): Dropout Dilemma. The Illustrated Weekly of India. C. 112, pp. 23 - 29.
  2. Nagamani, T.S. and Rajeswari, Y. (1988): Factors Responsible for Dropping out of the School of 7 to 12 years Girls. Journal of Educational Research and Extention. Volume 24, NO. 3 January 1988. pp. 159 - 164.
  3. Agarwal, H.N. (1972): Wastage and Stagnation in Mahendragarh T.D. Block. In: Buch M.B (ed.) Third Survey of Research Education, NCERT, 1986. pp. 102.
  4. Khandekar, M. (1974): Study of Dropout. Journal of Social Change. Volume 34, pp. 367 - 385.
  5. Kundu and Chakraborty (1977): Wastage in Primary Schhols. A Psychological Study. Indian Educational Review, Volume 12. pp. 87 - 93.

were almost absent. The future aspiration of both the child and parents were confused and there is no conformity between immediate and future expectation. Vathsala<sup>1</sup> (1981) revealed that poor achievement in reading and number abilities and failure were associated with dropouts. He also identified dropout as having low self acceptance and achievement motivation. They have neurotic predisposition. S.Mohan<sup>2</sup> (1981) also pointed out that the stay-ins and the dropouts differed significantly with respect to their achievement motivation, personal adjustment, school adjustment and educational interest. Singh and Gopal<sup>3</sup> (1984) also found that socio-economic status of the student have significant relationship with academic achievement. People of low economic status did not achieve high in studies.

(iii) Location.

Desai and Desai<sup>4</sup> (1957) conducted a study and found that wastage was more in backward districts. Wastage for advanced Hindus and Jains communities were much lower than the average figures, whereas, those for intermediate and backward

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1. Vathsala (1981): Potential Dropouts at Middle School Level. Ph. D. Madras University, In: Buch M.B. (ed.) Third Survey of Research in Education. NCERT, 1981, pp. 984-
  2. Mohan, S. (1981): Critical Study of Factors Related to Withdrawal of Secondary Stage. Ph. D. Education, Kar University. In: Buch M.B (ed.) Third Survey in Research in Education. NCERT, 1981. pp. 914.
  3. Singh and Gopal (1984): A Socio-psychological Study of High School Dropouts. Ph. D. Kum University 1984. In: Buch M.B (ed.) Fourth Survey of Research in Education. pp. 1126.
  4. Desai and Desai (1957): Wastage in Secondary Education in Gujarat. In: Buch M.B. (ed.) A survey of Research in Education. Baroda: The Centre of Advanced Study in Education, 1974.

Hindus as well as Muslims were much higher than the average. Raj, N.K.<sup>1</sup> (1978) also revealed in his study that the percentage of dropouts of scheduled caste and scheduled tribe was higher than that of caste groups. The percentage of dropouts and left out differed among different categories of parental occupations. He also reported that the numbers of dropouts and left cuts were high among children whose parents were manual labours. The study also reported that the rate of dropout was more in families which were low in family literacy index. There was more dropout rates in nuclear families than in joint families.

ISEC<sup>2</sup> (1991) also reported that dropout rate is higher in scheduled caste and scheduled tribe and also in the families where there is illiterate parents. Pillai G.V., Benjamin J. and Nair K.R.<sup>3</sup> (1980) in their study of dropout in primary education in Kerala, found that students belonging to scheduled castes, scheduled tribes and other backward communities constitute the majority of the dropout that is, 69 percent. Vathsala<sup>4</sup> (1981) also pointed out that potential dropouts are

1. Raj, N.K. (1978): Socio-economic Factors and their Interrelationship among the Out of School children. Ph.D. Education, Madras University, 1979. In: Buch M.B. Third Survey of Research in Education. pp. 179.
2. ISEC (1981): A Study of Universal Primary Education in Tumkur District (Karnataka) Bangalore. In: Buch M.B, Third Survey of Research in Education. NCERT. 1986. pp. 899.
3. Pillai, G.V, Benjamin, J., Nair K.R. (1980) : Study of Dropouts in Primary Education in Kerala. State Planning Board, Govt. of Kerala, Trivandrum. IBID. pp. 932.
4. Vathsala, S. (1981): Potential Dropout at Middle School Level. Madras University. IBID, pp. 984.

more in rural schools than in urban schools. This finding was also supported by A.N. Sinha<sup>1</sup> (1981) that the incidence of dropout in rural area is higher than in urban schools. Sharma and Sapra<sup>2</sup> (1969) also reported that about 43 percent of drop-out are from rural areas. Jandhyala B.G. Tilak<sup>3</sup> (1992) also revealed in his study that there is significant difference between rural and urban rates. The rate of wastage in rural areas at elementary level is as high as 92 percent, while, the corresponding figure is 60 percent in urban areas.

(iv) Sex.

Pratap, D.R. and others<sup>4</sup> (1971) in their investigation found that there was more absenteeism among girl students, that is, 40.50 percent among girls and 30.50 percent among boys. The Finance and Planning Department, Hyderabad<sup>5</sup> (1974) also reported that the percentage of girls attending school was considerably lower than that of boys in all age groups and the disparity tended to become more acute in the higher age

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1. Sinha, A.N. (1981): A Survey of Non-enrolled, Non-attending and Dropout Children of 6-14 Age Group in Hazaribagh District, Patna. IBID. pp.867.
  2. Sharma and Sapra (1969): A Study on Wastage and Stagnation in Primary and Middle Schools in India. NCERT, New Delhi.
  3. Jandhyala B.G. Tilak (1982) Wastage in Education in India, A Case Study. Indian Educational Review. Volume 37, NO. 2. 1992. page 58 -83.
  4. Pratap D.R. and others (1971): Absenteism, Stagnation and Wastage in Primary Schools of Tribal Areas of Andhra Pradesh. Tribal Cultural Research Institute (Hyderabad). In: Buch M.B. Third Survey of Research in Education. NCERT, 1986. page 936.
  5. The Finance and Planning Department, Hyderabad (1974): Survey of Primary Education in Telangana Region, Hyderabad. In: Buch M.B. (ed.). A Survey of Research Education. Baroda: The Centre of Advance Study in Education, 1974.

group. The percentage of dropout and stagnation was generally lower among boys than among girls. The incidence of stagnation among primary school was higher as compared to multiplied teacher schools in urban as well as rural areas.

Khandekar<sup>1</sup> (1974) also reported in his study that more girls than boys stopped education due to non economic reasons. Similar study has been reported by Masavi<sup>2</sup> (1976) that the percentage of wastage is found to be more among girls than boys. Raj N.K.<sup>3</sup> (1978) in his study, 'Socio Economic Factors and their Interrelationship among the Out of School Children', found that the percentage of girls was more than the percentage of boys in the enumerated out of school children.

Srivastava<sup>4</sup> (1980) found that one of the major reasons for female dropout in school was lack of separate school for girls, distance from home and domestic work. ISEC<sup>5</sup>, Karnataka (1981) also reported that dropout rate among girls was

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1. Khandekar, M (1974): A Study of Dropout. Journal of Social Change. Volume 34. page 367-385.
  2. Masavi (1976): Wastage and Stagnation in Primary Education in Tribal Areas in Gujarat. In: Buch M.B. Third Survey of Research in Education. NCERT, 1976. page 154.
  3. Raj, N.K. (1978): Socio Economic Factor and their Interrelationship among the Out of School Children. IBID. pp. 179.
  4. Srivastava (1980): Survey of Non enrolled, Non attending and Dropout Children of the Age Group 6 - 14 in Ferozpur District.
  5. ISEC (1981): A Study of Universal Primary Education in Tumkur District, Karnataka, Bangalore. IBID. page 899.

higher than among boys. Jandhyala, B.G. Tilak<sup>1</sup> (1982) also reported in his study in Andhra Pradesh found that the dropout rates are higher in all grades among girls than boys. The rate is as high as 93 percent for girls as against 87 percent for boys. At the primary level the difference is about 10 percent. Khanna<sup>2</sup> (1983) found that girls dropout belongs to nuclear families of seven members on an average and with Rs. 300/- as an average annual income. His study also reported that the most common reason for girls dropping out was that their parents want them as the girl had entered puberty.

(v) Social.

Naik<sup>3</sup> (1991) revealed that marriage or betrothal, unwillingness of parents to send their grown up daughters to a mixed school, lack of appreciation for girls education are some of the important social causes. Masavi<sup>4</sup> (1976) also revealed that the main causes of wastage and stagnation were by and large social and economic causes, early marriage among tribals

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1. Jandhyala, B.G. Tilak (1982): Wastage in Education in India. A Case Study. Indian Educational Review. Volume 37. NO. 2. 1982. pp. 58 - 83.
  2. Khanna, K. (1983): Preparation of Reading Materials for girl Dropouts in Delhi Slums. Ph.D. Education, Delhi University. In: Buch M.B. Third Survey of Research in Education, NCERT, 1983. page 571.
  3. Naik, J.P. (1941): Investigation on Stagnation and Wastage in Primary Schools. New Delhi, Allied Publishers Pvt. Ltd. 1975.
  4. Masavi (1976): Wastage and Stagnation in Primary Education in Tribal Areas of Gujarat. Tribal Research and Training Institute, Gujarat Vidhyapith, Ahmedabad. In: Buch M.B. Third Survey of Research Education. NCERT, 1986. pp. 154.

is also an important factor. Kundu and Chakraborti<sup>1</sup> (1977) revealed that social and cultural status of the dropout is invariably low, better cultural environment was not available within the community and within the family. The study also revealed that tradition played a significant role. They were also found to be aware of the financial and various limitations of their environment. Mani<sup>2</sup> (1980) also reported that families are caste based occupation. These people wanted their children to work along with them, so they might have stopped their children from attending school. Most of the respondents, that is, 89 percent belong to lower socio-economic status. A.N. Sinha<sup>3</sup> (1981) in his study found that social values and expectations emerging from widespread illiteracy in the society were responsible for poor female participation in educational system.

(vi) Teacher Training.

Bihari<sup>4</sup> (1969) on wastage and stagnation on primary education among tribals pointed out that inadequacy, inef-

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1. Kundu and Chakraborty (1977): Wastage in Primary School, a Psychological Study. Indian Educational Review. Volume 12. pp. 22 - 23.
  2. Mani (1980) : School Dropout in Slums. Spotlight on Madras Social Welfare. Journal of Social change. September 1980. pp. 22-23.
  3. Sinha A.N. (1981) ; Survey of Non-enrolled, Non-attending and Dropout children of 5-14 age group in Hazaribagh. In: Buch M.B. Third Survey of Research in Education. NCERT 1986. Page-867.
  4. Bihari (1969): Wastage and Stagnation in Primary schools among Tribals in Gujarat. In: Buch M.B. Third Survey of Research in Education. NCERT, 1986, page 113.

iciency and insincerity on the part of the teachers along with ineffective curriculum and inefficient teaching methods were some of the major causes responsible for educational wastage and stagnation. The study also revealed that, the higher the percentage of single teacher schools, the lower the percentage of school going children. Sharma and Sapra<sup>1</sup> (1969) found that the rate of dropout is negatively related to the qualification and per capital income of the teachers. Das<sup>2</sup> (1970) in his study pointed out that untrained Teachers is one of the major factor of dropping out of children from school. Masavi<sup>3</sup> (1971) also brought out similiar results in his findings that untrained and inefficient teachers along with unsuitable curriculum and medium of instruction are responsible for students dropping out. The Government College of Education<sup>4</sup> Jabalpur (1973) also revealed that lack of interest on the part of teachers, students, irregularity of teachers and teachers not using local dialect for teaching are responsible for dropout.

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1. Sharma and Sapra (1969): A Study of Wastage and Stagnation in Primary and Middle Schools in India. NCERT, New Delhi.
  2. Das, R.C. (1970): The problem of wastage and Stagnation in Primary Level in Sibsagar District.(Assam). In: Buch M.B(ed) A Survey of Research in Education. Baroda. The Centre of Advanced Study in Education. 1974.
  3. Masavi (1976): Wastage and Stagnation in primary education in Tribal areas of Gujarat. In: Buch, M.B. Third Survey of
  4. Govt. College of Education (1973) : A Study of the Incidence and Causes of wastage and Stagnation in Primary Schools. Madhya Pradesh Educational Investigation, Jabalpur, 1973.

Finance and Planning Department<sup>1</sup> (1980) Hyderabad also revealed in its study that, significant proportion of teachers were non-matriculate. Untrained teachers constitute 15.6 percent of all teachers in urban areas and 11.9 percent in rural areas. In rural areas matriculate teachers constitute 70.6 percent of all teachers, while, non matriculate are found to be 26.1 percent and graduate 3.3 percent. Kasimath<sup>2</sup> (1980) revealed in his study that the rate of wastage was positively related to pupil teacher relationship. Dropout cases as stagnation cases, perceived their teachers as strict. There is marked differences between the perception of wastage and stagnation cases on the part of parents, teachers and instructional variables. A. N. Sinha<sup>3</sup> (1981) also found that the dropout rate was significantly correlated with the number of teachers in school. It also shows that stagnation among primary school was high among single teachers schools as compared to multiple teacher schools in urban as well as in rural areas. Pillay<sup>4</sup> (1982) found that teachers favours graded units which minimised the dropouts.

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1. Finance and Planning Department (1980) : Survey of Primary Education in Hyderabad. In Buch: (ed). A Survey of Research in Education. Baroda, A Centre of Advanced Study in Education. 1974.
  2. Kasimath (1980): A Critical Study of the Problem of Wastage and Stagnation in Primary Education in Karnataka State. In: Buch, M. B. Third Survey of Research in Education. NCERT, 1986. pp 901.
  3. Sinha A.N.(1981) : A Survey of non-enrolled, Non-attending, and Dropout Children of 6-14 age group in Hazaribagh.IBID. pp. 867.
  4. Pillay, G.S(1982) : Impact of Non graded Units upon Primary School Dropouts. Department of Education, MKU (1982, NCERT - Financed). In: Buch: Third Survey of Research in Education. NCERT. 1986. Page 934.

But additional work was not given to the gifted nor were the slow learners attended to. The lack of orientation of teachers and increased in stagnation at grade III, reduce the efficacy of the elementary school system. Singh and Gopal<sup>1</sup>(1984) reported that female teachers had a great impact in the creation of motivating classroom learning. Naik<sup>2</sup> (1941) in his study revealed that, lack of women teacher in the schools is an important factor of dropout.

(vii) Educational Causes.

J.P. Naik<sup>3</sup> (1941) found that 30 percent of wastage is due to the existance of poor schools which do not complete full course. Other factors are; absence of ancilliary services, school meal and school health services. Choudhory<sup>4</sup> (1965) found that in West Bengal, high dropout and repetition is ascribe to the inefficiency and ineffectiveness of the school system. Agarwal, H.N.<sup>5</sup> (1972) pointed out that, some of the important causes of dropout as viewed by the teachers were ;

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1. Singh and Gopal (1984): A Socio-psychological Study of High School Dropouts. Ph.D. Kum. University, 1984. In: Buch M.B. Fourth Survey of Research in Education. NCERT. page 1126.
  2. Naik, J.P. (1941): Investigation on Stagnation and Wastage in Primary Schools. New Delhi, Allied Publishers, Private Limited. 1975.
  3. Naik, J.P. (1941): IBID.
  4. Chodhory(1965): Problem of Failure in the District of West
  5. Agarwal, H.N. (1972): Wastage and Stagnation in Mahendragarh, T.D. Block. A Survey Report, Tribal Research and Development Institute, Bhopal. In: Buch M.B (ed.) Third Survey of Research in Education. page 102.

high teacher pupil ratio, lack of text books, curriculum not adjusted to the needs of the students, reading materials as well as teaching materials were not available and teachers remain busy in the office duty. Khandekar<sup>1</sup> (1972) found that failure in examination and dislike for schools were the reason for students dropouts.

Ramunath Kundu and Chakraborti<sup>2</sup> (1977) revealed that, the habit of preparing lessons regularly was not so strong among the dropouts. Again, punishment as a system of maintaining discipline was found to be a regular feature in most of the schools. The study also revealed that in schools most of the dropouts are being punished. Aikoraj<sup>3</sup> (1979) found that the out of school children had a relatively poorer educational, occupational and economic backgrounds as compared to their counterparts in schools. Poor educational backgrounds and poverty stood out to be the main reason for dropout and failure in school. A.N. Sinha<sup>4</sup> (1981) found that, dropout rate was significantly correlated with the number of teachers in schools. Besides,

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1. Khandekar M. (1974): A Study of Dropout. Journal of Social Change. Volume 34, page 367 - 385.
  2. Ramunath Kundu and Chakraborti (1977): Wastage in Primary Schools, A Psychological Study. Indian Educational Review, Volume 12. page 87 - 93.
  3. Aikoraj (1979): Educating Out of School Children. A Survey of Dharavi Slums. In: Buch M.B. (ed). Third Survey of Research in Education. Page 106.
  4. Sinha, A.N. (1981): Survey of Non-enrolled, Non-attending and Dropout Children of 6 to 14 Age Group in Hazaribagh. IBID: Page, 932.

shortage of teaching aids, number of science kits, building condition of the school, number of rooms, qualification of headmaster etc. correlated significantly with the rate of non-attendance. Mathur J.S., Jain S.P, Rahim C.A<sup>1</sup> (1982) in their study reported that, most of the parents felt that the school timing were unsuitable and did not provide adequate opportunity to the children to be helpful in their family occupation. The reasons mentioned by dropouts for not attending school when asked were, lack of interest in studies, failure in examination. T.S. Nagamani and Y. Rageswari<sup>2</sup> (1988) also reported that 30 percent of students dropped due to fear of examination.

National Institute of Educational Planning and Administration<sup>3</sup> (1991) conducted a survey and revealed that the important factors that account for dropout were poor facilities in schools, unattractive school atmosphere, irrelevant curricula, medium of instruction i.e, language constraints etc. Other important factors that has been mentioned in the study are inconvenient location of the school, inconvenient school timing and dislike for education.

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1. Mathur, J.S., Jain, S.P., Rahim, C.A. (1982): Rural Youth from Poverty Groups, Dropout and Non-students. A Study of 4 States. Journal of Educational Planning and Administration.
  2. Nagamani, T.S. and Rageswari, Y. (1988): Factors Responsible for Dropping out. Journal of Educational Research and Extension. Volume 24. NO. 3. pp. 173 - 183.
  3. NIEPA (1991): Problems of Wastage in School Education, Dropout at Elementary Level. Journal of Educational Planning and Administration. Volume 5, NO.2. April 1991. pp. 173 - 183.

(viii) Family backgrounds and economic problems.

The Primary Education Department of Bombay<sup>1</sup> (1956) conducted a study on the extent and causes of non-attendance of greater Bombay within the population of 48,086. The study revealed that, on account of factors like domestic work, looking after younger children at home, extreme poverty, doing odd jobs to supplement family income, truancy and migration were reasons for non-attendance of children of compulsory age groups. The incidence of non-attendance was very high in economically depressed areas. Out of every 100 children of compulsory age groups on an average, 24 percent were not attending school due to various reasons such as, lack of accommodation facilities in school and negligence of parents.

Another study was carried out by the same Department in 1958, which revealed that, domestic work, unwillingness of parents to send their children unaccompanied to school are found to be the major causes of non-attendance. The former effect mostly the girls and the later is true in case of younger children between the age of 6 to 8 years. Bihari<sup>2</sup> (1969) also pointed out that lack of proper and adequate consciousness for the needs of formal education, parents apathy for education

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1. Primary Education Department, Bombay (1956): The Extent and Causes of Non-attendance of Children under Compulsory Age-Group in 10 different Localities in Greater Bombay. Department of Primary Education Bombay, 1956.
  2. Bihari (1969): Wastage and Stagnation in Primary Schools among Tribals in Gujarat. In: Buch M.B. (ed.). Third Survey of Research in Education. NCERT, 1986. pp. 113.

poor economic condition, household works engaged by children were some of the major causes of dropout. Sharma and Sapra<sup>1</sup> (1969) reported in their study that more dropout comes from nuclear families, who suffered death of both natural parents. An evaluation of wastage and stagnation in Andhra Pradesh carried out by Bureau of Economics and Statistics<sup>2</sup> (1970) found that the largest percentage of dropout as noticed in class V is due to household work, while in class I is due to financial difficulties. It has been observed that dropout are numerous in lower income groups.

Das<sup>3</sup> (1970) in his study in Sibsagar district reported that, poverty and economic backwardness claimed first rank among forty causes that were found to be responsible for wastage at primary stage. Backwardness of the society and non-stimulating social environment, illiterate parents and guardians were also important factors. This study was also supported by Masavi<sup>4</sup> (1976), Pratap D.R. and others<sup>5</sup> (1971). They all

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1. Sharma and Sapra (1969): A Study of Wastage and Stagnation in Primary and Middle Schools in India. NCERT, New Delhi, 1969.
  2. Bureau of Economics and Statistics (1970): Evaluation Study of Wastage at Primary School Level in A.P. Hyderabad, 1970. Department of Planning, Andhra Pradesh.
  3. Das R.C. (1970): An Investigation into the Problem of Wastage and Stagnation at Primary Level of Education in the District of Sibsagar. Ph.D. Gauhati University. In: Buch M.B. (ed.) A Survey of Research in Education. Baroda: The Centre of Advanced Study, 1974.
  4. Masavi (1976): Wastage and Stagnation in Primary Education in Tribal Areas of Gujarat. In: Buch M.B. (ed.) Survey of Research in Education. NCERT, 1986. pp.154.
  5. Pratap D.R. and others (1971): Absentism, Stagnation and Wastage in Primary Schools in Tribal Areas in A.P. Tribal Cultural Institute, Hyderabad. In: Buch M.B. (ed.) Third Survey of Research in Education, 1986. pp.936.

pointed out that, the most important factors contributing to wastage was found in child labour, both paid and domestic and also the indifferent attitude of both parent and student towards education. Agarwal<sup>1</sup> (1972) revealed that, 70 percent of the respondents, teachers, parents and community members believed that students dropout from school because parents do not feel the necessity of education. Their children do not get enough time to study because of household works, poor social environment, early marriage, parents were drunkards, illiterate and superstitious. All these factors contribute to the child's dropout. Khandekar<sup>2</sup> (1974) also revealed that, the most important and single factor for children's dropout was lack of financial resource. They belong to poor and ill-educated families. He found that about 57 percent of parents want their children to help them in domestic work. Masavi<sup>3</sup> (1976) also identified socio-economic condition of the family, ignorance among tribal parents and physical illness to be the main causes of wastage and stagnation. Ramunath Kundu and Chakraborti<sup>4</sup> (1977) found that financial difficulties, engagement in domestic work, inte-

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1. Agarwal H.N. (1972): Wastage and Stagnation in Mahendragarh T.D. Block. In: Buch M.B. (ed.) Third Survey of Research in Education. NCERT, 1986. pp. 102.
  2. Khandekar M. (1974): A Study of Dropout. Journal of Social Change. Volume 34. pp. 367 - 385.
  3. Masavi (1976): Wastage and Stagnation in Primary Education in Tribal Areas in Gujarat. In: Buch M.B. Third Survey of Research in Education. NCERT, 1986. pp. 154.
  4. Ramunath Kundu and Chakraborti (1977): Wastage in Primary Schools. A Psychological Study. Indian Educational Review. Volume 12. pp. 87 - 93.

rested in handiwork rather than schooling, low cultural status, confused expectation and aspiration, brother dominated and sister dominated were some of the important causes of dropouts. Dropout parents were also careless in assessing the abilities and achievement of their children.

Raj N.K.<sup>1</sup> (1978) identified the factors as, family factor, economic factor, educational factor, labour situation factor as responsible for dropout. The study also revealed that the percentage of dropouts and leftouts differed among different categories of parental occupation. The number of dropouts and leftouts were high among children whose parents were manual labours. Also, the rate of dropout were more in families which were low in family literacy index. Ramayana<sup>2</sup> (1978) also revealed that socio-economic factor that turn the child on economic asset and bread winner which in many cases was due to poverty. Mani G.<sup>3</sup> (1980) revealed that largeness of the family has a significant impact on children and subsequently acts as a cause of dropout. Illiteracy of parents also served as a contributory factor.

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1. Raj N.K. (1978): Socio-economic Factors and their Interrelationship among the Out of School Children. Ph.D. Education, Madras University, 1979. In: Buch M.B. Third Survey of Research in Education. pp. 179.
  2. Ramayana (1978): Sociological Implication of School Dropouts in Maharashtra. Journal of Social Change, 1978.
  3. Mani G. (1980): School Dropout in Slums. Spotlight on Madras Social Welfare. Journal of Social Change. September, 1980. pp. 22 - 23.

Shah M.R.<sup>1</sup> (1983) also revealed in his study that 40 percent parents had not attended school at all, while 54 percent had education upto grade IV. Domestic problems like, ill health of parents, loss of parents, engagement of children in the home, looking after younger brothers and sisters are also important family factors. Pillai G.V, Benjamin J. and Nair<sup>2</sup> (1980) revealed similar findings which reported that, ill-health, household works, poverty, were the important causes. Besides, large size of the family, lack of parents education also influenced the child to drop out from school. The study also revealed that, majority of the dropouts were children of casual labourers. Vathsala<sup>3</sup> (1981) found that potential dropouts hailed from poor illiterate wage earner families. Mathur J.S., Jain S.P. and Rahim C.A.<sup>4</sup> (1982) found that the main reason for children not attending schools were; poor fi-

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1. Shah M.R. (1983): A Study of the Incidence and Factors Responsible for dropout of children from Municipal and Local Authority Schools in Greater Bombay and Thana District. In: Buch M.B (ed) Third Survey of Research In Education, NCERT. page - 955.
  2. Pillai G.V., Benjamin J. and Nair (1980): A Study of Dropout in Primary Education in Kerala. State Planning Board Government of Kerala, Trivandrum, 1980.
  3. Vathsala (1981); Potential dropout at Middle school level. Ph.D. Madras University. In: Buch M.B (ed) Third Survey of Research in Education. NCERT, 1986. page 984.
  4. Mathur J.S. (1980) Rural Youth from Poverty Groups, Dropout and Non-student, a Study of four States NIRD. Journal of Educational Planning and Administration.

nancial position, parents ignorance, need to supplement family income, frequent migration of parents in search of employment. Khanna K.<sup>1</sup> (1983) in his study revealed that all mothers and 56 percent of fathers under study were illiterate. The remaining 18 percent fathers have primary education, 13 percent each studied upto High school and Secondary education. He also reported that, most of the girl dropouts belongs to nuclear families of 7 members on an average.

Arun Kumar Sharma<sup>2</sup> (1988) in his study revealed that 15.8 husbands and 15.4 wives desired to give education to their sons only upto High school. For daughters, very few parents desired to give graduate education. 75 percent husbands and 80 percent wives desired to give education to their children to High school level only. Among them, 34.5 percent husbands and 50 percent wives restricted even primary education. This is note worthy here that, the low aspiration of girls education can partly be explained. The study revealed four factors responsible; (a) Poverty of parents. (b) Lack of awareness among parents. (c) Lack of infrastructure. Lack of interest on the part of the students. ISEC<sup>3</sup> (1981) also found that the main ca-

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1. Khanna K. (1983): Preparation of Reading Materials for girls Dropout in Delhi Slums. Ph.D. Education, Delhi University. In: Buch: Third Survey of Research in Education. NCERT, page 571.
  2. Arun Kumar Sharma (1983): Educational Goals and Dropout Factors in Rural Population. Indian Educational Review. July 1983. Page 1-7.
  3. ISEC. (1981): A Study of Universal Primary Education in Tumkur District (Karnataka) Bangalore, 1981. In: Buch M.B(ed). Third Survey of Research in Education, NCERT. Page 891.

uses of dropouts were assisting the household works, tending cattles, looking after younger brothers and sisters, and working on daily wages.

National Institute of Educational Planning and Administration<sup>1</sup> (1991) conducted a study and identifies that maximum number of students have dropped out due to household work or domestic work. The study shows that 50 percent of the students in some states or even two third or more students discontinued their studies because of household works.

### 3 : 4. PRESENT STATUS OF RESEARCH STUDIES:

The investigator reviewed as many as 102 studies that has been conducted in India and abroad. This has lead the investigator to draw the following observations :-

(i) Many studies has been conducted to find out the incidence of educational wastage at different levels of education such as ; Primary, Middle, Secondary, and even at graduate and post graduatw level. These studies revealed that the highest incidence of educational wastage occurs at primary level. Moreover, the highest dropout rate was found in grade I.

(ii) The review of related literature also revealed that both in India and abroad, more dropouts are found to be in rural schools as compared to urban schools.

(iii) The review also revealed that the rate of dropout

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1. NIEPA (1991) : Problems of Wastage in Education, Dropouts at elementary Level. Journal of Educational Planning and Administration. Page 173-183.

was higher for males as compared to females.

(iv) Studies in India revealed that, the highest absenteeism was observed in January, April and October. This is related to the cycle of agricultural operation, festival celebration, marriage seasons etc.

(v) The studies conducted both in India and abroad to find out the causes of educational wastage also confirmed that poverty of parents, illiteracy and low educational background of parents had a great influence over their children's dropping out. Besides, other major causes are, indifferent attitude towards girls education, defective curriculum etc.

### 3 : 5 JUSTIFICATION OF THE STUDY.

The review of the past researches revealed that the study of educational wastage has become a vital area of educational research all over the world, as it is of direct concern for all. With regard to the proper utilisation of resources, wastage in education raises many questions regarding the funding of education. Though, many researches have been done in India and abroad, but no full-fledged study could be trace out with respect to Nagaland. Therefore, the present study has been undertaken on the following grounds :-

(i) The status of research studies as discussed in preceeding pages shows that many studies have been conducted both in India and abroad, to determine the extent of educational wastage at different levels of education, such as, primary, middle, secondary and even at graduate and post-graduate levels.

However, no such study was conducted in the state of Nagaland.

(ii) The investigator also found that, only one or two studies have been conducted to find out the causes of educational wastage in Nagaland and that too confined to a Block or Town level only by post graduate students, which are not sufficient to draw any final conclusions. So, there is a need to probe further into the causes of educational wastage at state level in depth.

(iii) Further, it is unfortunate that the investigator could not trace out any study on internal efficiency of primary education system, though there might be studies conducted abroad and at national level. Coming to Nagaland state, this area of study is still barren.

(iv) Though, many different methods for determining educational wastage have been used by different researchers in India and abroad, but only few studies have used the UNESCO method of pupil's flow analysis by cohort reconstruction method. So far in Nagaland, no one has used this method.

Keeping in view of the above mentioned reasons, the investigator developed a keen interest to undertake an indepth study of the problem of educational wastage and internal efficiency of the primary education in Nagaland.

C H A P T E R - I V .DESIGN OF THE STUDY.4 : 1 INTRODUCTION.

The design of the study is a part of blue print which describes/explains about the population, sample, tools used, method adopted, procedure of data collection and statistical techniques used. This chapter is devoted to this task.

4 : 2 POPULATION.

At present, Nagaland has about 1216 Government primary schools. This constitute the population. The private primary schools are not the part of the population in this study. The table below shows the districtwise population.

Table NO. 4.1

Showing the districtwise population of schools.

Sl.NO.	District	Population or NO. of schools
1	Kohima	337
2	Mokokchung	176
3	Zunheboto	130
4	Tuensang	250
5	Phek	92
6	Wokha	104
7	Mon	127
	Total	1216

4 : 3 SAMPLE.

The sample was drawn for the following three purposes :-

- (i) Sample to determine the incidence of educational wastage.
- (ii) Sample to find out the causes of educational wastage.
- (iii) Sample to seek opinions for reducing educational wastage.

(i) Sample to determine the incidence of educational wastage :-

The sample of 120 Government Primary Schools were drawn from the population by random sampling method. The detail of the sample is given in Table NO. 4.2 districtwise.

Table NO. 4.2

Sl.NO.	District	Rural	Urban	Total
1	Kohima	18	18	36
2	Mokokchung	9	9	18
3	Zunheboto	7	7	14
4	Tuensang	10	10	20
5	Phek	5	5	10
6	Wokha	5	5	10
7	Mon	6	6	12
	Total	60	60	120

Thus, the data for determining educational wastage was collected from these 120 schools of Nagaland.(Appendix-A)

(ii) Sample to find out the causes of educational wastage :-

In order to find out the causes of educational wastage, data was collected from primary school teachers, sub-inspector of schools, headmasters and teacher educators from, State Council of Educational Research and Training, District Institute of Education and Training and also from Nagaland College of Education, Kohima. The sample for this purpose is given in the table below.

Table NO. 4.3

Showing the sample of related persons for finding out the causes of educational wastage.

Sl.NO.	Related persons	NO.of persons
1	Primary school teachers	122
2	Sub-Inspector of schools	20
3	Headmasters	20
4	Teacher educators from NCE, SCERT & DIET	8
	Total	170

(iii) Sample to seek suggestions for reducing educational wastage :-

To seek suggestions for reducing educational wastage, data was collected from primary school teachers, sub-inspector of schools, headmasters and also from teacher educators from SCERT, DIET and Nagaland College of Education, Kohima. The sample for this purpose is given in the table below.

Table NO. 4.4

Showing the sample of related persons for seeking suggestions for reducing educational wastage.

Sl.NO.	Related persons	NO.of persons
1	Primary school teachers	174
2	Sub-Inspector of Schools	20
3	Teacher educators from, SCERT, NCE and DIET.	8
4	Headmasters	20
	Total	222

#### 4 : 4 TOOLS USED.

The following tools were used to collect the data:-

##### (a) School information blank :-

This school information blank was prepared by the investigator herself to collect the data on school enrolment from grade I to IV for two consecutive years. (Appendix - B). It contains items to know about the school, its location (i.e, District/Block), the total number of enrolment for the year 1991 and 1992, number of repeaters for 1992. The total number of enrolment includes promotees, newly admitted pupils (for grade I) and repeaters from the last year in the same grade.

##### (b) Teachers inventory on the causes of educational wastage:-

This was also prepared by the investigator herself to collect data with regard to the causes of educational wastage. (Appendix - C).

The inventory is divided into five parts according to different areas. The area along with the number of items are given in the table below.

Table NO. 4.5

Showing the areas on the causes of educational wastage and the number of items.

Sl.NO.	Area	NO.of items
1	Causes related to economic factors.	3
2	Causes related to educational practice.	12
3	Causes related to educational management.	12
4	Causes related to poor & unattractive holding power of the school.	8
5	Causes related to social factors.	6
	T O T A L	41

Responses are sought on three point scale that is, 'Not at all', 'To some extent' and 'To a great extent', with the score value of 0, 1 and 2 respectively.

Analysis of teacher inventory:

The analysis will be done in the following manner.

(1) Percentage value : It is calculated as follows :-

$$\text{Percentage value} = \frac{\text{NO.of ticks in the column}}{\text{Total NO. of respondents}} \times 100$$

(ii) Score value: It is calculated as follows :-

$$\text{Score value} = (\text{Number of responses under 'Not at all' X 0}) \\ + (\text{Number of responses under 'To some extent' X 1}) \\ + (\text{Number of responses under 'To a great extent' X 2}).$$

(iii) Significance value: It is calculated as follows :-

$$\text{Significant value} = \frac{\text{Total score value of a causal factor}}{\text{NO. of respondents x 2}} \times 100$$

(c) Opinionnaire for seeking suggestions for reducing educational wastage.

This opinionnaire was also prepared by the investigator herself to collect the data regarding seeking suggestions from headmasters, sub-inspector of schools, teacher educators (from NCE, SCERT, DIET) and primary school teachers. (Appendix - D). The opinionnaire is divided into 5 areas with 39 items seeking suggestion for reducing educational wastage as shown in the table below.

Table NO. 4.6

Showing the areas and items for seeking suggestions to reduce educational wastage.

Sl.NO.	Area	NO. of items
1	Opinions related to educational practice.	11
2	Opinions related to educational management.	12
3	Opinions related to increasing attractive and holding power of schools.	6
4	Opinions related to teacher training.	3
5	Opinions related to social factors.	7
	T O T A L	39

The responses are sought on three point scale i.e, 'Not at all', 'To some extent' and 'To a great extent' with the 'score value' of 0, 1 and 2 respectively. Further, the analysis of the opinionaire was done by calculati-  
ng the 'percentage value', 'score value' and 'significa-  
nce value' by using the same formula applied in the ana-  
lysis of Teacher's Inventory.

#### 4 : 5 METHOD OF THE STUDY.

As the problem is concerned with the pre-  
sent situation, survey method of research has been used  
in the present study. Survey method is the technique of  
investigation by direct observation of a phenomena or  
systematic gathering of data from the population throu-  
gh personal contact and interviews.

For determining educational wastage and  
internal efficiency of the system of primary education,  
UNESCO's Method of pupil's Flow Analysis by Cohort Re-  
construction<sup>1</sup> (1991) was followed. In this method, the  
position of pupils enrolment under the given educatio-  
nal cycle for two consecutive years i.e, 1991 and 1992  
and repeaters for 1992 only were taken. Repeaters for  
1991 are not taken for the present study.

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1. UNESCO (1991): Micro Level Educational Planning and  
Management - Handbook, UNESCO Principal Regional  
Office for Asia and the Pacific Bangkok, 1991.

The enrolment at any grade consist of promotees from a lower grade of previous year or new entrance if this is the first grade plus repeaters from the last year in the same grade.

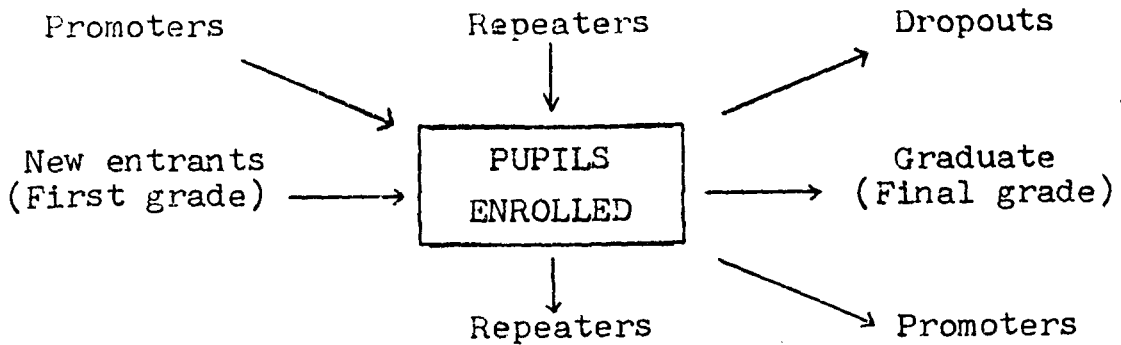


Diagram NO. 1 : Pupil flow.

At the end of the school year, a number of them will be promoted to the next higher grade, while some will repeat the same grade; a few may have dropped out in the mean time due to various reasons. If this grade happens to be the final grade, the promotees are actually the graduates. The method further follows the following steps :-

- (a) Determination of flow rates such as, promotion, repetition and dropout rates.

With the help of the data of pupil's enrolment for two consecutive years that is, 1991 and 1992 and the repeaters for 1992, the flow rates such as, promotion rate, repetition rate and dropout rate are calculated by applying the formulas as given below :-

(i) Promotion rate (p) for grade 'g' in the year 't' =  $\frac{\text{NO. of pupils promoted to grade (g+1) in year (t+1)}}{\text{Total number of pupils in grade 'g' in year 't'}} \times 100$

$$(ii) \text{ Repetition rate (r) for grade 'g' in year 't'} = \frac{\text{Number of pupils repeating grade 'g' in year (t + 1)}}{\text{Total number of pupils in grade 'g' in the year 't'}} \times 100$$

$$(iii) \text{ Dropout rate (d) for grade 'g' in the year 't'} = \frac{\text{Number of pupils dropping out from grade 'g' in year 't'}}{\text{Total number of pupils in grade 'g' in the year 't'}} \times 100$$

Example :

The data of government primary schools of Kohima district of Nagaland is used here as an example. It explains how the pupils flow model may be constructed based on only basic data on the enrolment and repetition by grade for two consecutive years

Year	E N R O L M E N T				
	I	II	III	IV	Total
1991 E	950 P+D+R	916	970	799	3635
1992 E	874	802 P+R	836	760	3272
1992 Repeaters	152 (R)	131 (R)	174	113	570

E = Enrolment.

P = Number of promotees.

D = Number of dropouts.

R = Number of repeaters.

Using the formula given above, one can obtain flow rates like, promotion, repetition and dropout rates for grade I as follows :-

$$\begin{aligned}
 \text{(i) Promotion rate (p)} &= \frac{\text{NO. Of pupils promoted to grade II in the year 1992}}{\text{Total number of pupils in grade I in the year 1991}} \times 100 \\
 &= \frac{802 - 131}{950} \times 100 = 70.63
 \end{aligned}$$

$$\begin{aligned}
 \text{(ii) Repetition rate(r)} &= \frac{\text{Number of pupils repeating grade I in the year 1992}}{\text{Total number of pupils in grade I in the year 1991}} \times 100 \\
 &= \frac{152}{950} \times 100 = 16.00
 \end{aligned}$$

$$\begin{aligned}
 \text{(iii) Dropout rate (d)} &= \frac{\text{NO. of pupils dropping out from grade I in the year 1991}}{\text{Total number of pupils in grade I in the year 1991}} \times 100 \\
 &= \frac{(P + D) - P}{E} \times 100 \\
 &= \frac{[(P+D+R) - R] - (P+R) - R}{E} \times 100 \\
 &= \frac{(950 - 152) - (802 - 131)}{950} \times 100 \\
 &= \frac{788 - 671}{950} \times 100 \\
 &= 13.37
 \end{aligned}$$

These flow rates were calculated for each grade. The same are given in table NO. 4.7.

Table NC. 4.7Showing flow rates in percentage.

Year	Rate	G R A D E			
		I	II	III	IV
1991	Promotion	70.85	71.50	66.59	84.83
	Repetition	16.76	14.78	18.55	15.17
	Dropout	12.39	13.72	14.86	0.0

In the above example, it has been assumed that there are no dropouts from the final grade. The non repeaters are thus, the graduates. It may be mentioned here that, these rates usually add up to 100 percent. In the case of final grade, the promotion rate becomes the graduate rates.

(b) Construction of pupils flow chart :

Further, on the basis of promotion rates, repetition rates and dropout rates so calculated, the pupils flow chart is constructed to show what will happen to a cohort of 1000 pupils entering grade I in 1991. This is explained in diagram NO. 2.

These type of pupils flow charts were prepared seperately for each district sexwise, locationwise and for Nagaland as a whole (i.e, with respect to sex, location and for total Nagaland).

(c) Determination of educational wastage statistics.

With the help of the flow chart so constructed, the following educational wastage statistics were determined. The same example has been taken to show the statistics.

- (i) Total output of graduate = 585
- (ii) Total number of dropout = 415
- (iii) Total number of repeaters = 620
- (iv) Total pupil years actually spent = 3774
- (v) Total pupil years wasted due to repetition.

This was calculated with the following formula :-

$$(X_1 \times 1) + (X_2 \times 2) + (X_3 \times 3) + (X_4 \times 4)$$

where,  $X_1$  = Number of pupils who repeated once.

$X_2$  = Number of pupils who repeated twice.

$X_3$  = Number of pupils who repeated thrice.

$X_4$  = Number of pupils who repeated for the fourth time.

$$= (186 \times 1) + (76 \times 2) + (12 \times 4) = 464.$$

- (vi) Total pupil years wasted due to dropout.

This was calculated with the following formula :-

$$(Y_1 \times 1) + (Y_2 \times 2) + (Y_3 \times 3) + (Y_4 \times 4) + (Y_5 \times 5) + (Y_6 \times 6) + (Y_7 \times 7).$$

where,  $Y_1$  = Number of pupils who dropped out in the first year of their schooling.

$Y_2$  = Number of pupils who dropped out in the second year of their schooling.

Similarly,  $Y_3, Y_4, Y_5, Y_6, Y_7$ , = Number of pupils who dropped out in the 3rd, 4th, 5th, 6th and 7th year of their schooling.

$$= (124 \times 1) + (116 \times 2) + (113 \times 3) + (45 \times 4) + (14 \times 5) + (4 \times 6) + (1 \times 7)$$

$$= 970.$$

(vii) Total pupil years wasted =  $464 + 970 = 1434$ .

(d) Calculation of indices for educational wastage.

With the help of educational wastage statistics so calculated, the following indices of educational wastage were also calculated. The same example is taken here also.

(i) Total pupil years which should have been spent  
 = Total output  $\times$  4 (length of schooling)  
 =  $585 \times 4 = 2340$ .

(ii) Total pupil years wasted  
 = (Total pupil years actually spent - Total pupil years which should have been spent).  
 =  $3774 - 2340 = 1434$ .

(iii) Percentage of pupil years spent in excess.

$$= \frac{\text{Total pupil years spent in excess}}{\text{Total pupil years actually spent}} \times 100$$

$$= \frac{1434}{3774} \times 100 = 37.99 \%$$

(e) Calculation of indices for internal efficiency.

With the help of educational wastage statistics, the following indices for internal efficiency of the system of primary education were calculated.

(i) Coefficient of efficiency :

$$\begin{aligned} \text{CE} &= \frac{\text{NO. of pupils who successfully completed the full educational cycle} \times \text{Normal length of schooling}}{\text{Pupil years actually spent by school completers}} \times 100 \\ &= \frac{585 \times 4}{3774} \times 100 = 62.00 \% \end{aligned}$$

(ii) Input-Output ratio :

$$\begin{aligned} &= \frac{\text{Pupil input years (Total pupil years actually spent)}}{\text{Pupil output years (Total pupil years which should have been spent)}} \\ &= \frac{3774}{2340} = 1.61. \end{aligned}$$

(iii) Average number of pupil years spent per successful graduate :

$$\begin{aligned} &= \frac{\text{Total pupil years actually spent}}{\text{Total number of successful graduates}} \\ &= \frac{3774}{585} = 6.45 \end{aligned}$$

(iv) Retention rate (RR)

$$= \frac{\text{Total number of pupils promoted to grade (g+1)}}{1000}$$

$$\text{RR for grade II} = \frac{(708 + 120 + 21 + 4 + 1)}{1000} \times 100$$

$$= \frac{854 \times 1}{10}$$

$$= 85.4 \%$$

$$\text{RR for grade III} = \frac{(506 + 159 + 38 + 9 + 2)}{1000} \times 100$$

$$= \frac{714 \times 1}{10}$$

$$= 71.4 \%$$

$$\begin{aligned}
 \text{RR for grade IV} &= \frac{(337 + 167 + 57 + 17 + 7)}{1000} \times 100 \\
 &= \frac{585 \times 1}{10} \\
 &= 58.5 \%
 \end{aligned}$$

#### 4 : 6 DATA COLLECTION:

The data was collected in three stages.

- (i) Collection of data for school enrolment and repeaters.
- (ii) Collection of data to find out the causes of educational wastage.
- (iii) Collection of data to find out the opinion for seeking suggestions to reduce educational wastage.

##### (i) Data collection for school enrolment and repeaters.

In order to collect data on school enrolment and repeaters of government primary schools for two consecutive years i.e, 1991 and 1992, the investigator herself prepared a school information blank. This information blank aims to collect the information about the schools, its location (i.e, rural/urban), sex, (i.e, male/female) and total number of pupil in different grades, (i.e, grade I - IV).

After the preparation of this information blank, the investigator herself approached the different Deputy Inspector of Schools (D.I.S) of the different districts personally and requested them to help her in obtaining the required information from the sampled schools which are under their jurisdiction. About 250 copies of school information blanks were distributed for data collection to the schools. The respective Deputy Ins-

pector of Schools were kind enough to instruct the schools to furnish the necessary information in time. The investigator also provide to them self addressed stamped envelope to facilitate the return of the school information blank to the investigator.

Besides, the investigator herself approached the teacher trainees in the District Institute of Education and Training, (DIET) who were representing the different districts of Nagaland. The investigator, by giving the school information blank to these selected primary school teachers, requested them to collect the necessary information provided in the school information blank from the respective schools as they go home to their respective villages/towns during vacation and return the same to the investigator. This was promptly returned to the investigator in time.

For collecting data on school enrolment and repeaters in Kohima district, the investigator herself visited the different Government Primary Schools of both rural and urban location and collected the required information herself.

The distribution of the information blank for the other districts in Nagaland was done in the month of May 1993. By the end of August 1993, the investigator coul received only 58 filled information blank from all over Nagaland. Therefore, the investigator again sent reminders to all the Deputy Inspectoes of Schools in the different districts to kindly remind the schools to expediate the work.

Thus, by the end of May 1994, the investigator could received 173 school information blank, some schools have never returned the same. Out of the school information blank received, 45 were to be rejected as they were incomplete or invalid. In all there were 128 school information blank retained. Out of which, 65 were from rural schools and 63 were from urban schools. Finally, only 60 school information blank were retained for the present study by randomly deleting 5 and 3 schools information blank respectively. (Appendix - E).

(ii) Data collection on Teacher's Inventory on the pupil's, Educational Wastage.

For the purpose of collecting data on the causes of educational wastage, the investigator herself prepared teacher's inventory of pupil's educational wastage. This inventory aims to collect information on causes of educational wastage from primary school teachers, sub-inspector of schools, headmasters and teacher educators from SCERT, DIET and NCE, Kohima.

Altogether, 250 copies of inventory were distributed in the month of July 1993 through the respective Deputy Inspector of Schools with self addressed and stamped envelope provided to the respondents to facilitate the return of the inventory to the investigator. However, after a lapse of almost three months, the investigator could hardly received few filled-in Teachers Inventory from the respondents. Therefore, the investigator sent reminders to the respective Deputy Inspector of Schools to kindly instruct the sampled Primary School Tea-

chers and school Inspectors to expediate the work of filling up the inventory. This was done accordingly and by the end of April 1994, the investigator could recieved 198 copies of inventory. For collecting data from teacher educators from SCERT, DIET and NCE, Kohima, the investigator herself approached the concerned persons. After scrutiny, the investigator found that 28 copies of inventory were incomplete and so they were rejected. Finally, 170 copies of inventory were made available as follows, for the purpose of this study.

1. Government Primary School Teachers	-	122
2. Sub-Inspector of Schools	-	20
3. Headmasters	-	20
4. Teacher Educators	-	8
		<hr/>
Total	-	170

(iii) Data collection to find out the opinion for seeking suggestions to reduce educational wastage.

For the purpose of collecting data to find out the opinions of primary school teachers, headmasters, sub-inspector of schools and teacher educators, the investigator herself prepared an opinionnaire. This opinionnaire aims to seek suggestions to reduce educational wastage. The opinionnaire was prepared on three point scale where the respondents were asked to give their opinions by putting a tick mark in the column which they felt most appropriate, against each item.

The distribution of these opinionnaires to the primary school teachers, headmasters and sub-inspector of schools

was done through the Deputy Inspector of Schools, while the investigator herself approach the teacher educators (from SCERT, DIET and NCE, Kohima). Altogether 250 copies of the opinionnaire were sent out with self addressed and stamped envelope to facilitate the return of the opinionnaire to the investigator. This was done in the month of July 1994. After repeated reminders sent to the Deputy Inspectors of schools of the different districts to instruct the primary school teachers and Sub- Inspector of schools , and also the Headmasters to expediate the work, the investigator could received 237 copies of the opinionnaire from all the districts. After scrutiny, 15 copies of the opinionnaire were rejected as they were incomplete and invalid. Finally, 222 copies of the opinionnaire were made available for the purpose of this study as follows.

- |                               |       |
|-------------------------------|-------|
| 1. Primary school teachers    | - 174 |
| 2. Sub- Inspector of schools- | 20    |
| 3. Teacher Educators          | - 8   |
| 4. Headmasters                | - 20  |

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Total - 222

#### 4. 7 STATISTICAL TECHNIQUES USED.

To analyse the data, simple statistical techniques like percentage was used. Besides, the study involved some arithmetical formulas and procedures to calculate the different flow rates, indices of educational wastage and internal efficiency.

C H A P T E R - V.ANALYSIS AND INTERPRETATION OF DATA.5.0 INTRODUCTION :

The present chapter deals with the analysis and interpretation of the data which are presented under the following sections :-

- 5.1 Section I : Analysis and interpretation of flow rates such as, promotion rate, repetition rate and dropout rate with respect to grade, sex, school location, for the different districts and for the whole Nagaland.
- 5.2 Section II : Analysis and interpretation of educational Wastage data due to dropout, repetition and overall in terms of pupil years wasted with respect to sex, location, for the different districts and for whole Nagaland.
- 5.3 Section III: Analysis and interpretation of the extent of educational wastage in terms of percentage of the pupil years spent in excess with respect to sex, location, for the different districts and for whole Nagaland.
- 5.4 Section IV : Analysis and interpretation of data of internal efficiency of the system of primary education with respect to sex, school location for the different districts and for the whole Nagaland.

5.5 Section V : Analysis and interpretation of the data of the causes of educational wastage.

5.6 Section VI : Analysis and interpretation of the data of the opinion for reducing educational wastage.

#### 5.1 SECTION I.

#### ANALYSIS AND INTERPRETATION OF FLOW RATES SUCH AS PROMOTION RATE, REPETITION RATE AND DROPOUT RATE WITH RESPECT TO GRADE, SEX, SCHOOL LOCATION FOR THE DIFFERENT DISTRICTS AND FOR THE WHOLE NAGALAND.

The analysis and interpretation of this section is presented in two parts :

- (i) The first part presents the analysis and interpretation of flow rates such as promotion rate, repetition rate and dropout rate for the different districts with respect to grade, sex and school location.
- (ii) The second part presents the interpretation of flow rates such as promotion rate, repetition rate and dropout rate for whole Nagaland with respect to sex, grade, school location and total Nagaland.

Part - IANALYSIS AND INTERPRETATION OF FLOW RATES SUCH AS PROMOTION RATE, REPETITION RATE AND DROPOUT RATE FOR THE DIFFERENT DISTRICTS WITH RESPECT TO SEX, GRADE AND SCHOOL LOCATION.(A) With respect to sex :-

Table No.5.1 shows the pupils enrolment in different grades (i.e, grade I, II, III, IV) for two consecutive years (i.e, 1991 and 1992) and number of repeaters from 1992 for the government primary schools of Nagaland with respect to grade and sex.

Table No. 5.1

Showing pupils enrolment for two consecutive years (i.e, 1991 and 1992) and repeater 1992, with respect to sex and grade and for the different districts.

DISTRICTS	Y E A R	M A L E				F E M A L E			
		I	II	III	IV	I	II	III	IV
Kohima	1991 Enrolment	520	470	507	396	430	446	463	403
	1992 Enrolment	438	416	438	376	409	386	398	384
	1992 Repeater	67	62	88	54	85	69	86	59
Mokokchung	1991 Enrolment	163	169	152	174	157	173	175	186
	1992 Enrolment	153	151	159	146	144	142	160	166
	1992 Repeater	20	28	27	30	22	23	33	33
Tuensang	1991 Enrolment	273	263	270	233	304	282	265	265
	1992 Enrolment	259	246	232	229	293	250	236	229
	1992 Repeater	31	36	33	21	42	38	28	24

Districts	YEAR	M A L E				F E M A L E			
		I	II	III	IV	I	II	III	IV
Zenheboto	1991 Enrolment	178	152	129	154	163	143	132	147
	1992 Enrolment	169	163	136	114	157	140	125	119
	1992 Repeater	21	15	19	15	28	22	21	18
Mon	1991 Enrolment	204	172	170	134	191	179	192	97
	1992 Enrolment	188	184	156	138	194	164	154	158
	1992 Repeater	40	39	39	16	39	31	29	18
Wokha	1991 Enrolment	68	70	75	69	96	106	114	94
	1992 Enrolment	64	54	64	65	90	90	82	94
	1992 Repeater	15	15	15	15	23	22	15	16
Phek	1991 Enrolment	154	146	136	121	126	112	131	95
	1992 Enrolment	145	146	120	115	115	119	100	109
	1992 Repeater	18	18	19	21	21	22	17	14
Whole Nagaland	1991 Enrolment	1560	1442	1439	1281	1467	1441	1472	1287
	1992 Enrolment	1416	1360	1305	1183	1183	1402	1255	1259
	1992 Repeater	220	213	240	172	260	227	229	182

With the help of the data shown in Table No.5.1, flow rate such as, promotion rate, repetition rate and dropout rate are calculated with respect to grade and sex for the different districts which are given below in Table No. 5.2 A, 5.2 B, 5.2 C.

Table No. 5.2 A.

Showing promotion rate in percentage with respect to grade and sex for the different districts.

Districts	Promotion rate for :-							
	Grade -I		Grade- II		Grade- III		Grade -IV	
	M	F	M	F	M	F	M	F
Kohima	68.08 (6)	73.72 (3)	74.47 (4)	69.96 (6)	63.51 (7)	70.19 (6)	86.36 (4)	85.36 (3)
Mokokchung	75.46 (4)	75.80 (1)	78.10 (1)	73.42 (3)	76.32 (3)	76.00 (3)	82.76 (6)	82.26 (6)
Tuensang	76.92 (3)	69.73 (6)	75.66 (3)	73.76 (2)	77.04 (1)	77.36 (1)	90.99 (1)	90.94 (1)
Zunheboto	76.92 (2)	72.73 (4)	76.97 (2)	72.73 (4)	76.74 (2)	76.52 (2)	90.26 (2)	87.75 (1)
Mon	71.08 (5)	69.83 (5)	68.02 (7)	69.83 (4)	71.76 (4)	72.92 (4)	88.06 (3)	81.44 (2)

Districts	Promotion rate for							
	Grade - I		Grade - II		Grade- III		Grade- IV	
	M	F	M	F	M	F	M	F
Wokha	57.35 (7)	63.21 (7)	70.00 (5)	63.21 (7)	66.67 (6)	68.43 (7)	78.26 (7)	82.98 (7)
Phek	83.12 (1)	74.11 (2)	69.18 (6)	74.11 (1)	69.12 (5)	72.52 (5)	82.64 (5)	85.26 (4)
Whole Nagaland	78.60	72.73	73.20	71.00	71.59	73.42	88.62	85.14

Note : Figure in the brackets indicate ranking.

Table NO. 5.2 B.

Showing the repetition rate in percentage with respect to grade and sex for the different districts.

Districts	R E P E T I T I O N R A T E for :							
	Grade - I		Grade - II		Grade - III		Grade - IV	
	M	F	M	F	M	F	M	F
Kohima	12.88 (3)	19.77 (3)	13.19 (5)	15.47 (4)	17.36 (4)	18.57 (2)	13.64 (4)	14.64 (5)
Mokokchung	12.27 (4)	14.01 (6)	16.57 (3)	13.29 (7)	17.76 (3)	18.85 (1)	17.24 (3)	17.74 (2)
Tuensang	11.36 (7)	13.82 (7)	13.69 (4)	13.47 (6)	12.22 (7)	10.57 (7)	9.01 (7)	9.06 (7)
Zunheboto	11.80 (6)	17.18 (4)	9.87 (7)	15.38 (5)	14.73 (5)	15.91 (5)	9.74 (6)	12.25 (6)
Mon	23.53 (1)	20.42 (2)	22.68 (1)	17.32 (3)	22.94 (1)	15.10 (4)	11.94 (5)	18.56 (1)
Wokha	22.06 (2)	23.96 (1)	21.43 (2)	20.75 (1)	20.00 (2)	13.15 (5)	21.74 (1)	17.02 (3)
Phek	11.69 (5)	16.67 (5)	12.33 (6)	19.64 (2)	13.97 (6)	12.98 (6)	17.36 (2)	14.74 (4)
Whole Nagaland	15.03	17.97	15.68	16.47	17.00	15.00	14.38	14.86

Note : Figure in brackets indicate ranking.

Table No. 5.2 C.

Showing the dropout rate in percentage with respect  
grade and sex for different districts.

Districts	Dropout rate for					
	Grade - I		Grade - II		Grade - III	
	M	F	M	F	M	F
Kohima	19.04 (2)	6.51 (5)	12.34 (3)	14.57 (2)	18.13 (1)	11.23 (5)
Mokokchung	12.27 (3)	10.19 (3)	5.33 (7)	13.29 (3)	5.92 (6)	5.15 (7)
Tuensang	11.76 (4)	16.45 (1)	10.65 (4)	12.77 (5)	10.74 (4)	12.07 (3)
Zunheboto	5.05 (7)	10.43 (2)	13.16 (2)	11.89 (6)	8.53 (5)	7.57 (6)
Mon	5.39 (5)	9.95 (4)	9.30 (5)	12.85 (4)	5.30 (7)	11.98 (4)
Wokha	20.59 (1)	5.21 (7)	8.57 (6)	16.04 (1)	13.33 (3)	18.42 (1)
Phek	5.19 (6)	6.35 (6)	18.49 (1)	6.25 (7)	16.91 (2)	14.50 (2)
Whole Nagaland	11.32	9.30	11.12	12.85	11.41	11.56

Note : Figure in the brackets indicates ranking.

I N T E R P R E T A T I O N .

Promotion rate :

Table NO. 5.2 A. reveals the position of promotion rate for the different districts with respect to grade and sex as follows :-

(a) For grade I, the analysis of the data reveals that promotion rate is more for male as compared to that of female for all the districts except Kohima, Mokokchung and Wokha, while, the same is more for female as compared to that of male. The promotion rate when arranged in decending order, we find the following ranking for both male and female.

Grade - I.

M A L E			F E M A L E		
Districts	Promotion rate	Rank	Districts	Promotion rate	Rank
Phek	83.2	1	Mokokchung	75.80	1
Zunheboto	76.92	2	Phek	74.11	2
Tuensang	76.94	2	Kohima	73.72	3
Mokokchung	75.46	3	Zunheboto	72.73	4
Mon	71.08	4	Mon	69.83	5
Kohima	68.08	5	Tuensang	69.73	6
Wokha	57.35	6	Wokha	63.21	7



Grade - II.

M A L E			F E M A L E		
Districts	Promotion rate	Rank	Districts	Promotion rate	Rank
Mokokchung	78.10	1	Phek	74.11	1
Zunheboto	76.97	2	Tuensang	73.76	2
Tuensang	75.66	3	Mokokchung	73.42	3
Kohima	74.47	4	Zunheboto	72.73	4
Wokha	70.00	5	Kohima	69.96	5
Phek	69.18	6	Mon	69.83	6
Mon	68.02	7	Wokha	63.21	7

The above ranking reveals that the incidence of promotion rate for male in grade II is highest for Mokokchung district followed by Zunheboto, Tuensang, Kohima, Wokha and Phek while the least is found in Mon district.

With respect to male, the incidence of promotion rate is highest for Phek district followed by Tuensang, Mokokchung, Zunheboto, Kohima and Mon district while the least is found in Wokha district.

This indicates that male in Mokokchung district and female in Phek district are comparatively doing better while male in Mon district and female in Wokha district are contributing more to educational wastage as compared to male and female of other districts.

(c) For grade III, the promotion rate is more for female as compared to male for all the districts except Mokokchung. For this district, promotion rate is more for male as compared to female. Arranged in descending order we find the following ranking of promotion rate for both male and female.

Grade - III

M A L E			F E M A L E		
Districts	Promotion rate	Rank	Districts	Promotion rate	Rank
Tuensang	77.04	1	Tuensang	77.36	1
Zunheboto	76.74	2	Zunheboto	76.52	2
Mokokchung	76.32	3	Mokokchung	76.00	3
Mon	71.76	4	Mon	72.92	4
Phek	69.12	5	Phek	72.52	5
Wokha	66.67	6	Kohima	70.19	6
Kohima	63.51	7	Wokha	68.43	7

The above ranking shows that the incidence of promotion rate for grade III in the case of male is highest for Tuensang district followed by Zunheboto, Mokokchung, Mon, Phek, Wokha and least for Kohima district, while, the incidence of promotion rate for female is highest for Tuensang district followed by Zunheboto, Mokokchung, Mon, Phek, Kohima and least for Wokha district.

It indicate that promotion rate for grade III is found highest for Tuensang district in the case of both male and female while the same is found least for Kohima district in the case of male and Wokha district in the cae of female. Hence, it can be interpreted that Tuensang district is doing better in the case of both male and female as compared to other districts while, male in Kohima district and female in Wokha district are contributing more to educational wastage.

(d) For grade IV, the promotion rate is more for male as compared to female for all the districts except Wokha and Phek. For these two districts, promotion rate is more for male as compared to female. When the promotion rate are arranged in decending order, we find the following ranking for both male and female.

Grade - IV.

M A L E			F E M A L E		
Districts	Promotion rate	Rank	Districts	Promotion rate	Rank
Tuensang	90.99	1	Tuensang	90.94	1
Zunheboto	90.26	2	Zunheboto	87.75	2
Mon	88.06	3	Kohima	85.36	3
Kohima	86.36	4	Phek	85.26	4
Mokokchung	82.76	5	Wokha	82.96	5
Phek	82.64	6	Mokokchung	82.26	6
Wokha	78.26	7	Mon	81.44	7

The above ranking shows that promotion rate in grade IV in the case of male is highest for Tuensang district followed by Zunheboto, Mon, Kohima, Mokokchung, Phek and the least being Wokha district.

With regard to female, the ranking shows that promotion rate is highest for Tuensang district followed by Zunheboto, Kohima, Phek, Wokha, Mokokchung and the least in Mon district.

This indicate that Tuensang district is doing better in the case of both male and female as compared to male and female of other districts while, male in Wokha district and female in Mon district are contributing more to educational wastage as compared to other districts.

(ii) Repetition rate :

Table NO.5.2 B reveals the position of repetition rate for the different districts with respect to grade and sex as follows :-

(a) For grade I, the repetition rate is more for female as compared to male for all the districts except Mon. Arranged in decending order we find the following ranking of repetition rate for both male and female.

Grade - I.

M A L E			F E M A L E		
Districts	Repetition rate	Rank	Districts	Repetition rate	Rank
Mon	23.53	1	Wokha	23.96	1
Wokha	22.06	2	Mon	20.42	2
Kohima	12.88	3	Kohima	19.77	3
Mokokchung	12.27	4	Zunheboto	17.18	4
Zunheboto	11.80	5	Phek	16.67	5
Phek	11.69	6	Mokokchung	14.01	6
Tuensang	11.36	7	Tuensang	13.82	7

The above ranking reveals that repetition rate for grade I in the case of male is highest for Mon district followed by Wokha, Kohima, Mokokchung, Zunheboto, Phek and least for Tuensang district. With respect to female, the incidence of repetition rate is highest for Wokha district followed by Mon, Kohima, Zunheboto, Phek, Mokokchung and the least being Tuensang district.

This indicate that the highest repetition rate for male is found in Mon district and female in Wokha district while, the lowest repetition rate for both male and female is found in Tuensang district.

This shows that male in Mon district and female in Wokha district are contributing more to educational wastage while, both male and female in Tuensang district are doing better as compared to male and female of other districts.

(b) For grade II, the repetition rate is more for female as compared to male for all the districts except Mokokchung, Tuensang, Mon and Wokha. For these districts repetition rate is more for male as compared to female. When the repetition rates are arranged in decending order we find the following ranking for both male and female.

Grade - II.

M A L E			F E M A L E		
Districts	Repetition rate	Rank	Districts	Repetition rate	Rank
Mon	33.68	1	Wokha	20.75	1
Wokha	21.43	2	Phek	19.64	2
Mokokchung	16.57	3	Mon	17.32	3
Tuensang	13.69	4	Kohima	15.47	4
Kohima	13.19	5	Zunheboto	15.38	5
Phek	12.33	6	Tuensang	13.47	6
Zunheboto	9.87	7	Mokokchung	13.29	7

The above ranking shows that repetition rate in case of males is highest for Mon district followed by Wokha, Mokokchung, Tuensang, Kohima, Phek and the least being Zunheboto districts. With respect to female, repetition rate is highest for Wokha district followed by Phek, Mon, Kohima, Zunheboto, Tuensang and lowest being Mokokchung district.

This indicates that the highest repetition rate for male is found in Mon district and female in Wokha district while the same is least for males in Zunheboto district and female in Mokokchung district. This further indicate that males in Mon district and females in Wokha district are contributing more to educational wastage, while, male in Zunheboto district and female in Mokokchung district are comparatively doing better than male and female of other districts.

(c) For grade III, repetition rate is more for male as compared to that of female for all the districts except Kohima Mokokchung and Zunheboto. For these districts repetition rate is more for females as compared to males. When the repetition rate are arranged in decending order we find the ranking of both male and female as follows :

Grade - III.

M A L E			F E M A L E		
Districts	Repetition rate	Rank	Districts	Repetition rate	Rank
Mon	22.94	1	Mokokchung	18.85	1
Wokha	20.00	2	Kohima	18.57	2
Mokokchung	17.76	3	Zunheboto	15.91	3
Kohima	17.36	4	Mon	15.10	4
Zunheboto	14.93	5	Wokha	13.15	5
Phek	13.97	6	Phek	12.98	6
Tuensang	12.22	7	Tuensang	10.57	7

The above ranking shows that repetition rate in the case of male is highest for Mon district followed by Wokha, Mokokchung, Kohima, Zunheboto, Phek and least for Tuensang district. With respect to female, the repetition rate is highest for Mokokchung district followed by Kohima, Zunheboto, Mon, Wokha, Phek and the least being Tuensang district.

This indicate that the highest repetition rate for male is found in Mon district and female in Mokokchung district while, the same is least for both males and females in Tuensang district. This further indicate that male in Mon district and female in Mokokchung district are contributing more to educational wastage, while, both male and female in Tuensang districts are comparatively doing better than males and females of other districts.

(d) For grade IV, repetition rate is more for female as compared to that of male for all the district except Wokha and Phek. For these two districts, repetition rate is more for male as compared to female. When repetition rate are arranged in decending order, we find the ranking of both male and female as follows :

Grade - IV.

M A L E			F E M A L E		
Districts	Repetition rate	Rank	Districts	Repetition rate	Rank
Wokha	21.74	1	Mon	18.56	1
Phek	17.36	2	Mokokchung	17.74	2
Mokokchung	17.24	3	Wokha	17.02	3
Kohima	13.64	4	Phek	14.74	4
Mon	11.94	5	Kohima	14.64	5
Zunheboto	9.74	6	Zunheboto	12.75	6
Tuensang	9.01	7	Tuensang	9.06	7

The above ranking shows that repetition rate for male is highest for Wokha district followed by Phek, Mokokchung, Kohima, Mon, Zunheboto, while, the lowest repetition rate is found in Tuensang district. With respect to female, the highest repetition rate is found in Mon district followed by Mokokchung, Wokha, Phek, Kohima, Zunheboto and the least is found in Tuensang district.

This shows that, repetition rate is more for female as compared to that of male for all the districts with some exception. The highest repetition rate for both male

and female are found in Wokha and Mon districts respectively, while, the same is least for Tuensang district in the case of both male and female. Further, it indicates that males in Wokha district and female in Mon district are contributing more to educational wastage as compared to male and female of other districts, while, Tuensang district is doing better in the case of both male and female.

(iii) Dropout rate :

Table NO. 5.2 C. reveals the districtwise analysis of dropout rate with respect to grade and sex as follows :

(a) For grade I, dropout rate is more for male as compared to female for all the districts except Kohima, Mokokchung and Wokha. For these districts, dropout rate is more for female as compared to male. When the dropout rate is arranged in descending order, we find the following ranking for both male and female :

Grade - I.

M A L E			F E M A L E		
Districts	Dropout rate	Rank	Districts	Dropout rate	Rank
Wokha	20.59	1	Tuensang	16.45	1
Kohima	19.04	2	Zunheboto	10.43	2
Mokokchung	12.27	3	Mokokchung	10.19	3
Tuensang	11.76	4	Mon	9.95	4
Mon	5.39	5	Kohima	6.51	5
Phek	5.19	6	Phek	6.35	6
Zunheboto	5.05	7	Wokha	5.21	7

The above ranking shows that dropout rate in respect of male is highest for Wokha followed by Kohima, Mokokchung, Tuensang, Mon, Phek while the least being Zunheboto district. With respect to female, the highest dropout rate is found in Tuensang district followed by Zunheboto, Mokokchung, Mon, Kohima, Phek and the least is found in Wokha district.

The analysis indicates that dropout rate is more for male as compared to female for all the districts with some exceptions. Further, males in Wokha district and females in Tuensang district are having the highest dropout rate, while males in Zunheboto district and females in Wokha district has the least dropout rate. This indicates that male in Wokha district and female in Tuensang district are contributing more to educational wastage in the form of dropout, while, male in Zunheboto and female in Wokha district are doing better as compared to male and female of other districts.

(b) For grade II, dropout rate is more for female as compared to male for all the districts except Zunheboto and Phek. When the dropout rate is arranged in decending order, we find the ranking for both male and female as follows :

Grade - II.

M A L E			F E M A L E		
DISTRICTS	Dropout rate	Rank	Districts	Dropout rate	Rank
Phek	18.49	1	Wokha	16.04	1
Zunheboto	13.16	2	Kohima	14.57	2
Kohima	12.34	3	Mokokchung	13.29	3
Tuensang	10.65	4	Mon	12.85	4
Mon	9.30	5	Tuensang	12.77	5
Wokha	8.57	6	Zunheboto	11.89	6
Mokokchung	5.33	7	Phek	6.25	7

The above ranking shows that the incidence of dropout for grade II in the case of male is highest for Phek district followed by Zunheboto, Kohima, Tuensang, Mon, Wokha and the least being Mokokchung district. With respect to female, the highest incidence of dropout is found in Wokha followed by Kohima, Mokokchung, Mon, Tuensang, Zunheboto and the least being Phek district.

This indicates that the incidence of dropout is more for female as compared to that of male for all the districts with some exception. Further, dropout rate for male is found highest in Phek district and female in Wokha district, while, the same is least for male in Mokokchung district and female in Phek district.

Hence, it can be interpreted that, male in Phek district and female in Wokha district contribute more to educational wastage in the form of dropout, while, male in Mokokchung district and female in Wokha district are doing better as compared to male and female of other districts.

(c) For grade III, dropout rate is more for female as compared to male for all the districts except Kohima, Mokokchung, Zunheboto and Phek. For these districts the dropout rate is more for male as compared to female. The dropout rate when arranged in decending order, we find the ranking for both male and female as follows :

Grade - III.

M A L E			F E M A L E		
Districts	Dropout rate	Rank	Districts	Dropout rate	Rank
Kohima	19.13	1	Wokha	18.42	1
Phek	15.91	2	Phek	14.50	2
Wokha	13.33	3	Tuensang	12.07	3
Tuensang	10.74	4	Mon	11.98	4
Zunheboto	8.53	5	Kohima	11.23	5
Mokokchung	5.92	6	Zunheboto	7.57	6
Mon	5.30	7	Mokokchung	5.15	7

The above ranking shows that dropout rate for male is highest for Kohima district followed by Phek, Wokha, Tuensang, Zunheboto, Mokokchung and the least being Mon district. With respect to female, the highest dropout is found in Wokha district followed by Phek, Tuensang, Mon, Kohima, Zunheboto and the least being Mokokchung district.

The analysis shows that dropout rate is more for female as compared to male for all the districts with some exception. Further, dropout rate is highest for male in Kohima district and female in Wokha district. While the least for male is found in Mon district and female in Mokokchung district. Hence, it is interpreted that male in Kohima district and female in Wokha district are contributing more to educational wastage in the form of dropout. While, male in Mon district and female in Mokokchung district are doing better as compared to male and female of other districts.

(B) With respect to location :

Table NO. 5.3 shows the pupil's enrolment in different grades that is, (I, II, III & IV) for two consecutive years (i.e, 1991 and 1992) and the number of repeaters for 1992 for the Government primary schools of Nagaland with respect to grade and school location.

Table No. 5.3

Showing pupil's enrolment for two consecutive years (i.e, 1991 and 1992) and number of repeaters (i.e, 1992) for the different districts with respect to grade and school location.

Districts	YEAR	R U R A L				U R B A N			
		I	II	III	IV	I	II	III	IV
Kohima	1991 E	328	361	361	288	622	555	609	511
	1992 E	308	305	316	302	539	497	520	458
	1992 R	69	71	86	68	83	60	88	45
Mokokchung	1991 E	168	166	150	156	152	176	177	204
	1992 E	144	152	158	139	153	141	161	173
	1992 R	22	29	32	30	20	22	28	33
Tuensang	1991 E	277	256	233	209	300	289	302	289
	1992 E	271	236	216	214	281	260	252	244
	1992 R	24	24	24	21	49	50	37	24
Zunheboto	1991 E	145	126	103	130	196	169	158	171
	1992 E	149	126	103	95	177	177	158	138
	1992 R	28	23	20	16	21	14	20	17

Districts	YEAR	RURAL				URBAN			
		I	II	III	IV	I	II	III	IV
Mon	1991 E	193	165	171	98	202	186	191	133
	1992 E	196	174	150	148	186	174	160	148
	1992 R	51	42	34	20	36	28	34	14
Wokha	1991 E	86	88	95	81	78	88	94	82
	1992 E	78	72	72	82	76	72	74	77
	1992 R	21	21	17	16	17	16	13	15
Phek	1991 E	127	130	124	94	153	128	143	122
	1992 E	127	122	116	94	133	143	104	130
	1992 R	12	13	14	08	27	27	22	27
Total Nagaland	1991 E	1324	1292	1237	1056	1703	1591	1674	1512
	1992 E	1273	1187	1131	1074	1545	1464	1429	1368
	1992 R	227	223	227	279	253	217	242	175

With the help of the data shown in table No.5. 3, the flow rates such as, promotion rate, repetition rate and dropout rates were calculated locationwise which are given below in Table No. 5.4.A, 5.4.B, and 5.4 C.

Table No. 5.4 A.

Showing the promotion rate in percentage with respect to grade and school location for the different districts.

DISTRICTS	Promotion rate for:-							
	Grade - I		Grade - II		Grade - III		Grade - IV	
	R	U	R	U	R	U	R	U
Kohima	71.34 (4)	70.26 (6)	63.71 (6)	77.84 (2)	64.82 (7)	67.87 (6)	76.39 (7)	91.19 (2)
Mokokchung	73.21 (3)	78.29 (2)	75.90 (2)	75.57 (3)	72.67 (4)	79.09 (1)	80.77 (4)	83.82 (5)
Tuensang	76.53 (2)	70.00 (7)	75.00 (3)	74.39 (4)	82.83 (1)	72.85 (3)	89.95 (2)	91.69 (1)
Zunheboto	71.03 (5)	83.16 (1)	65.87 (5)	81.66 (1)	76.70 (2)	76.58 (2)	87.69 (3)	90.06 (3)
Mon	68.39 (6)	72.28 (4)	70.30 (4)	67.74 (6)	74.85 (3)	70.16 (5)	71.59 (6)	89.47 (4)
Wokha	59.30 (7)	71.50 (5)	62.50 (7)	69.32 (5)	69.47 (5)	65.95 (7)	80.25 (5)	81.71 (6)
Phek	85.33 (1)	75.82 (3)	78.46 (1)	64.06 (7)	69.35 (6)	72.03 (4)	91.49 (1)	77.87 (7)
Total Nagaland	72.23	74.52	70.25	72.94	72.96	72.07	83.73	86.54

Note : Figure in the brackets indicate ranking.

Table NO. 5. 4 B.

Showing the repetition rate in percentage with respect to grade and school location for the different districts.

Districts	Repetition rate for :-							
	Grade - I		Grade - II		Grade - III		Grade- IV	
	R	U	R	U	R	U	R	U
Kohima	21.04 (3)	13.34 (5)	19.67 (1)	10.81 (5)	23.82 (1)	14.45 (4)	23.61 (1)	8.81 (6)
Mokokchung	13.10 (5)	13.16 (6)	17.47 (5)	12.50 (6)	21.33 (2)	15.82 (2)	19.23 (4)	16.18 (3)
Tuensang	8.66 (7)	16.33 (4)	9.37 (7)	17.30 (3)	10.30 (7)	17.25 (7)	10.05 (6)	8.31 (7)
Zunheboto	19.31 (4)	10.71 (7)	18.26 (4)	8.28 (7)	19.42 (4)	12.66 (6)	12.31 (5)	9.94 (5)
Mon	26.43 (1)	17.82 (2)	25.45 (1)	15.05 (4)	19.88 (3)	17.80 (1)	20.41 (2)	10.53 (4)
Wokha	24.42 (2)	21.79 (1)	23.86 (2)	18.18 (2)	17.89 (5)	13.83 (5)	19.75 (3)	18.29 (2)
Phek	9.43 (6)	17.65 (3)	10.00 (6)	21.09 (1)	11.29 (6)	15.38 (3)	8.51 (7)	22.13 (1)
Total Nagaland	17.49	15.83	17.72	14.74	17.70	14.60	16.27	13.46

Note : Figure in the brackets indicate ranking.

U - Urban

R - Rural

Table No. 5.4 C.

Showing the dropout rate in percentage with respect to grade and school location for the different districts.

Districts	Dropout rate for : -					
	Grade - I		Grade - II		Grade - III	
	R	U	R	U	R	U
Kohima	7.62 (6)	16.40 (1)	7.62 (6)	16.40 (2)	11.36 (3)	17.73 (2)
Mokokchung	13.69 (3)	8.55 (4)	13.69 (3)	11.93 (5)	6.00 (5)	5.09 (7)
Tuensang	14.81 (2)	13.67 (2)	14.81 (2)	8.31 (7)	6.87 (4)	14.90 (3)
Zunheboto	9.66 (5)	6.12 (7)	15.87 (1)	10.06 (6)	3.88 (7)	10.76 (6)
Mon	9.95 (4)	9.90 (3)	4.25 (7)	17.21 (1)	5.27 (6)	12.04 (5)
Wokha	16.28 (1)	6.41 (6)	13.64 (4)	12.50 (4)	12.63 (2)	20.22 (1)
Phek	4.72 (7)	6.53 (5)	11.54 (5)	14.84 (3)	19.36 (1)	12.54 (4)
Total Nagaland	10.28	9.65	12.03	12.32	9.34	13.33

Note : Figure in the bracket indicate ranking.

R - rural

U - urban

Interpretation :(A) With respect to grade and school location.(i) Promotion rate :

The analysis of Table NO. 5.4 A, reveals the position of promotion rate for the different districts with respect to grade and school location as follows :

(a) For grade I, the promotion rate is more for urban schools as compared to rural schools for all the districts except Kohima, Tuensang and Phek districts. For these three districts the promotion rate is more for rural schools as compared to urban schools. When the promotion rate are arranged in decending order, we find the ranking of both rural and urban school as follows :

Grade - I.

R U R A L			U R B A N		
Districts	Promotion rate	Rank	Districts	Promotion rate	Rank
Phek	85.83	1	Zunheboto	83.16	1
Tuensang	76.53	2	Mokokchung	78.82	2
Mokokchung	73.21	3	Phek	75.82	3
Kohima	71.34	4	Mon	72.28	4
Zunheboto	71.03	5	Wokha	71.80	5
Mon	68.39	6	Kohima	70.26	6
Wokha	59.30	7	Tuensang	70.00	7

The above ranking shows that promotion rate for rural school is highest for Phek district followed by Tuensang, Mokokchung, Kohima, Zunheboto, Mon and least for Wokha district. With respect to urban schools, the highest promotion rate is found in Zunheboto district followed by Mokokchung, Phek, Mon, Wokha and Kohima, while, the least being Tuensang district.

The analysis shows that promotion rate in class I is more for urban schools as compared to rural schools with some exceptions. Further, promotion rate is highest for rural school in Phek and urban school in Zunheboto district. While, the least promotion rate for rural school is found in Wokha and urban school in Phek district.

Hence, it can be interpreted that rural schools in Phek district and urban schools in Zunheboto district are doing better as compared to rural and urban schools of other districts. While, rural schools in Wokha and urban schools in Tuensang are contributing more to educational wastage.

(b) For grade II, the promotion rate is more for urban school for all the districts except Kohima, Tuensang and Phek district. For these districts promotion rate is more for rural schools as compared to urban schools. When the promotion rates are arranged in descending order, we find the ranking for both rural and urban schools as follows :

Grade - II.

R U R A L			U R B A N		
Districts	Promotion rate	Rank	Districts	Promotion rate	Rank
Phek	78.46	1	Zunheboto	81.66	1
Mokokchung	75.90	2	Kohima	77.84	2
Tuensang	75.00	3	Mokokchung	75.57	3
Mon	70.30	4	Tuensang	74.39	4
Zunheboto	65.87	5	Wokha	69.32	5
Kohima	63.71	6	Mon	67.74	6
Wokha	62.05	7	Phek	64.06	7

The above ranking shows that promotion rate for rural school is highest for Phek district followed by Mokokchung, Tuensang, Mon, Zunheboto, Kohima and least for Wokha district. With respect to urban schools the same is highest for Zunheboto district followed by Kohima, Mokokchung, Tuensang, Wokha, Mon and the least being Phek district.

The analysis further shows that promotion rate for rural school is highest for Phek district and urban school in Zunheboto, while, the least promotion rate for rural school is found in Wokha and urban school in Phek District.

It indicate that rural school in Phek district and urban school in Zunheboto are comparatively better as compared to other districts while, rural school in Wokha and urban school in Phek are contributing more to educational wastage.

(c) For grade III, the promotion rate is more for rural school as compared to urban school for all the district except for Kohima, Mokokchung and Phek districts. For these three districts promotion rate is more for urban school as compared to rural school. The promotion rate when arranged in decending order, we find the ranking for both rural and urban school as follows :

Grade - III.

R U R A L			U R B A N		
Districts	Promotion rate	Rank	Districts	Promotion rate	Rank
Tuensang	82.83	1	Mokokchung	79.09	1
Zunheboto	76.70	2	Zunheboto	76.58	2
Mon	74.85	3	Tuensang	72.85	3
Mokokchung	72.67	4	Phek	72.03	4
Wokha	69.47	5	Mon	70.16	5
Phek	69.35	6	Kohima	67.82	6
Kohima	64.82	7	Wokha	65.95	7

The above ranking shows that promotion rate for rural school is highest for Tuensang district followed by Zunheboto, Mon, Mokokchung, Wokha, Phek and least for Kohima district.

With respect to urban schools, the highest promotion rate is found in Mokokchung district followed by Zunheboto, Tuensang, Phek, Mon and Kohima, while the least is found in Wokha district.

The analysis further shows that promotion for rural school is highest in Tuensang district and urban school for Mokokchung district while, the least for rural school is found in Kohima district and urban school in Wokha district.

It indicate that rural school in Tuensang and urban school in Mokokchung are doing better as compared to other districts while, rural school in Kohima and urban school in Wokha are contributing more to educational wastage.

(d) For grade IV, promotion rate is more for urban schools as compared to rural schools for all the districts except Phek. When the promotion rates are arranged in decending order, we find the ranking of both rural and urban schools as follows :

Grade - IV.

R U R A L			U R B A N		
Districts	Promotion rate	Rank	Districts	Promotion rate	Rank
Phek	91.49	1	Tuensang	91.69	1
Tuensang	89.95	2	Kohima	91.19	2
Zunheboto	87.69	3	Zunheboto	90.06	3
Mokokchung	80.77	4	Mon	89.47	4
Wokha	80.25	5	Mokokchung	83.82	5
Mon	79.59	6	Wokha	81.71	6
Kohima	76.39	7	Phek	77.87	7

The above ranking shows that the incidence of promotion rate for rural school is highest for Phek district followed by Tuensang, Zunheboto, Mokokchung, Wokha, Mon and least for Kohima district. With respect to urban school, promotion rate is highest for Tuensang district followed by Kohima, Zunheboto, Mon, Mokokchung, Wokha and the least being Phek district.

The analysis further shows that the highest promotion rate for rural school is found in Phek district and for urban school in Tuensang district while, the least promotion rate for rural school is found in Kohima and

urban school in Phek district. This indicate that rural schools in Phek district and urban schools in Tuensang are doing better as compared to other districts. While, rural schools in Kohima and urban school in Phek are contributing more to educational wastage.

(ii) Repetition rate :

Table NO. 5.4 B. reveals the districtwise analysis of repetition rate with respect to grade and sex as follows :

(a) For grade I repetition rate is more for rural schools as compared to that of urban schools for all the districts except Mokokchung, Tuensang and Phek. When the repetition rates are arranged in decending order, we find the ranking for both rural and urban schools as follows :

Grade - I.

R U R A L			U R B A N		
Districts	Repetition rate	Rank	Districts	Repetition rate	Rank
Mon	26.43	1	Wokha	21.79	1
Wokha	24.42	2	Mon	17.82	2
Kohima	21.04	3	Phek	17.65	3
Zunheboto	19.31	4	Tuensang	16.33	4
Mokokchung	13.10	5	Kohima	13.34	5
Phek	9.45	6	Mokokchung	13.16	6
Tuensang	8.66	7	Zunheboto	10.71	7

The above ranking shows that repetition rate for rural school is highest for Mon district followed by Wokha, Kohima, Zunheboto, Mokokchung, Phek and least for Tuensang district. With respect to urban school, the repetition rate is highest for Wokha district followed by Mon, Phek, Tuensang, Kohima, Mokokchung and least for Zunheboto district.

The analysis further shows that repetition rate for rural school is highest for Mon district and urban school in Wokha. While, the least repetition rate for rural schools is found in Tuensang and urban schools in Zunheboto. This indicates that rural school in Mon district and urban schools in Wokha district are contributing more to educational wastage while, rural school in Tuensang and urban school in Zunheboto are comparatively better as compared to other districts.

(b) For grade II, repetition rate is more for rural schools as compared to that of urban schools for all the districts except Tuensang and Phek district. For these two districts repetition rate is more for urban schools as compared to rural schools. The repetition rate when arranged in descending order, we find the ranking of both rural and urban school as follows :

Grade - II.

R U R A L			U R B A N		
Districts	Repetition rate	Rank	Districts	Repetition rate	Rank
Mon	25.45	1	Phek	21.09	1
Wokha	23.86	2	Wokha	18.18	2
Kohima	19.67	3	Tuensang	17.30	3
Zunheboto	18.26	4	Mon	15.05	4
Mokokchung	17.47	5	Kohima	10.81	5
Phek	10.00	6	Mokokchung	12.50	6
Tuensang	9.37	7	Zunheboto	8.28	7

The above ranking shows that for rural school repetition rate is highest for Mon district followed by Wokha, Kohima, Zunheboto, Mokokchung, Phek and least for Tuensang district. With respect to urban school repetition rate is highest for Phek district followed by Wokha, Tuensang, Mon, Kohima, Mokokchung the least is found in Zunheboto district.

The analysis further shows that repetition rate for rural school is highest for Mon district and urban school in Phek district, while the least repetition rate for rural school is found in Tuensang district and urban

school in Zunheboto district. This indicate rural schools in Mon and urban schools in Phek district contribute more to educational wastage, while rural schools in Tuensang and urban schools in Zunheboto are doing better as compared to other districts.

(c) For grade III, repetition rate is more for rural schools as compared to urban schools for all the districts except Tuensang and Phek districts. For these districts repetition rate for urban school is more as compared to rural school. The repetition rate when arranged in decending order, we find the ranking for both rural and urban schools as follows :

Grade - III.

R U R A L			U R B A N		
Districts	Repetition rate	Rank	Districts	Repetition rate	Rank
Kohima	23.82	1	Mon	17.80	1
Mokokchung	21.33	2	Mokokchung	15.82	2
Mon	19.88	3	Phek	15.38	3
Zunheboto	19.42	4	Kohima	14.45	4
Wokha	17.89	5	Wokha	13.83	5
Phek	11.29	6	Zunheboto	12.66	6
Tuensang	10.30	7	Tuensang	12.25	7

The above ranking shows that for rural schools the incidence of repetition is highest for Kohima district followed by Mokokchung, Mon, Zunheboto, Wokha, Phek and while, the least is found in Tuensang district. With respect to urban schools the incidence of repetition is highest from Mon followed by Mokokchung, Phek, Kohima, Wokha, Zunheboto and the least being Tuensang district.

The analysis shows that, the highest repetition rate for rural school is found in Kohima and urban schools in Mon while, the least for both rural and urban school is found in Tuensang district. The analysis further shows that rural schools in Kohima district and urban schools in Mon are contributing more to educational wastage, while Tuensang district is doing better for both rural and urban schools.

(d) For grade IV, the incidence of repetition is more for rural schools as compared to urban schools for all the districts except Phek. The repetition rate when arranged in descending order, we find the ranking for both rural and urban schools as follows :

Grade - IV.

R U R A L			U R B A N		
Districts	Repetition rate	Rank	Districts	Repetition rate	Rank
Kohima	23.61	1	Phek	22.13	1
Mon	20.41	2	Wokha	18.29	2
Wokha	19.75	3	Mokokchung	16.18	3
Mokokchung	19.23	4	Mon	10.53	4
Zunheboto	12.31	5	Zunheboto	9.94	5
Tuensang	10.05	6	Kohima	8.81	6
Phek	8.51	7	Tuensang	8.31	7

The above ranking reveals that the incidence of repetition rate for rural school is highest for Kohima district followed by Mon, Wokha, Mokokchung, Zunheboto, Tuensang and the least being Phek district. With respect to urban school repetition rate is highest for Phek district followed by Wokha, Mokokchung, Mon, Zunheboto, Kohima and least being Tuensang district.

This indicate that rural schools in Kohima and urban schools in Phek district are contributing more to educational wastage, while, rural schools in Phek and urban schools in Tuensang are doing better.

(iii) Dropout rate :

Table NO. 5.4 C, reveals the districtwise analysis of dropout rate with respect to grade and school location as follows :

(a) For grade I, the dropout rate is more for rural schools as compared to urban schools for all the districts except Kohima and Phek. For these two districts dropout rate is more for urban schools as compared to rural schools. The dropout rates when arranged in descending order, we find the ranking for both rural and urban school as follows :

Grade - I.

R U R A L			U R B A N		
Districts	Dropout rate	Rank	Districts	Dropout rate	Rank
Wokha	16.28	1	Kohima	16.40	1
Tuensang	14.81	2	Tuensang	13.67	2
Mokokchung	13.69	3	Mon	9.90	3
Mon	9.95	4	Mokokchung	8.55	4
Zunheboto	9.66	5	Phek	6.53	5
Kohima	7.62	6	Wokha	6.41	6
Phek	4.72	7	Zunheboto	6.12	7

The above ranking shows that for rural school, the incidence of repetition is highest for Wokha district followed by Tuensang, Mokokchung, Mon, Zunheboto, Kohima and the least being Phek district. With respect to urban location, the highest dropout rate is found in Kohima district followed by Tuensang, Mon, Mokokchung, Phek, Wokha and the least being Zunheboto district.

The analysis further shows that repetition rate is highest for rural schools in Wokha and urban schools in Kohima district, while, the least dropout rate for rural schools is found in Phek district and urban schools in Zunheboto district. This indicate that rural schools in Wokha and urban school in Kohima contributes more to educational wastage, while rural schools in Phek and urban schools in Zunheboto are doing better as compared to rural and urban schools of other districts.

(b) For grade II, the dropout rate is more for urban schools as compared to rural schools for all the districts except Mokokchung, Zunheboto, Tuensang and Wokha districts. For these districts dropout rate is more for rural school as compared to that of urban school. The repetition rate when arranged in decending order, we find the following ranking for both rural and urban schools.

Grade - II.

R U R A L			U R B A N		
Districts	Dropout rate	Rank	Districts	Dropout rate	Rank
Zunheboto	15.87	1	Mon	17.21	1
Tuensang	14.81	2	Kohima	16.40	2
Mokokchung	13.69	3	Phek	14.84	3
Wokha	13.64	4	Wokha	12.50	4
Phek	11.54	5	Mokokchung	11.93	5
Kohima	7.62	6	Zunheboto	10.06	6
Mon	4.25	7	Tuensang	8.31	7

The above ranking shows that for rural schools the incidence of dropout is highest for Zunheboto district followed by Tuensang, Mon, Wokha, Phek, Kohima and the least being Mon district. With respect to urban school the highest dropout rate is found in Mon district followed by Kohima, Phek, Wokha, Mokokchung, Zunheboto and the least is found in Tuensang district.

The analysis further shows that the dropout rate for rural schools, is highest for Zunheboto and urban schools in Mon district, while the same is least for rural

schools in Mon district and urban schools in Tuensang district. This indicate that rural schools in Zunheboto and urban schools in Mon district are contributing more to educational wastage, while, rural school in Mon and urban school in Tuensang are doing better as compared to rural and urban schools of other districts.

(c) For garde III, dropout rate is more for urban school as compared to rural school for all the districts except Mokokchung and Phek districts. For these two districts, dropout rate is more for rural schools as compared to urban school. The dropout rate when arranged in decending order, we find the ranking for both rural and urban schools as follows :

Grade - III.

R U R A L			U R B A N		
Districts	Dropout rate	Rank	Districts	Dropout rate	Rank
Phek	19.36	1	Wokha	20.22	1
Wokha	12.63	2	Kohima	17.73	2
Kohima	11.36	3	Tuensang	14.90	3
Tuensang	6.87	4	Phek	12.54	4
Mokokchung	6.00	5	Mon	12.04	5
Mon	5.27	6	Zunheboto	10.76	6
Zunheboto	3.88	7	Mokokchung	5.09	7

The above ranking shows that the incidence of dropout in rural schools is highest for Phek district followed by Wokha, Kohima, Tuensang, Mokokchung, Mon and Zunheboto being the least. With respect to urban schools, the dropout rate is highest for Wokha district followed by Kohima, Tuensang, Phek, Mon, Zunheboto and Mokokchung being the least.

The analysis further shows that rural schools in Phek district and urban schools in Wokha district has the highest rate of dropout, hence, contribute more to educational wastage. While rural school in Zunheboto and urban school in Mokokchung has the least dropout rate, and hence, it can be interpreted that they are doing better as compared to other districts.

#### SECTION I. PART - II.

Analysis and interpretation of the flow rates, such as promotion rate, repetition rate and dropout rate for whole Nagaland with respect to grade, sex, school location and total Nagaland.

(A) With respect to grade and sex :-

Table NO. 5.5 shows the pupils enrolment in different grades for two consecutive years (i.e, 1991 and 1992) and number of repeaters for 1992 for the government primary schools in Nagaland with respect to sex :-

Table NO. 5.5.

Showing pupil's enrolment in different grades for two consecutive years and number of repeaters for Nagaland with respect to sex.

YEAR	M A L E				F E M A L E			
	Gr.I	Gr.II	Gr.III	Gr.IV	Gr.I	Gr.II	Gr.III	Gr.IV
1991 Enrolment	1350	1442	1439	1281	1467	1441	1472	1287
1992 Enrolment	1416	1360	1305	1183	1402	1291	1255	1259
1992 Repeaters	220	213	240	172	260	227	229	182

With the help of the data shown in Table No. 5.5 flow rates such as promotion, repetition and dropout rates for Nagaland were determined sexwise which are given below in Table NO. 5.6. A, 5.6 B and 5.6 C.

Table NO. 5.6 A.

Showing promotion rate in percentage with respect to grade and sex for whole Nagaland.

Grade	Male	Female
I	73.60	72.73
II	73.20	71.00
III	71.59	73.42
IV	85.52	85.15

Table NO. 5.6 B.

Showing the repetition rate in percentage with respect to grade and sex for whole Nagaland.

Grade	Male	Female
I	15.08	17.97
II	15.68	16.47
III	17.00	15.02
IV	14.38	14.86

Table NO. 5. 6 C.

Showing dropout rate in percentage with respect to grade and sex for whole Nagaland.

Grade	Male	Female
I	11.32	9.30
II	11.12	12.53
III	11.41	11.56
IV	0.0	0.0

Interpretation.

1. Promotion rate :- Table NO. 5.6 A reveals the position of promotion rate for whole Nagaland with respect to grade and sex as follows :-
  - (a) For grade I, promotion rate is more for male as compared to female.
  - (b) For grade II, the same is more for male as compared to female.
  - (c) For grade III, promotion rate is more for female as compared to that of male.
  - (d) For grade IV, promotion rate is more for male as compared to that of female.

- (e) The highest promotion rate for male is found in grade IV and lowest in grade III.
- (f) The highest promotion rate for female is found in grade IV and lowest in grade II.

The above analysis indicate that promotion rate is more for male as compared to female in all grades except in grade III, where promotion rate is more for female as compared to that of male. Hence, it can be interpreted that females contribute more to educational wastage as compared to that of male in all the grades except grade III.

II. Repetition rate :- Table No. 5.6 B reveals the position of repetition rate for the whole Nagaland with respect to grade and sex as follows :-

- (a) For grade I, repetition rate is more for female as compared to that of male.
- (b) For grade II, repetition rate is more for female as compared to that of male.
- (c) For grade III, repetition rate is more for male as compared to that of female.
- (d) For grade IV, the same is more for female as compared to that of male.
- (e) The highest repetition rate for male is found in grade III and lowest in grade II.

(f) The highest repetition rate for female is found in grade II and lowest in grade I.

The above analysis indicate that repetition rate is more for female in all the grades except in grade III where it is more for male as compared to female. it is, therefore, interpreted that females contribute more to educational wastage in all the grades as compared to that of males except in grade III.

III. Dropout rate :- Table NO. 5.6 C reveals the position of dropout rate for the different grades with respect to sex as follows :-

- (a) For grade I, dropout rate is more for male as compared to that of female.
- (b) For grade II, dropout rate is more for female as compared to that of male.
- (c) For grade III, dropout rate is more for female as compared to that of male.
- (d) The highest dropout rate for male is found in grade III, and lowest in grade II.
- (e) The highest dropout rate for female is found in grade II, and lowest in grade I.

The analysis of dropout rate indicate that the same is more for female as compared to that of male for

all the grades except grade I, where it is more for male as compared to female. Therefore, it is interpreted that females contribute more to educational wastage in the form of dropout as compared to that of male.

The above analysis draws the following facts:-

- (1) Promotion rate is more for males as compared to females for all the grades except grade III.
- (2) Repetition rate is more for female as compared to that of male in all the grades except in grade III.
- (3) Dropout rate is more for female as compared to that of male for all the grades except grade I.

Therefore, the analysis shows that females contribute more to educational wastage as compared to that of male for all the cases.

(B) With respect to location :- Table NO. 5.7 shows the pupils enrolment in different grades for two consecutive years, that is, 1991 and 1992 and the number of repeaters for 1992 for the Government primary schools of Nagaland with respect to its location.

Table NO. 5.7.

Showing pupils enrolment in different grades for two consecutive years and number of repeaters for Nagaland as a

whole with respect to its location.

Year	R U R A L				U R B A N			
	I	II	III	IV	I	II	III	IV
Enrolment 1991	1324	1292	1237	1056	1703	1591	1674	1512
Enrolment 1992	1273	1187	1131	1074	1545	1464	1429	1368
Repeater 1992	227	223	227	179	253	217	242	175

With the help of data shown in Table No.5. 7 the flow rates in percentage such as, promotion rate repetition rate and dropout rate were calculated for whole Nagaland with respect to school location which are given below in Table NO.5. 8 A, 5.8 B, 5.8 C.

Table NO. 5.8 A.

Showing promotion rate in percentage with respect to grade and school location for whole Nagaland.

Grade	Rural	Urban
I	72.23	74.52
II	70.25	72.94
III	72.96	72.07
IV	83.73	86.54

Table NO. 5.8 B.

Showing repetition rate in percentage with respect to grade and school location for whole Nagaland.

Grade	Rural	Urban
I	17.89	15.83
II	17.72	14.74
III	17.70	16.69
IV	16.27	13.46

Table NO. 5.8 C.

Showing dropout rate in percentage with respect to grade and school location for whole Nagaland.

Grade	Rural	Urban
I	10.28	9.65
II	12.03	12.32
III	9.34	13.33
IV	x	x

Interpretation.

I. Promotion rate : Table NO.5.8 A reveals the position of promotion rate for all Nagaland with respect to grade and school location as follows :-

- (a) For grade I, promotion rate is more for urban school as compared to that of rural school.
- (b) For grade II, the same is more for urban school as compared to rural school.
- (c) For grade III, promotion rate is more for rural school as compared to urban school.
- (d) For grade IV, promotion rate is more for urban school as compared to that of rural school.
- (e) The analysis further reveals that the highest promotion rate for both rural and urban school is found in grade IV and lowest for rural schools in grade III and urban school in grade II.

This analysis indicate that promotion rate is more for urban schools in all the grades except in grade III where promotion rate for rural school is more as compared to that of urban schools.

II. Repetition rate : Table NO. 5.8 B reveals the position of repetition rate for the whole Nagaland with respect to grade and school location as follows :-

- (a) For grade I, the repetition rate for rural school is more as compared to that of urban schools.

- (b) For grade II, the same is more for rural school as compared to that of urban school.
- (c) For grade III, promotion rate is more for rural schools as compared to that of urban schools.
- (d) For grade IV, the same is more for rural schools as compared to that of urban schools.
- (e) The analysis further reveals that the highest repetition rate for rural school is found in grade I while the lowest is found in grade IV.

The above analysis indicate that repetition rate is more for rural schools in all the grades as compared to that of urban schools .

III. Dropout rate :- Table NO. 5.8 C reveals the position of dropout rate for all Nagaland with respect to grade and school location as follows :-

- (a) For grade I, dropout rate is more for rural schools as compared to that of urban schools.
- (b) For grade II, dropout rate is more for urban schools as compared to that of rural schools.
- (c) For grade III, dropout rate is more for urban schools as compared to that of rural schools.
- (d) The analysis further reveals that the highest dropout for rural school is found in grade II, and lowest in grade III.

- (e) With respect to urban schools, the highest rate of dropout is found in grade III and lowest in grade I.
- (f) The analysis indicate that dropout rate is more for urban schools in all the grades except grade I, whereas, dropout rate in grade I is more in rural schools as compared to that of urban schools.

The above analysis draws the following facts:-

- (i) Promotion rate is more for urban schools as compared to rural schools in all the grades except in grade III.
  - (ii) Repetition rate is more for rural schools for all the grades as compared to urban schools.
  - (iii) Dropout rate is more for urban schools in all the grades except grade I.
- (C) With respect to total Nagaland :- Table No. 5.9 shows the total pupil enrolment in different grades of Government primary schools of Nagaland for two consecutive years, that is, 1991 and 1992 and the number of repeaters for 1992 with respect to Nagaland as a whole.

Table NO. 5.9.

Showing the total pupil enrolment in different grades for two consecutive years and repeaters for Nagaland as a whole.

YEAR	Grade- I	Grade - II	Grade -III	Grade - IV
1991 Enrolment	3027	2883	2911	2568
1992 Enrolment	2818	2651	2560	2442
1992 Repeaters	480	440	469	354

With the help of the data shown in Table NO. 5. 9 flow rates in percentage such as, promotion, repetition, and dropout rates for whole Nagaland(i.e, Grand Total Nagaland) were determined which are given below in Table No. 5. 10.

Table NO. 5.10.

Showing promotion rate, repetition rate, and dropout rate in percentage for total Nagaland.

Flow rates	Grade - I	Grade - II	Grade -III	Grade-IV
Promotion	73.27	71.85	72.51	85.26
Repetition	16.59	16.16	16.08	14.74
Dropout	10.14	11.99	11.41	0.0

Interpretation :- Table NO. 5. 10 reveals the position of promotion rate, repetition rate, and dropout rate for the different grades for whole Nagaland as follows :-

1. Promotion rate.

(a) For grade I, the promotion rate in percentage is 73.27, grade II, 71.85, grade III, 72.51 and for grade IV, promotion rate is 85.26.

The analysis further reveals that promotion rate in Nagaland is highest for grade IV followed by grade I, III and grade II being the least.

II. Repetition rate.

Table NO. 5. 10 reveals the position of repetition rate for total Nagaland as follows :-

For grade I, repetition rate in percentage is 16.59, grade II, is 16.16, for grade III it is 16.08 and for grade IV it is 14.74.

The analysis further reveals that repetition rate is highest for grade I, followed by grade II, III and grade IV being the least.

### III. Dropout rate.

Table NO. 5.10 reveals the position of dropout rate for total Nagaland as follows :-

The dropout rate in percentage for grade I, is 10.14, for grade II, it is 11.99, grade III is 11.41. It is assumed that there is no dropout in the final grade (i.e, grade IV.)

The analysis reveals that the highest rate of dropout is found in grade II, followed by grade III, and lowest in grade I.

S E C T I O N - II.

5.2 ANALYSIS AND INTERPRETATION OF EDUCATIONAL WASTAGE DATA DUE TO DROPOUT, REPETITION AND OVERALL (i.e, DUE TO BOTH DROPOUT AND REPETITION) IN TERMS OF PUPIL YEARS WASTED FOR THE DIFFERENT DISTRICTS AND FOR WHOLE NAGALAND WITH RESPECT TO SEX, SCHOOL LOCATION AND FOR TOTAL NAGALAND.

The analysis and interpretation of this section is presented in two parts :

Part I: Analysis and interpretation of educational wastage data due to dropout, repetition and overall (i.e, due to both dropout and repetition) in terms of pupil years wasted for the different districts with respect to sex and school location.

Part II: Analysis and interpretation of the educational wastage data due to dropout, repetition and overall (i.e, due to both dropout and repetition) in terms of pupil years wasted for whole Nagaland with respect to sex, school location and for total Nagaland.

PART - I

ANALYSIS AND INTERPRETATION OF EDUCATIONAL WASTAGE DATA DUE TO DROPOUT, REPETITION AND OVERALL (i.e, DUE TO BOTH DROPOUT AND REPETITION) IN TERMS OF PUPIL YEARS WASTED FOR THE DIFFERENT DISTRICTS WITH RESPECT TO SEX AND SCHOOL LOCATION.

(1) With respect to sex:

On the basis of promotion rate, repetition rate and dropout rate the pupil's flow charts were constructed to show what will happen to a cohort of 1000 pupils entering grade I in 1991 for male and female separately for each district which are shown in diagram NO. 1 - 14.

Diagram NO.5.1  
(Kohima Male)

Theoretical Pupil's Flow and Cohort Reconstruction.

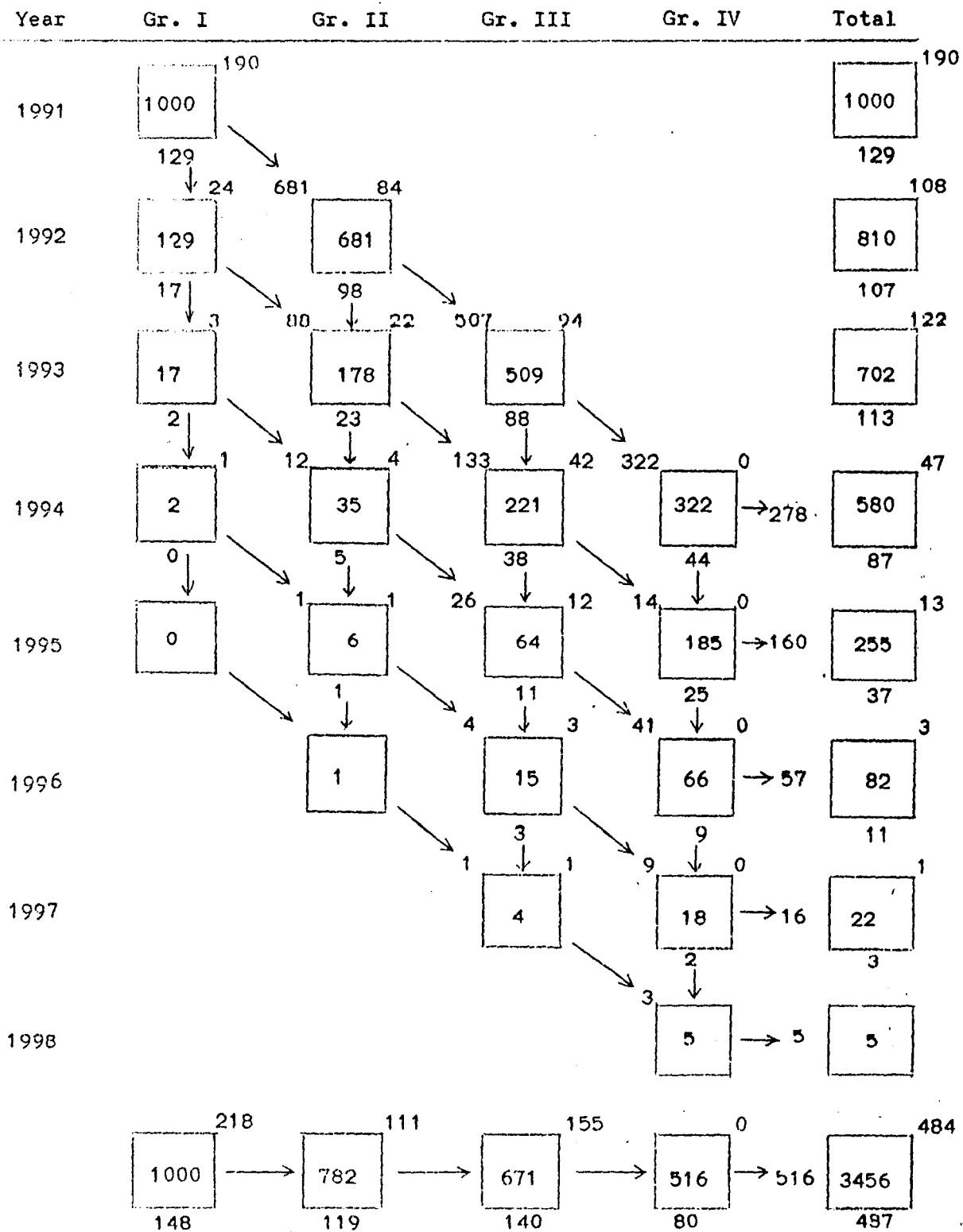


Diagram NO. 5.2  
(Mokokchung Male)

Theoretical Pupil's Flow and Cohort Reconstruction.

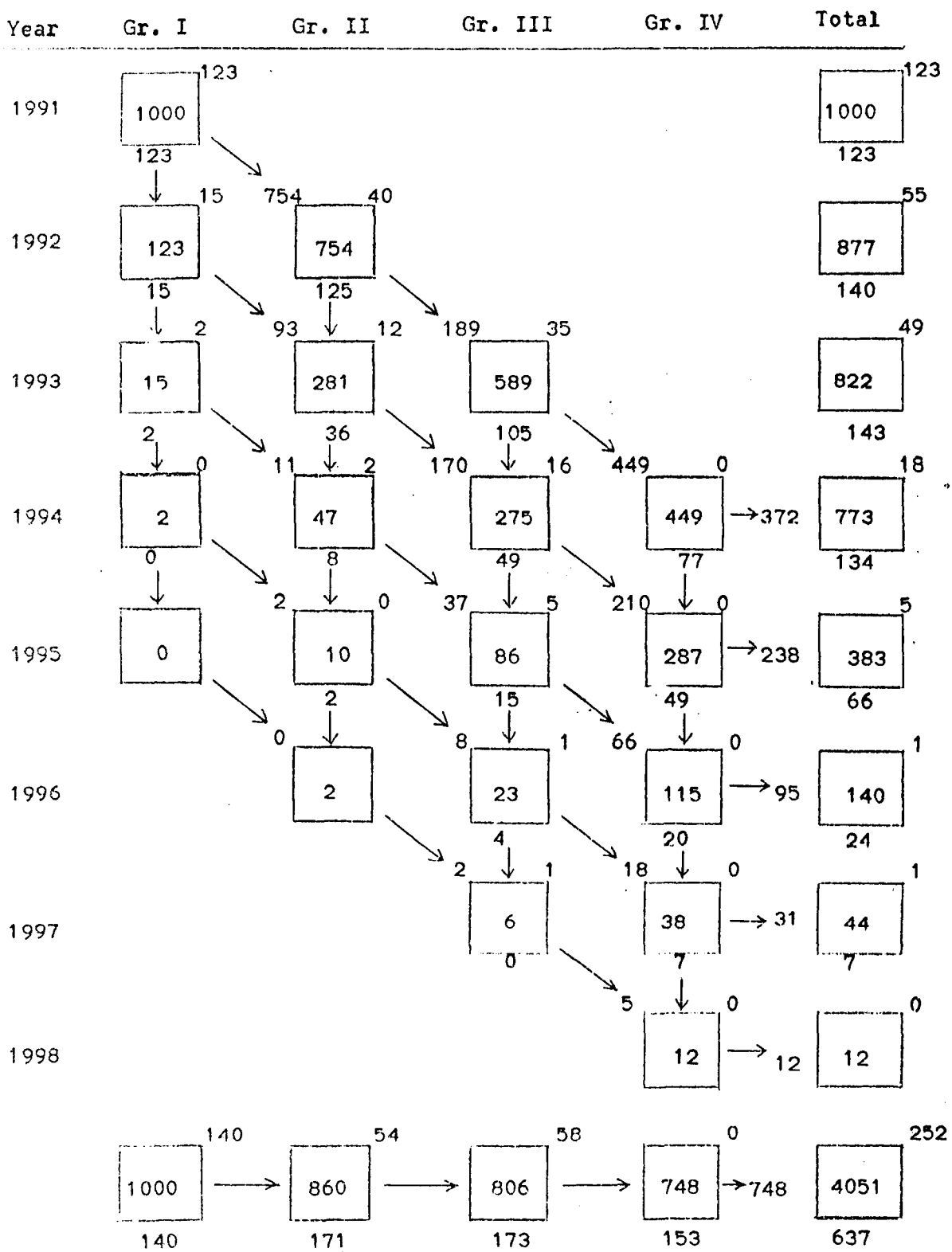


Diagram NO. 5.3

(Tuensang Male)

Theoretical Pupil's Flow and Cohort Reconstruction.

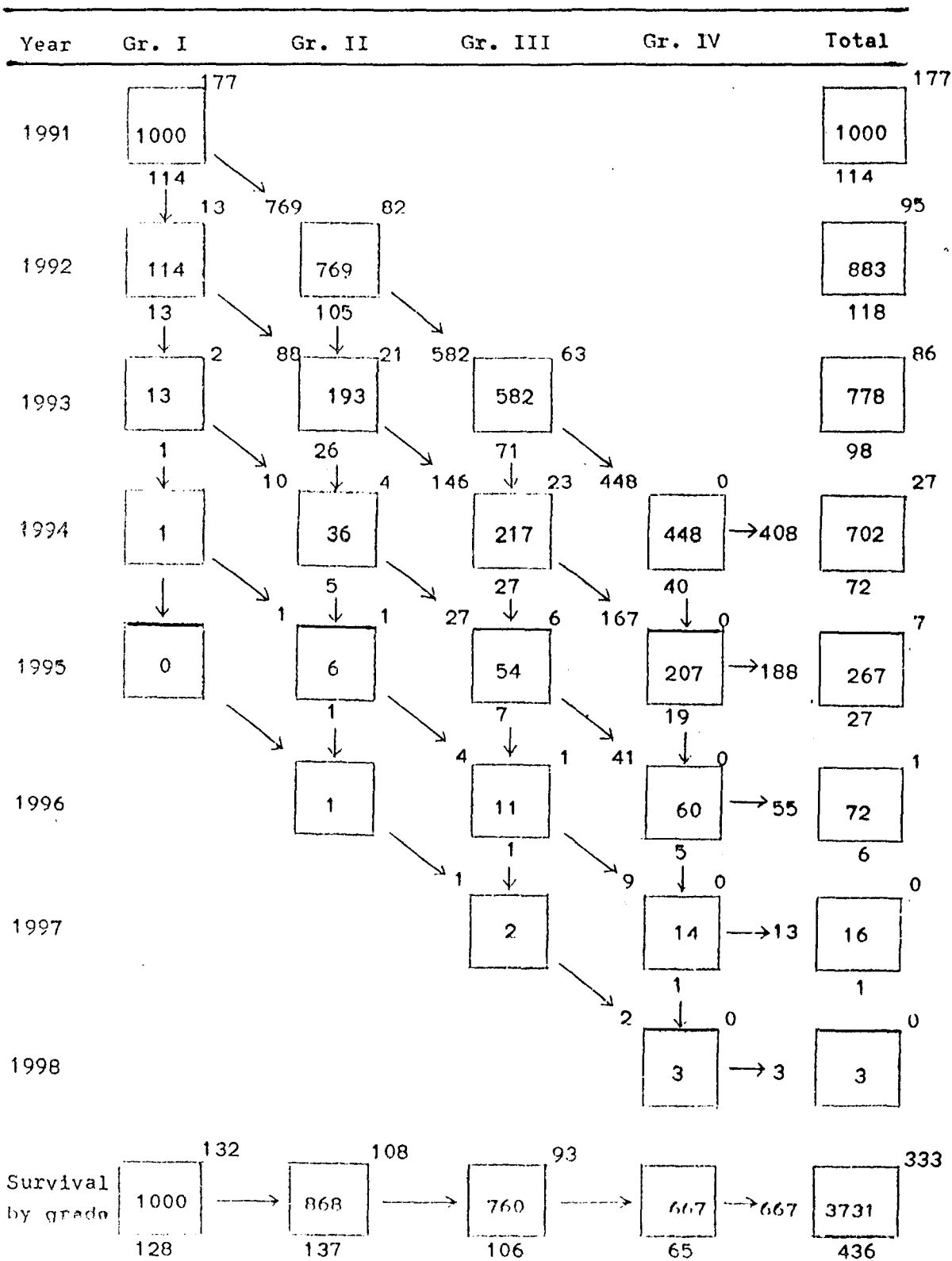


Diagram NO. 5.4  
(Zunheboto Male)  
Theoretical Pupil's Flow and Cohort Reconstruction.

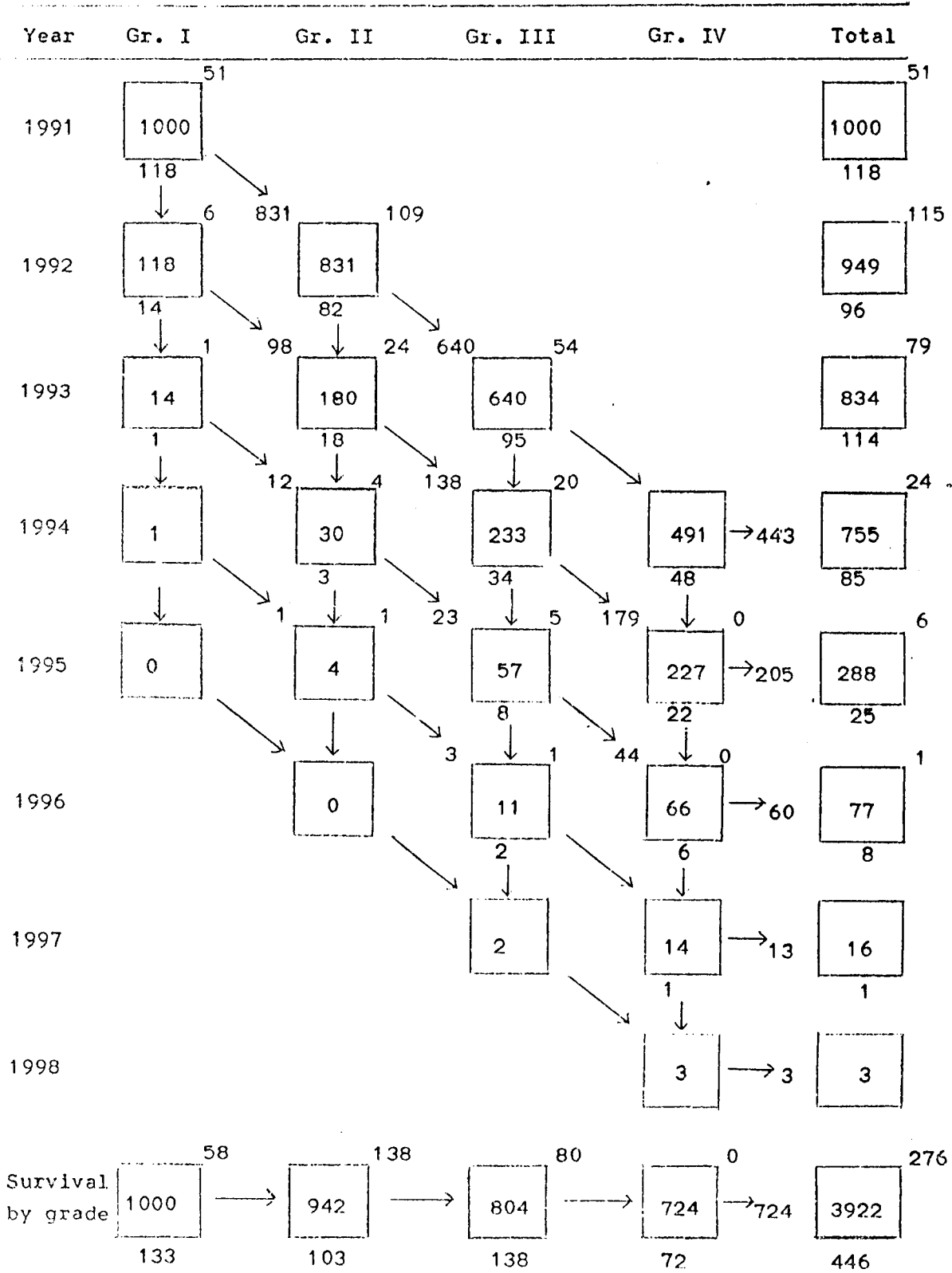


Diagram NO. 5.5  
(Mon Male)

Theoretical Pupil's Flow and Cohort Reconstruction.

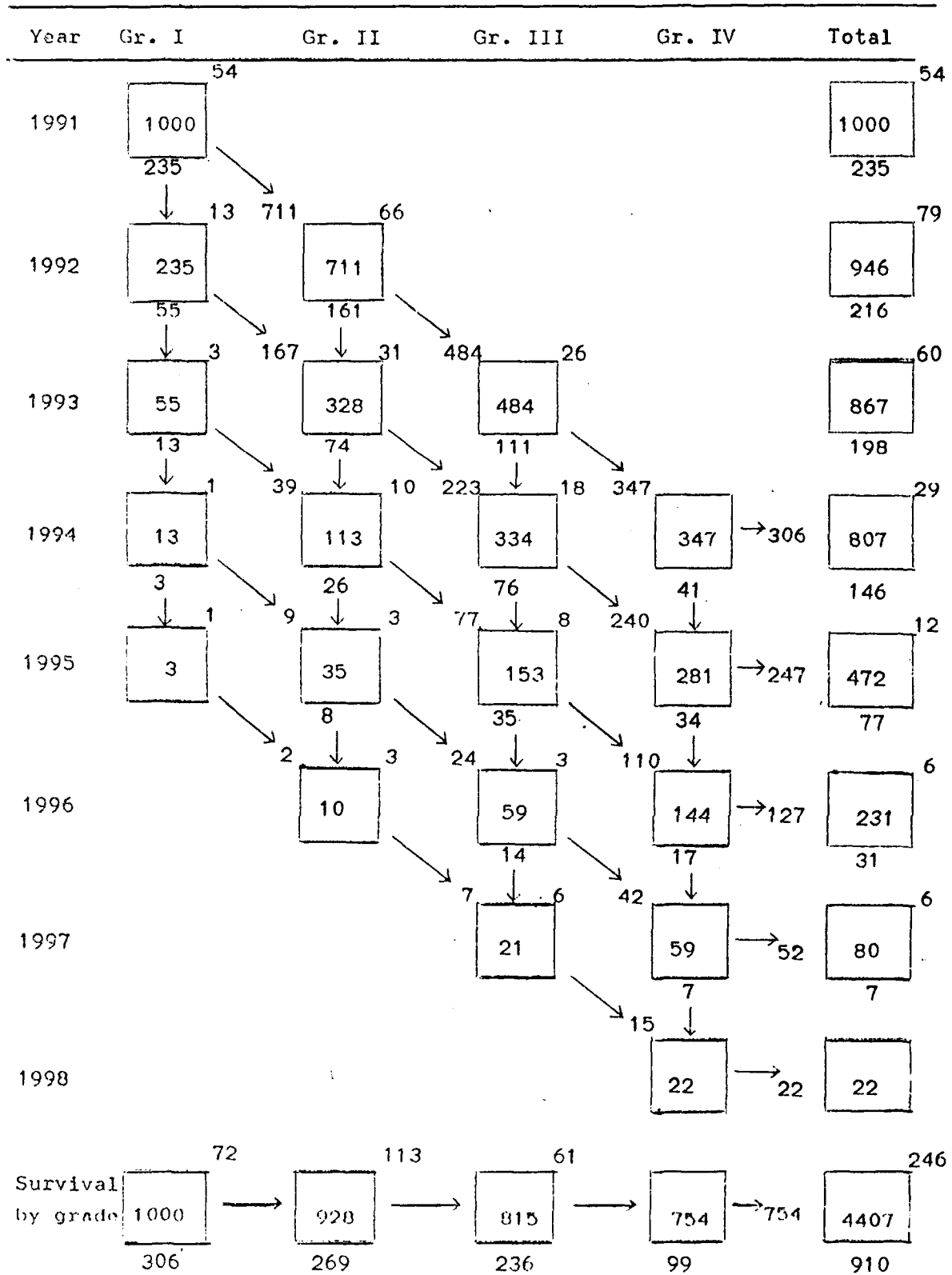


Diagram NO. 5.6

(Wokha Male)

Theoretical Pupil's Flow and Cohort Reconstruction

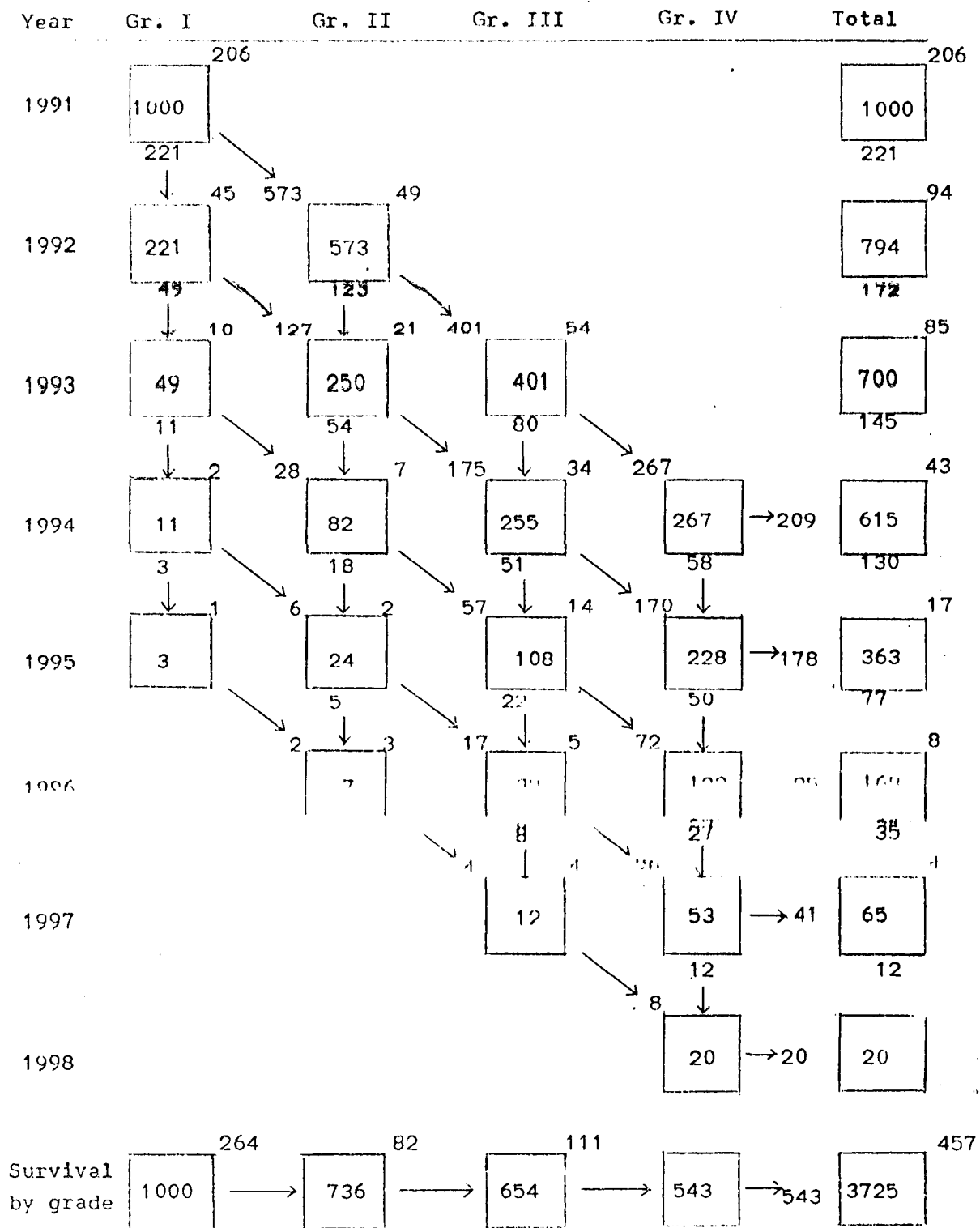


Diagram NO. 5.7

(Phek Male)

Theoretical Pupil's Flow and Cohort Reconstruction.

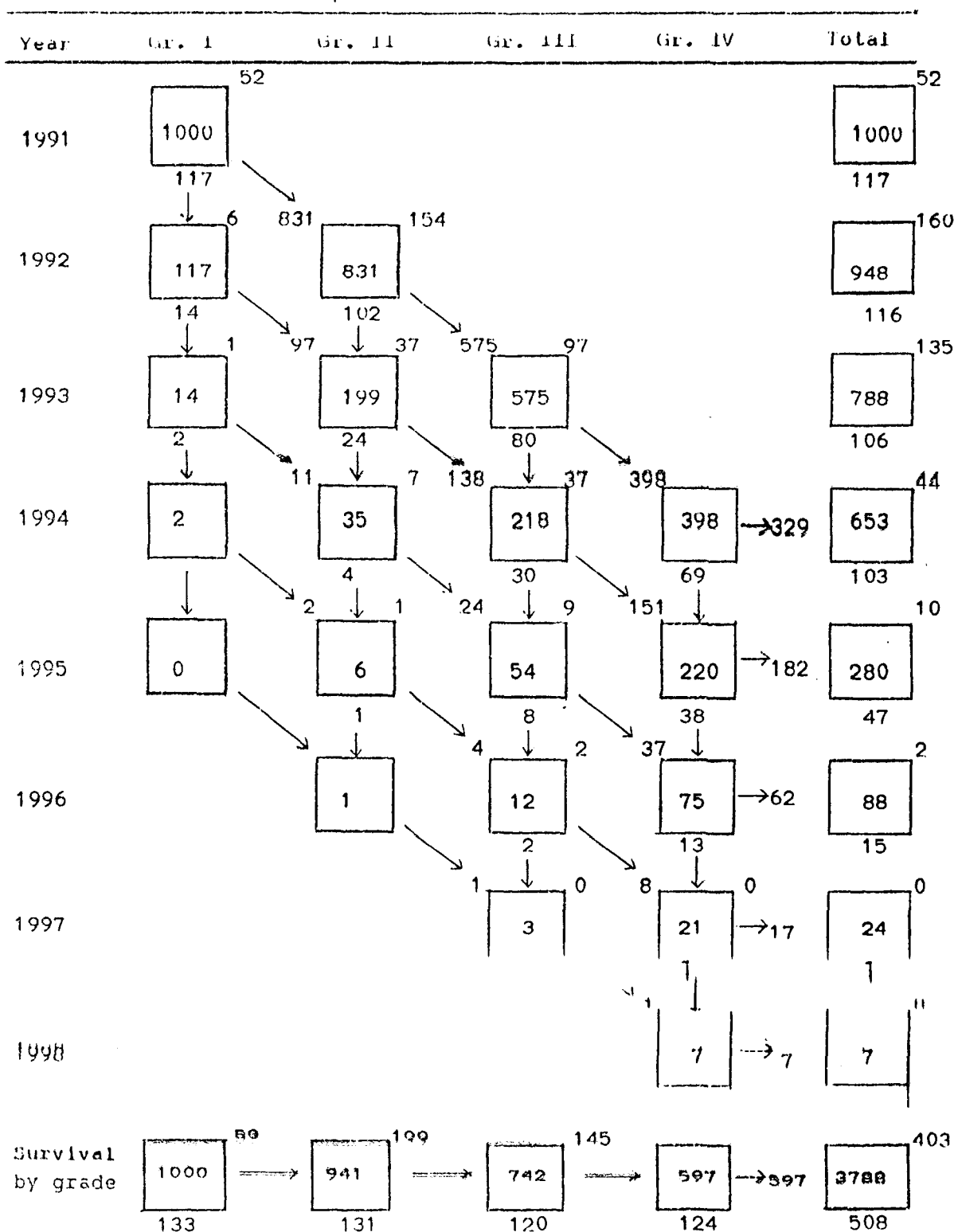


Diagram NO. 5.8

(Kohima Female)

Theoretical Pupil's Flow and Cohort Reconstruction

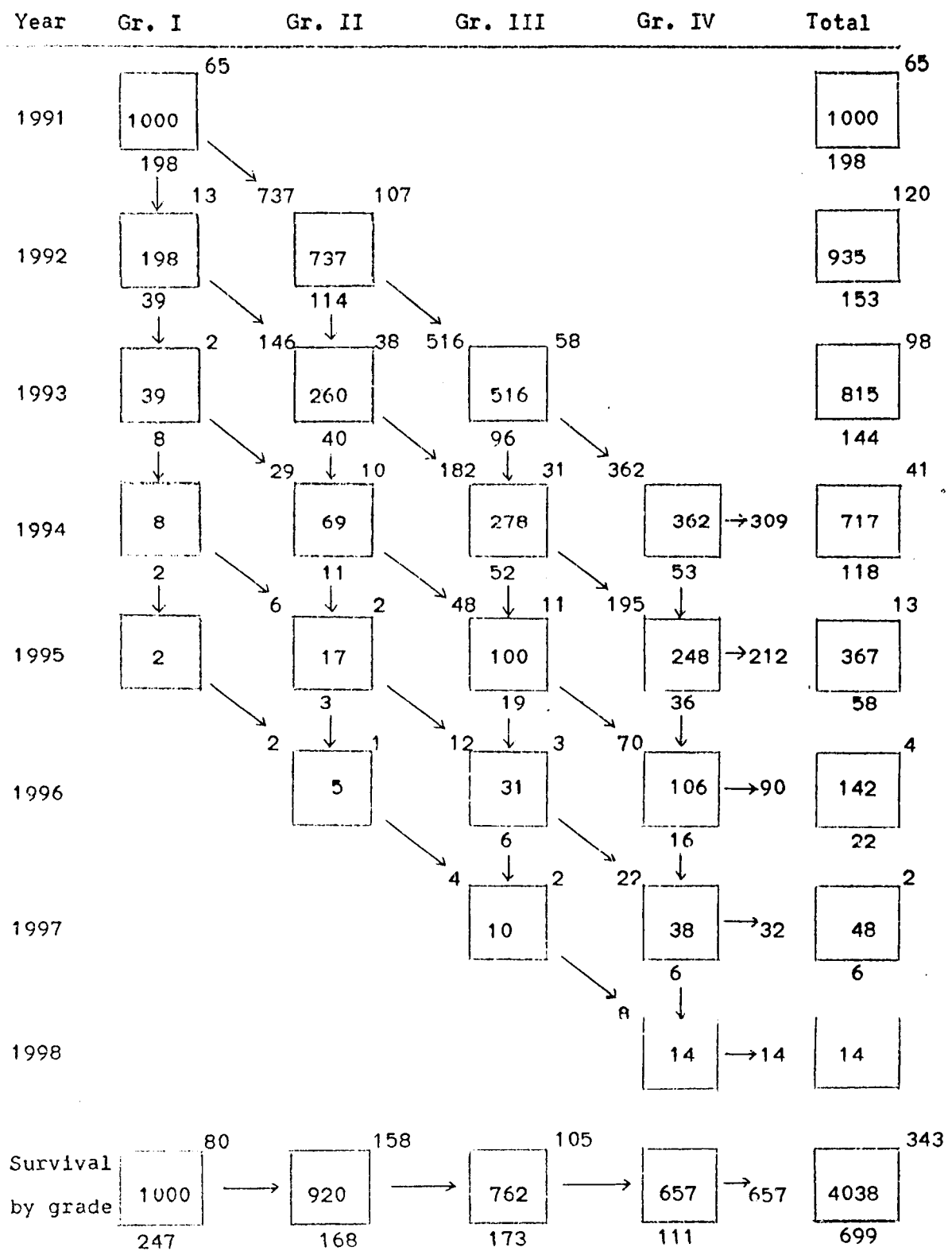




Diagram NO. 5.10  
(Tuensang Female)

Theoretical Pupil's Flow and Cohort Reconstruction.

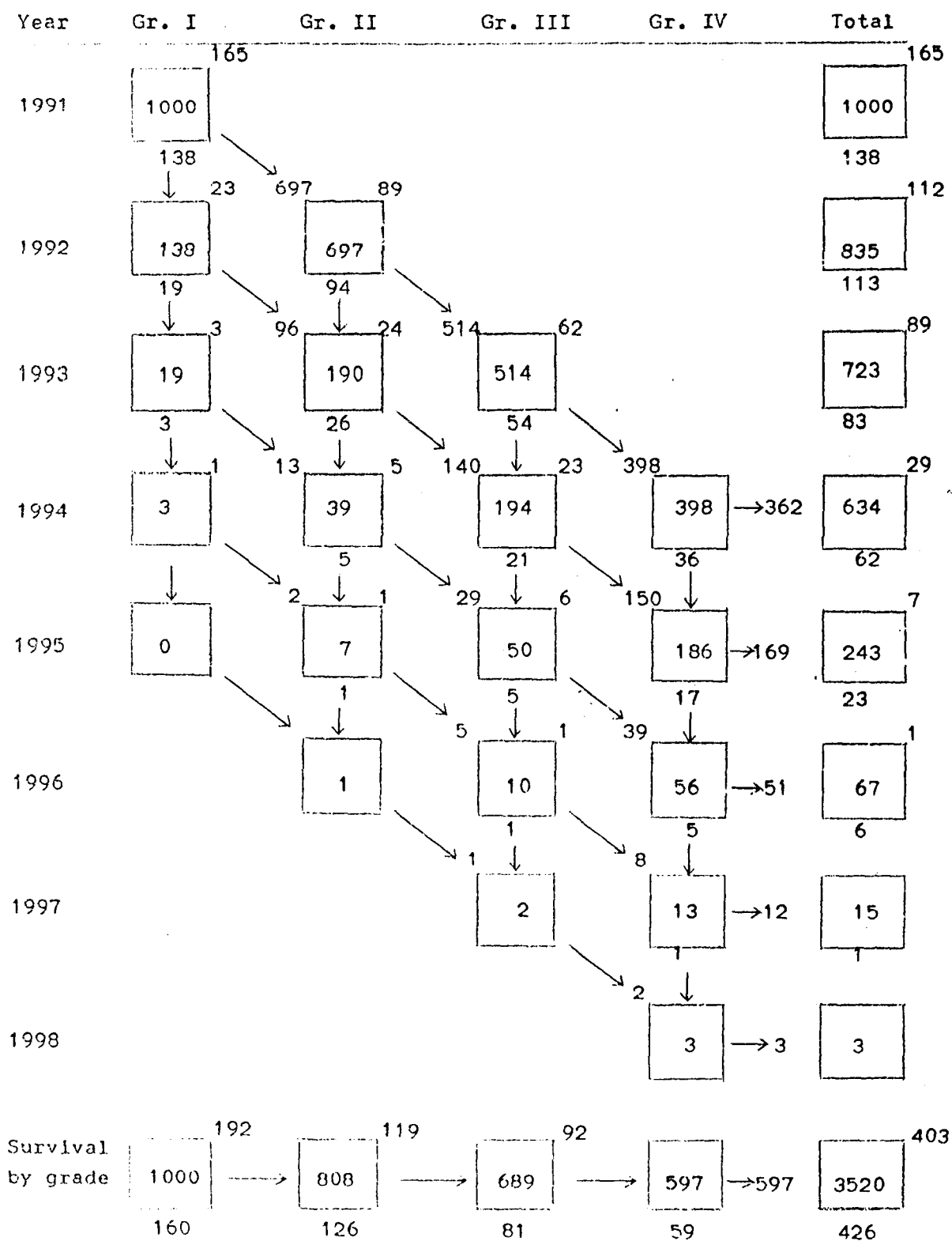


Diagram NO. 5.11  
(Zunheboto Female)

Theoretical Pupil's Flow and Cohort Reconstruction.

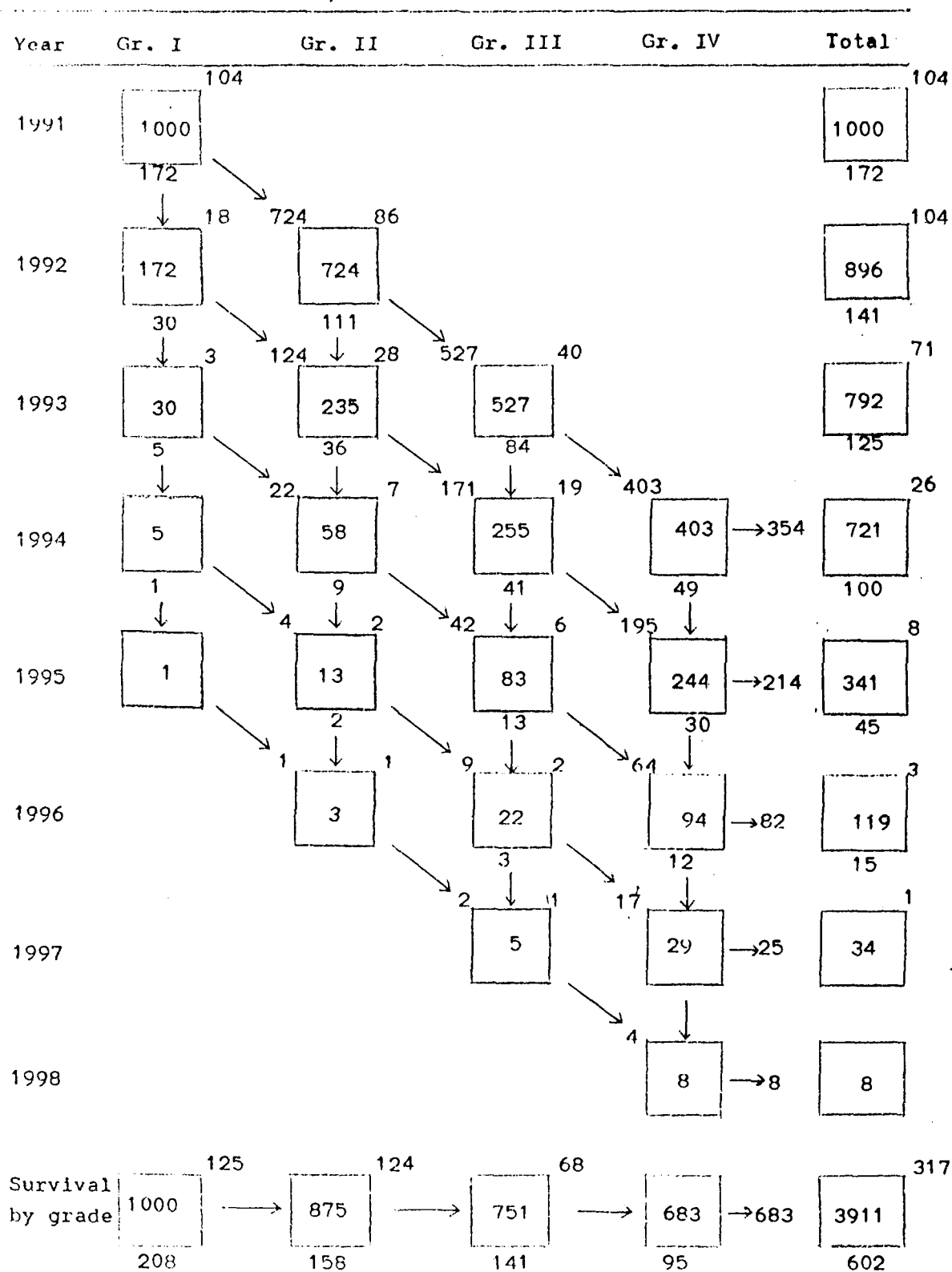


Diagram NO. 5.12

(Mon Female)

Theoretical Pupil's Flow and Cohort Reconstruction.

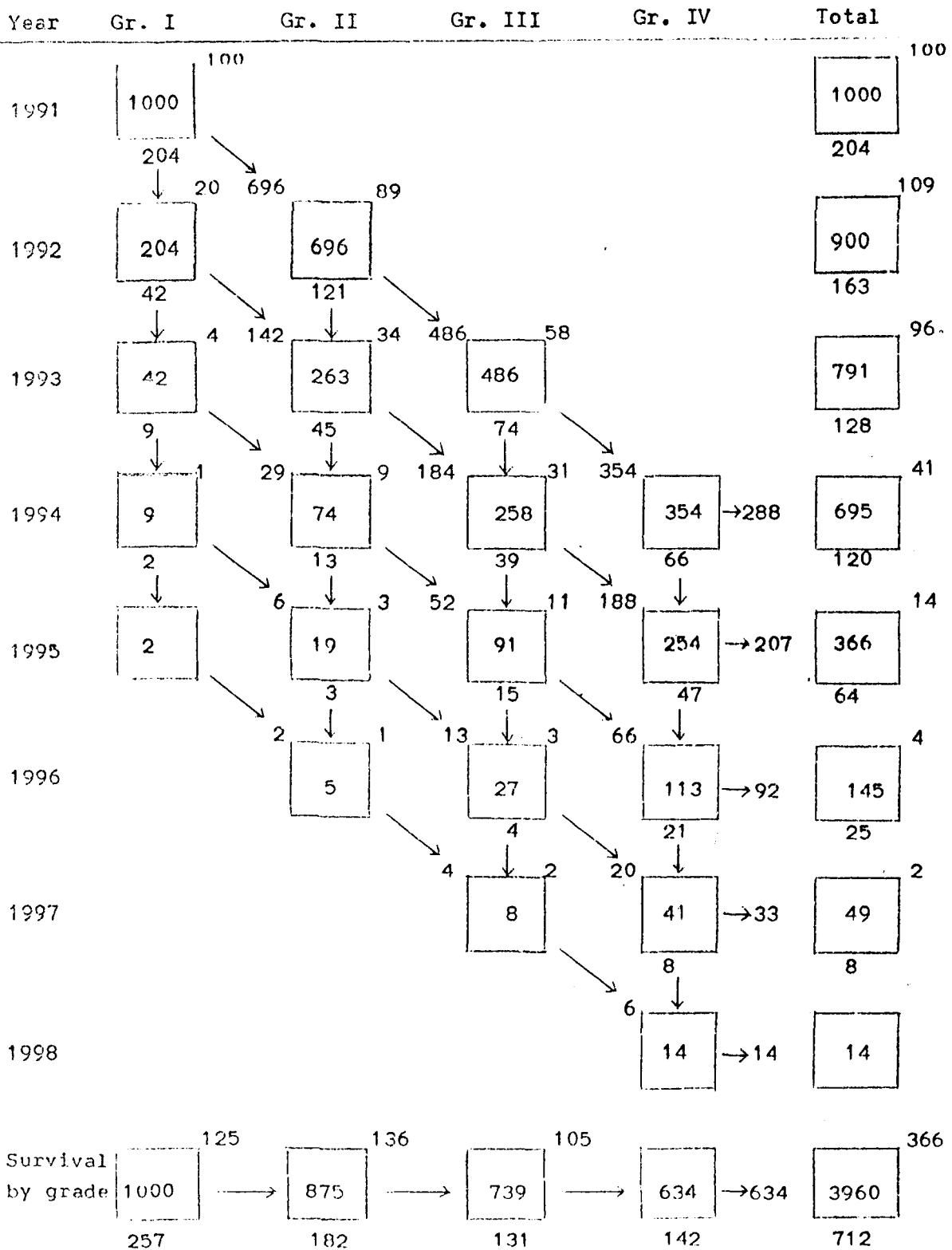


Diagram NO. 5.13

(Wokha Female)

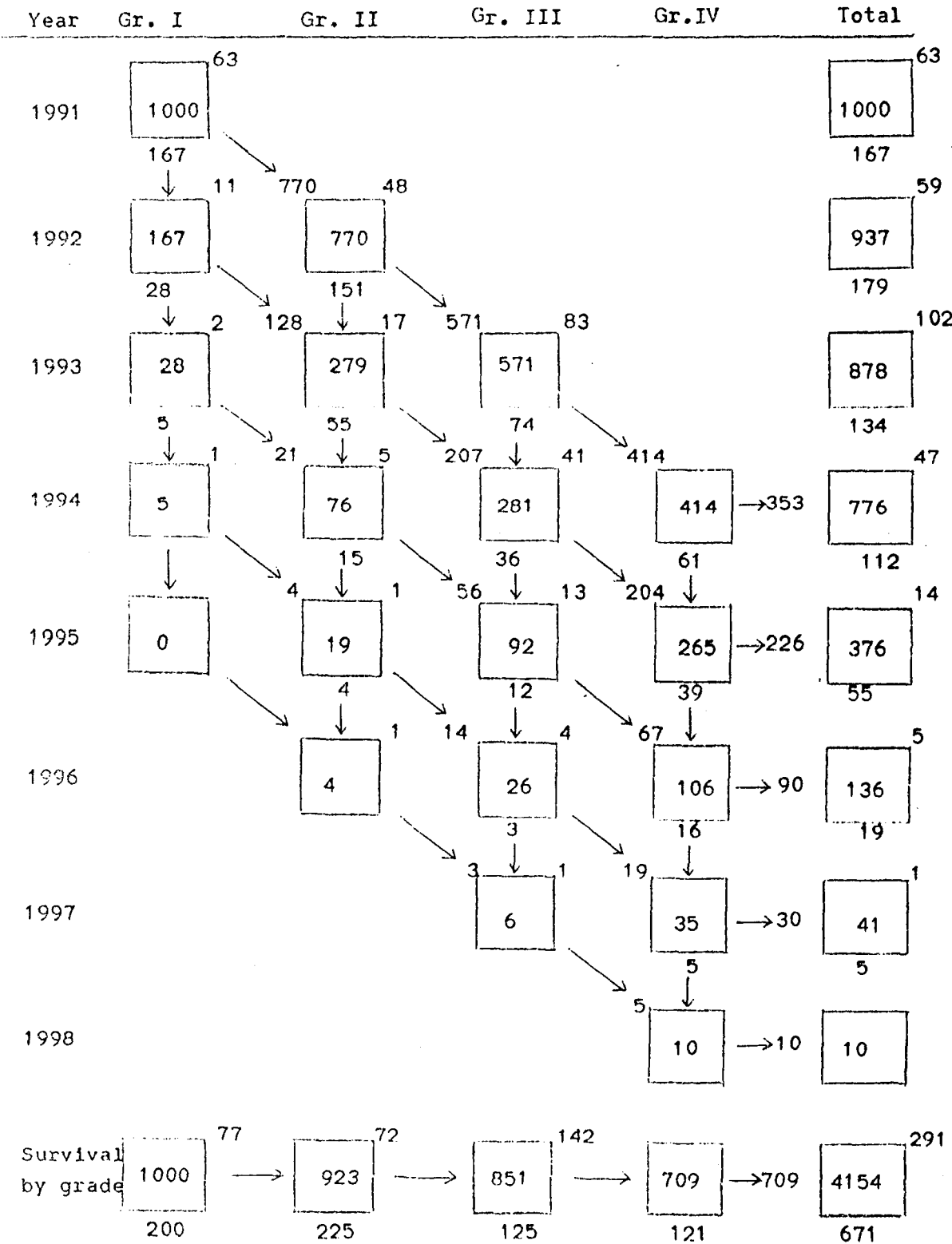
Theoretical Pupil's Flow and Cohort Reconstruction.



Diagram NO. 5.14

(Phek Female)

Theoretical Pupil's Flow and Cohort Reconstruction.



On the basis of the flow chart, educational wastage was determined in terms of pupil years wasted due to dropout, repetition and overall which are shown in table NO. 5.11.

Table NO. 5.11

Showing educational wastage in terms of pupil years with respect to sex (districtwise).

Districts	Pupil years wasted due to :					
	Dropout		Repetition		Overall due to both	
	Male	Female	Male	Female	Male	Female
Kohima	1050 (2)	866 (3)	342 (7)	544 (2)	1392 (3)	1410 (3)
Mokokchung	490 (7)	623 (7)	569 (3)	529 (4)	1059 (6)	1152 (6)
Tuensang	714 (4)	813 (4)	349 (6)	319 (7)	1062 (5)	1132 (7)
Zunheboto	650 (5)	694 (6)	379 (5)	485 (6)	1026 (7)	1179 (5)
Mon	646 (6)	878 (2)	745 (1)	546 (1)	1391 (4)	1426 (2)
Wokha	982 (3)	1178 (1)	571 (2)	528 (5)	1553 (1)	1706 (1)
Phek	1051 (1)	782 (5)	385 (4)	536 (3)	1400 (2)	1318 (4)
Nagaland	793	823	478	501	1271	1324

Note : Figure in the brackets indicate ranking.

Interpretation.

(1) Educational wastage due to dropout :- Table NO. 5.11 reveals the position of educational wastage in terms of pupil years wasted due to dropout for the different districts with

respect to sex as follows :-

Educational wastage in terms of pupil years wasted due to dropout is more for female as compared to that of male for all the districts except for Kohima and Phek, where educational wastage is more for male as compared to female in these two districts. When the educational wastage in terms of pupil years wasted due to dropout is arranged in descending order, we find the following ranking for both male and female.

M A L E			F E M A L E		
Districts	Pupil years wasted due to dropout	Rank	Districts	Pupil years wasted due to dropout	Rank
Phek	1051	1	Wokha	1178	1
Kohima	1050	2	Mon	878	2
Wokha	982	3	Kohima	866	3
Tuensang	714	4	Tuensang	813	4
Zunheboto	650	5	Phek	782	5
Mon	646	6	Zunheboto	694	6
Mokokchung	490	7	Mokokchung	623	7

The above ranking shows that the educational wastage in terms of pupil years wasted due to dropout is highest for male in Phek district followed by Kohima, Wokha, Tuensang, Zunheboto, Mon and the least is found in Mokokchung district. With respect to female, the same is found highest in Wokha district followed by Mon, Kohima, Tuensang, Phek, Zunheboto and least for Mokokchung district.

This indicate that male in Phek district and female

in Wokha district are contributing more to educational wastage, while, Mokokchung is doing better for both male and female as compared to other districts.

(ii) Educational wastage due to repetition :- Table NO. 5.11 reveals the position of educational wastage in terms of pupil years wasted due to repetition for the different districts with respect to sex as follows :-

The educational wastage in terms of pupil years wasted due to repetition is more for female for all the districts except Mokokchung, Tuensang, Mon and Wokha. For these districts, repetition rate is more for male as compared to female.

Arranged in decending order, we find the ranking for both male and female as follows :-

M A L E			F E M A L E		
Districts	Pupil years wasted due to repetition	Rank	Districts	Pupil years wasted due to repetition	Rank
Mon	745	1	Mon	546	1
Wokha	571	2	Kohima	544	2
Mokokchung	569	3	Phek	536	3
Phek	385	4	Mokokchung	529	4
Zunheboto	379	5	Wokha	528	5
Tuensang	349	6	Zunheboto	485	6
Kohima	342	7	Tuensang	319	7

The above ranking shows that educational wastage in terms of pupil years wasted for male is highest for Mon district

followed by Wokha, Mokokchung, Phek, Zunheboto, Tuensang and the least being Kohima district with respect to female. The same is highest for Mon followed by Kohima, Phek, Mokokchung, Wokha, Zunheboto and the least being Tuensang district.

This indicate that Wokha district has the highest rate of repetition for both male and female while, the least for male is found in Kohima district and female in Tuensang district. This further indicates that, Mon district contribute more for educational wastage while, male in Kohima district and female in Tuensang district are comparatively better as compared to male and female of other districts.

(iii) Educational wastage due to dropout and repetition :-

Table NO. 5.11 reveals the position of educational wastage in terms of pupil years wasted due to both dropout and repetition for the different districts with respect to sex as follows :-

The educational wastage due to both dropout and repetition in terms of pupil years wasted is more for female as compared to that of male for all the districts except Phek.

When the pupil years wasted due to both dropout and repetition are arranged in decending order, we find the following ranking for both male and female.

M A L E			F E M A L E		
Districts	Pupil years wasted due to Drop. & Repe.	Rank	Districts	Pupil years wasted due to Drop. & Repe.	Rank
Wokha	1553	1	Wokha	1706	1
Phek	1400	2	Mon	1426	2
Kohima	1392	3	Kohima	1410	3
Mon	1391	4	Phek	1318	4
Tuensang	1062	5	Zunheboto	1179	5
Mokokchung	1059	6	Mokokchung	1152	6
Zunheboto	1926	7	Tuensang	1132	7

The above ranking shows that, the pupil years wasted due to both dropout and repetition for male is highest for Wokha district followed by Phek, Kohima, Mon, Tuensang, Mokokchung and least for Zunheboto.

With respect to female, the highest pupil years wasted due to both dropout and repetition is found in Wokha district followed by Mon, Kohima, Phek, Zunheboto, Mokokchung and least for Tuensang district. This indicate that Wokha district contribute more to educational wastage in terms of pupil years wasted for both male and female as compared to other districts.

The analysis shows that pupil years wasted due to both dropout and repetition is found highest in Wokha district for both male and female while, the least for male is found in Zunheboto and female in Tuensang district. This further indicates that Wokha district contribute more to educational wastage

terms of pupil years wasted due to dropout and repetition while males in Zunheboto district and females in Tuensang district are much better as compared to males and females of other districts.

((B) With respect to location (Districtwise))

On the basis of the promotion rate, repetition rate, and dropout rate, the pupils flow charts were constructed to show what will happen to a cohort of 1000 pupils entering grade I in 1991 for rural and urban location separately for each district which are shown in diagram NO. 15-28.

Theoretical Pupil's flow and Cohort Reconstruction

Year	Gr.I	Gr.II	Gr.III	Gr.IV	Total
1991	1000				1000
1992	133	703			836
1993	18	169	547		734
1994	2	31	211	371	615
1995	0	4	55	176	235
1996		0	11	53	64
1997			2	12	14
1998				2	2
Survival by grade	1000	810	706	559	3500

Flow Diagram Details:

- 1991: Gr.I (1000) → Gr.II (703) [Loss: 22]; Gr.II (703) → Gr.III (547) [Loss: 19]; Gr.III (547) → Gr.IV (371) [Loss: 176]
- 1992: Gr.I (133) → Gr.II (703) [Loss: 22]; Gr.II (703) → Gr.III (547) [Loss: 19]; Gr.III (547) → Gr.IV (371) [Loss: 176]
- 1993: Gr.I (18) → Gr.II (169) [Loss: 3]; Gr.II (169) → Gr.III (547) [Loss: 18]; Gr.III (547) → Gr.IV (371) [Loss: 176]
- 1994: Gr.I (2) → Gr.II (31) [Loss: 1]; Gr.II (31) → Gr.III (211) [Loss: 4]; Gr.III (211) → Gr.IV (371) [Loss: 160]; Gr.IV (371) → Total (615) [Loss: 42]
- 1995: Gr.I (0) → Gr.II (4) [Loss: 1]; Gr.II (4) → Gr.III (55) [Loss: 1]; Gr.III (55) → Gr.IV (176) [Loss: 121]; Gr.IV (176) → Total (235) [Loss: 59]
- 1996: Gr.II (0) → Gr.III (11) [Loss: 3]; Gr.III (11) → Gr.IV (53) [Loss: 42]; Gr.IV (53) → Total (64) [Loss: 11]
- 1997: Gr.III (2) → Gr.IV (12) [Loss: 7]; Gr.IV (12) → Total (14) [Loss: 2]
- 1998: Gr.IV (2) → Total (2) [Loss: 0]

Theoretical Pupil's flow And Cohort Reconstruction

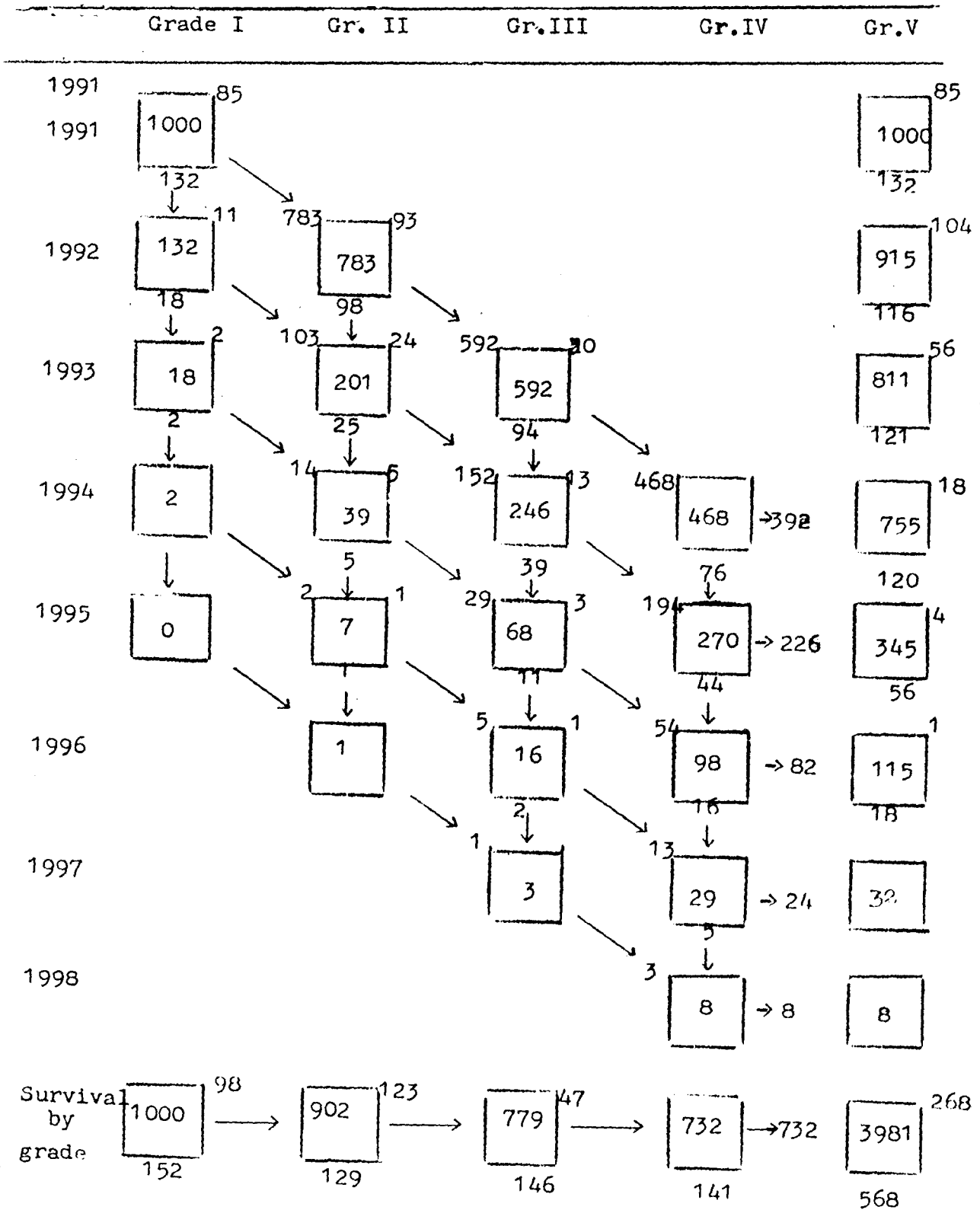


Diagram NO.5. 17

( Tuensang Urban )

234

Theoretical Pupil's flow and Cohort Reconstruction.

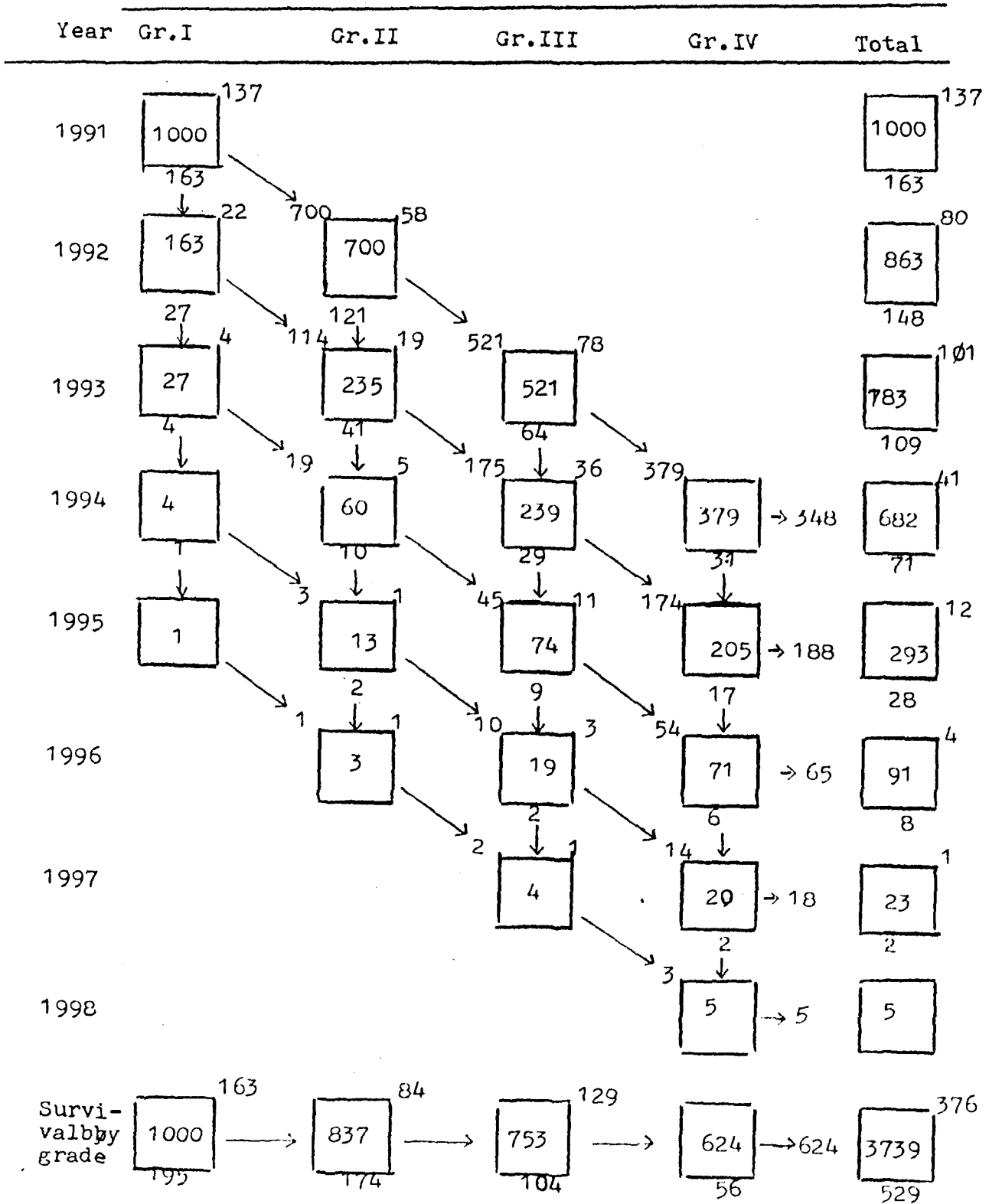


Diagram NO.5. 18

( Zunheboto Urban )

235

Theoretical Pupil's flow and Cohort Reconstruction

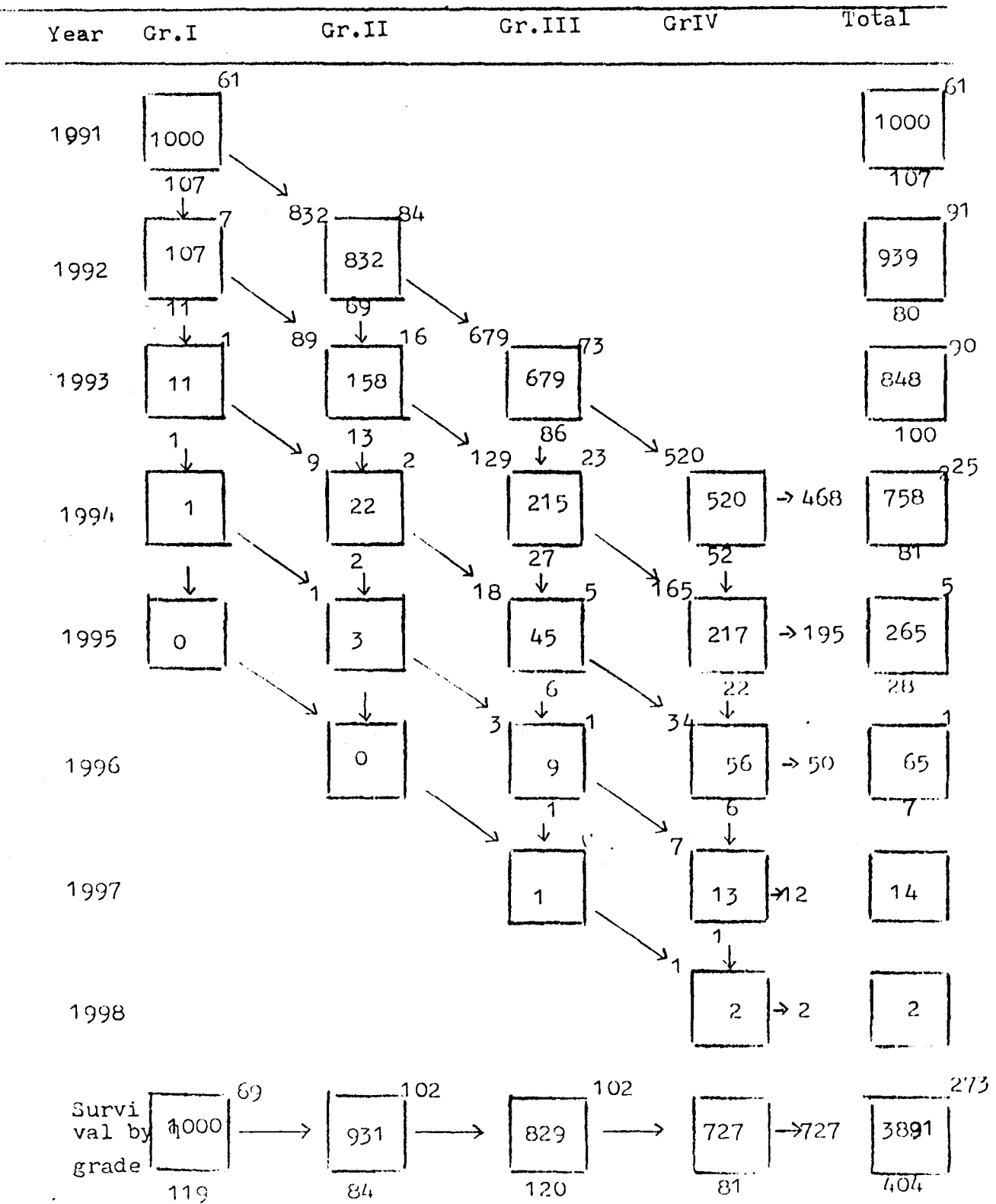


Diagram NO. 5. 19

(Mon Urban)

Theoretical Pupil's Flow and Cohort Reconstruction.

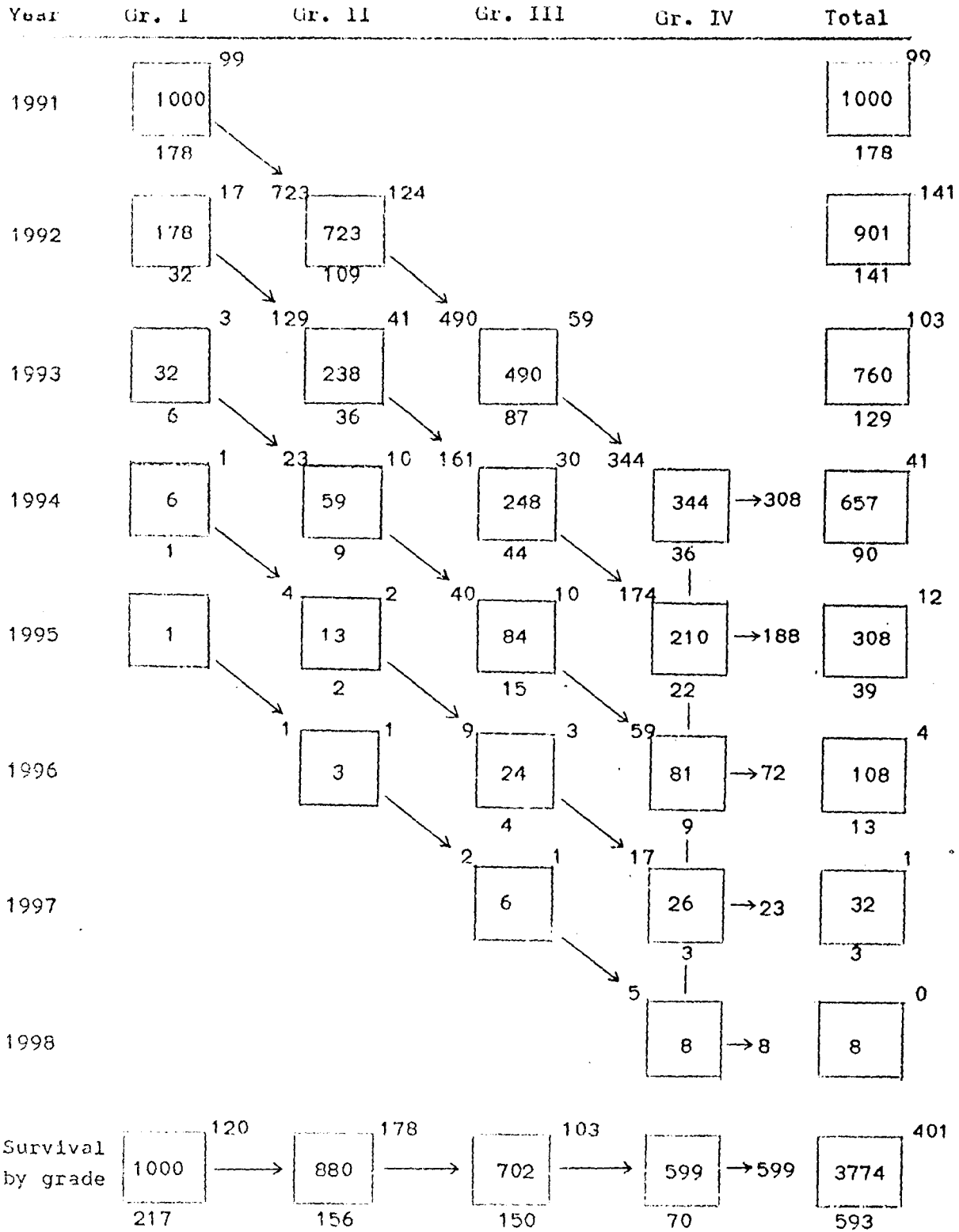


Diagram NO. 5. 20

(Wokha Urban)

Theoretical Pupil's Flow and Cohort Reconstruction.

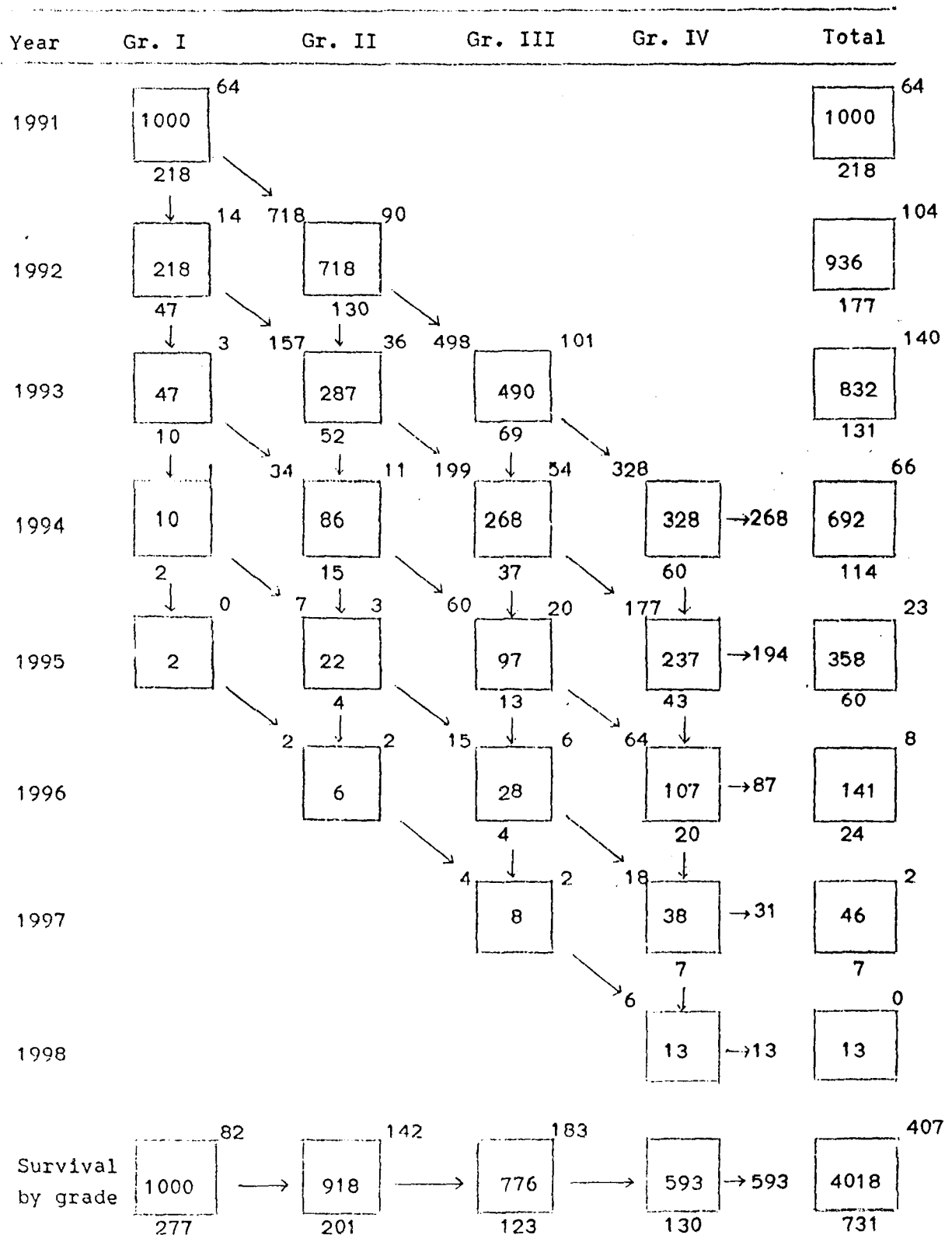


Diagram NO. 5.21

(Phek Urban)

Theoretical Pupil's Flow and Cohort Reconstruction.

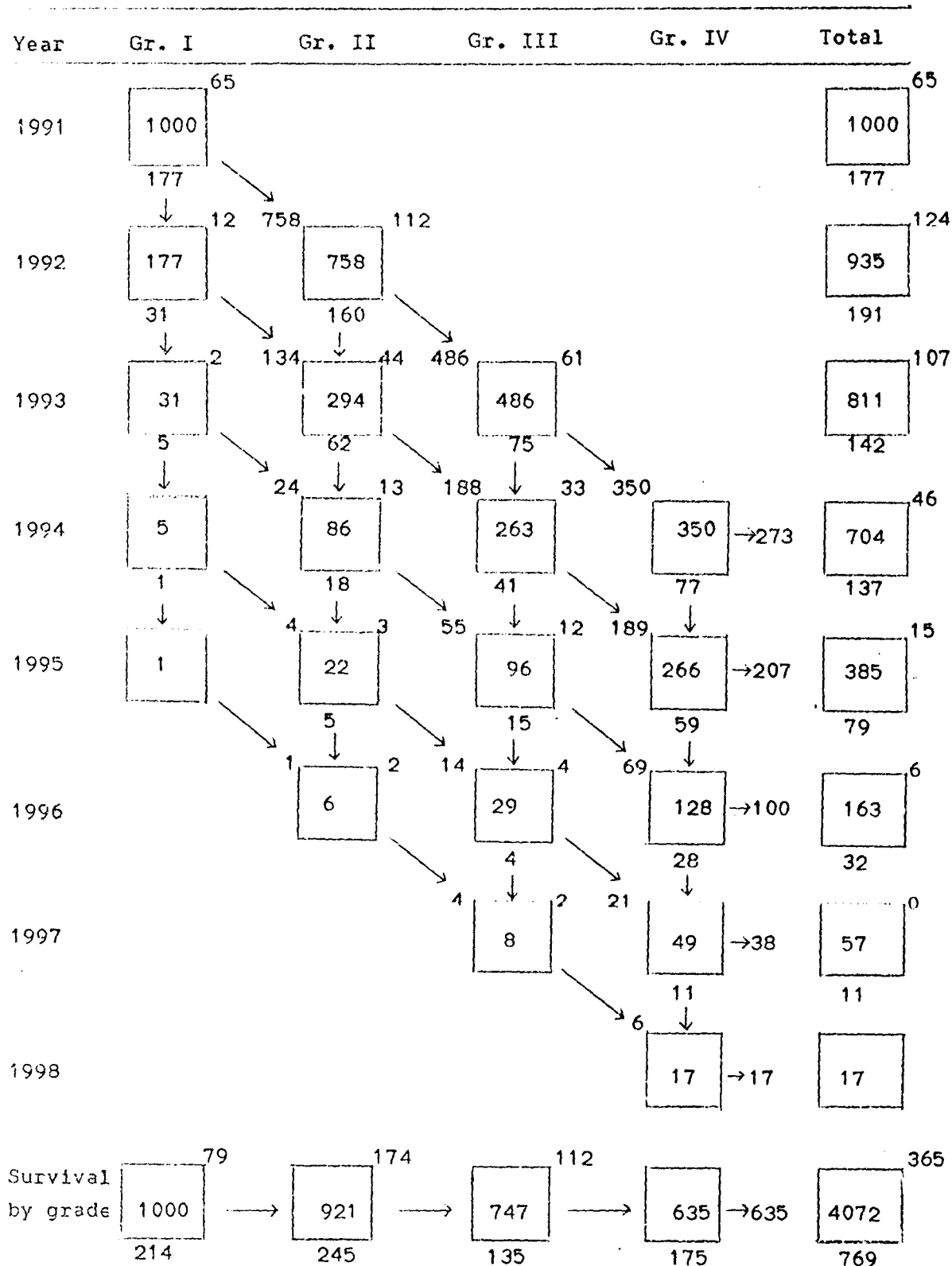


Diagram NO. 5.22

(Kohima Rural)

Theoretical Pupil's Flow and Cohort Reconstruction.

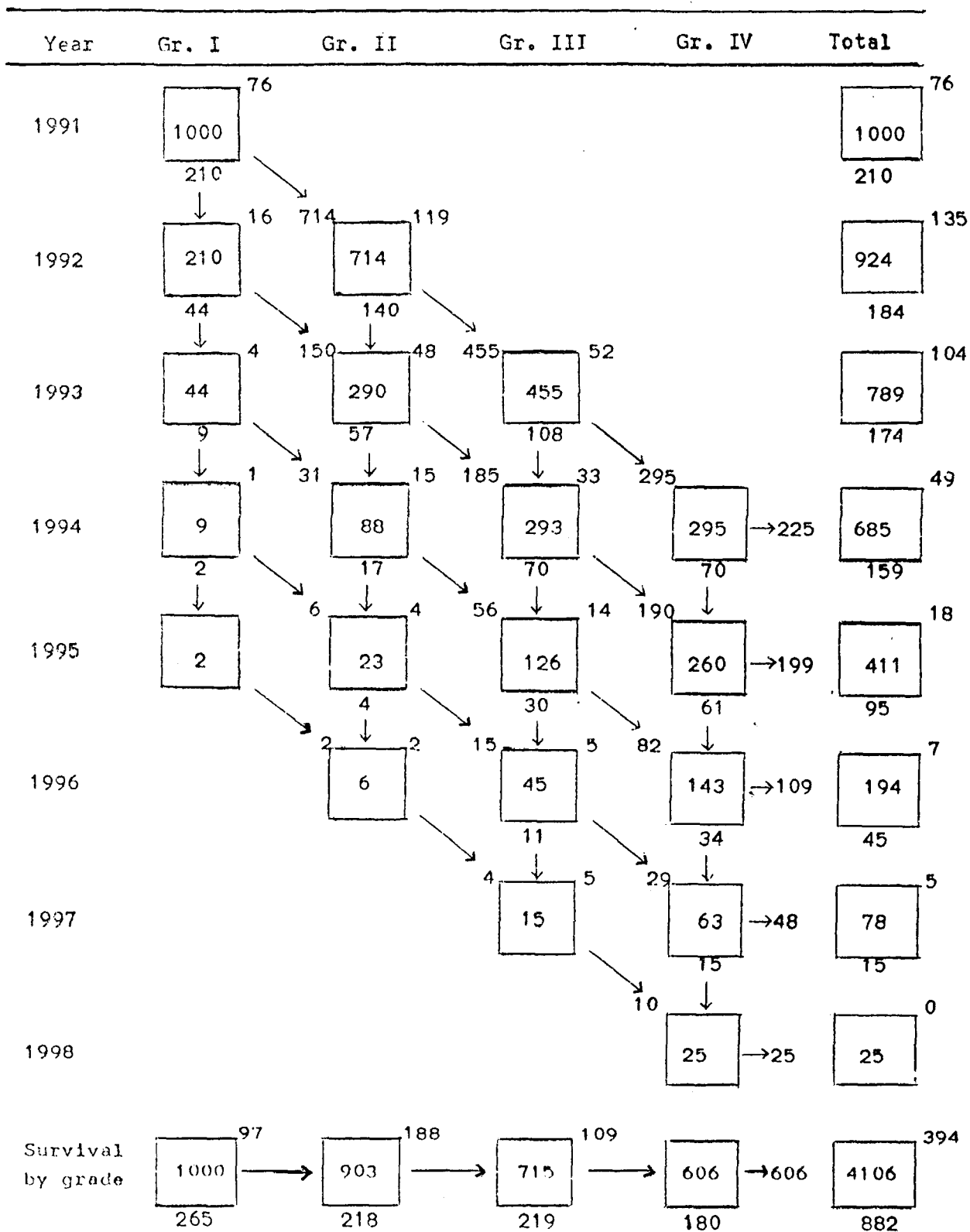


Diagram NO. 5.23

(Mokokchung Rural)

Theoretical Pupil's Flow and Cohort Reconstruction.

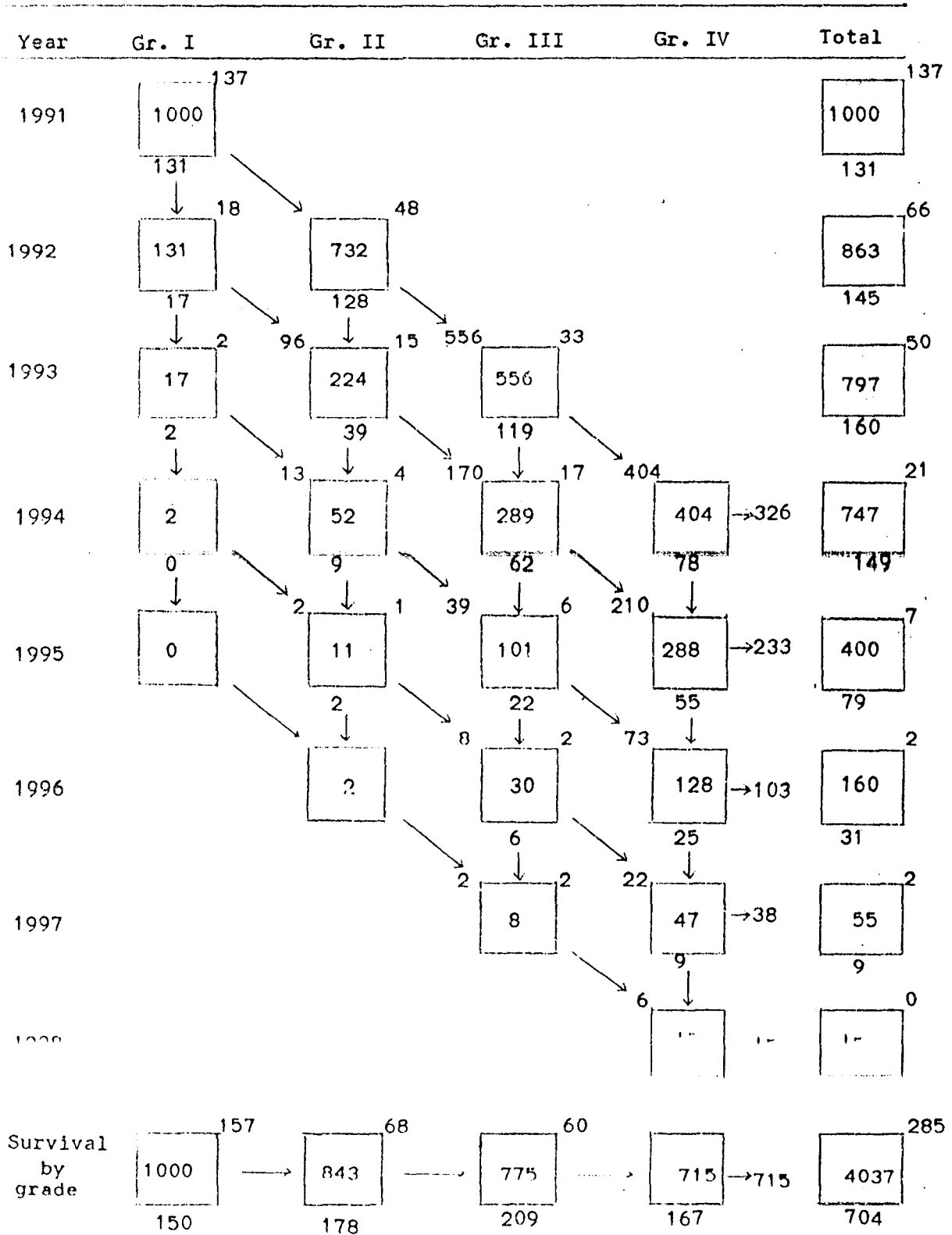


Diagram NO. 5.24  
(Tuensang Rural)

Theoretical Pupil's Flow and Cohort Reconstruction.

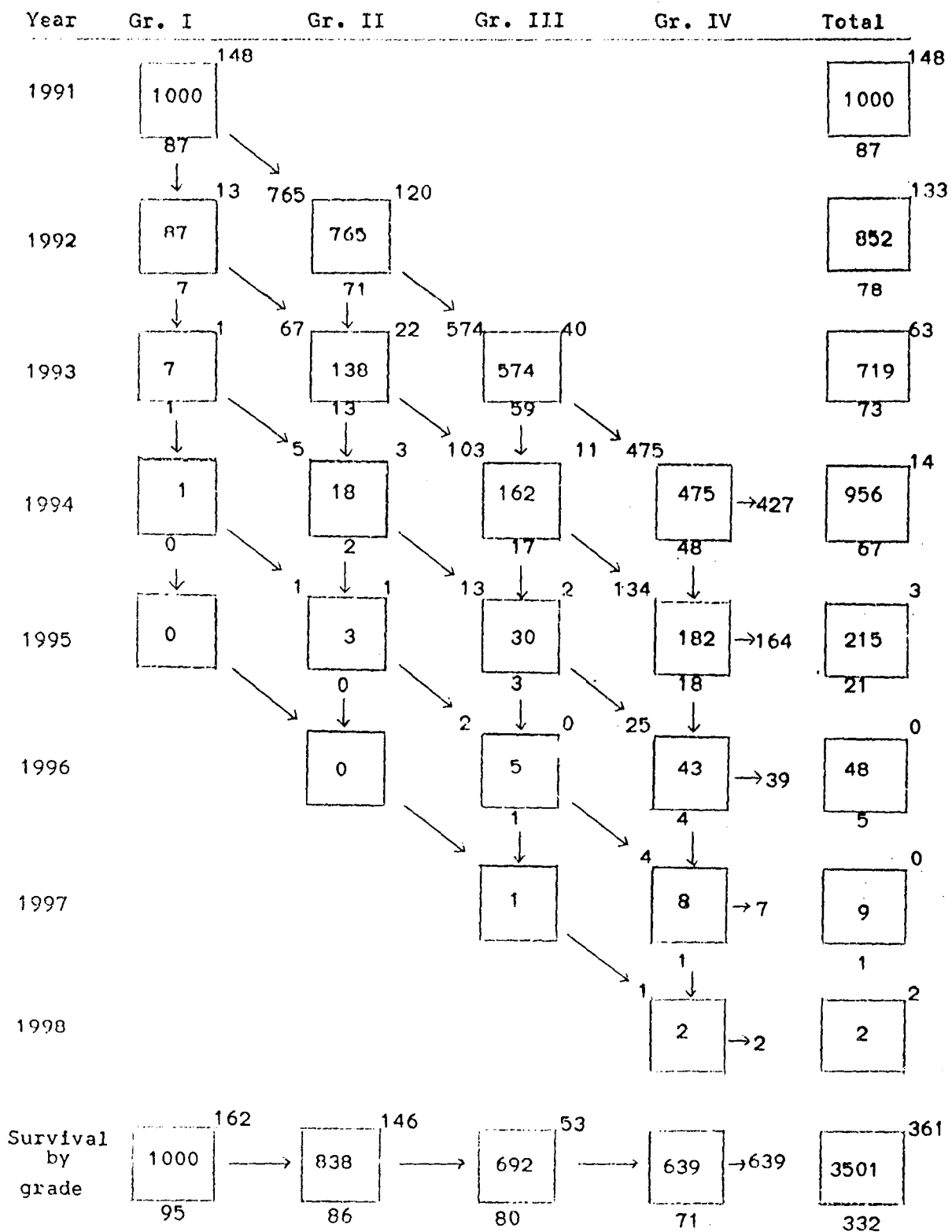


Diagram NO. 5.25

(Zunheboto Rural)

Theoretical Pupil's Flow and Cohort Reconstruction.

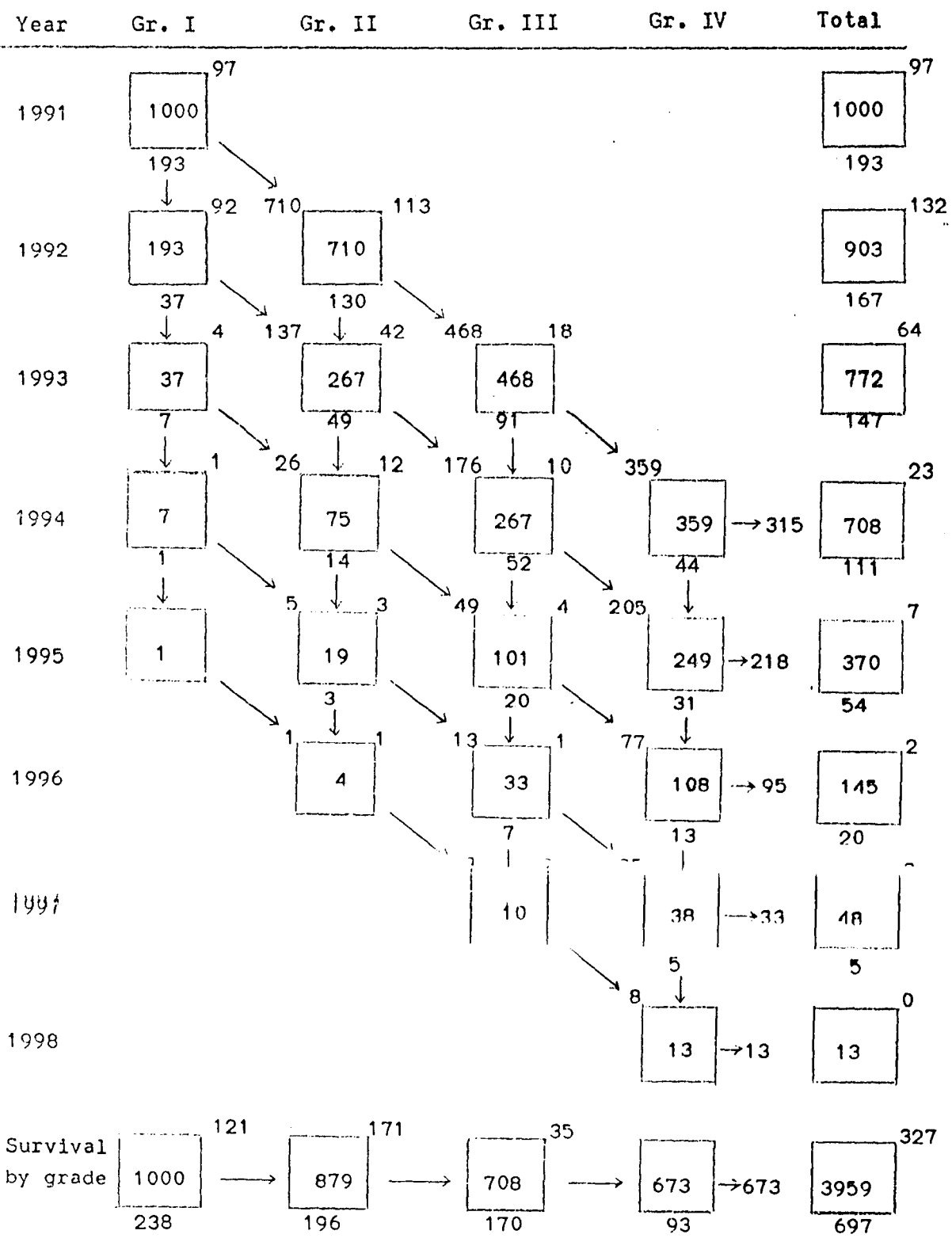


Diagram NO. 5.26

(Mon Rural)

Theoretical Pupil's Flow and Cohort Reconstruction.

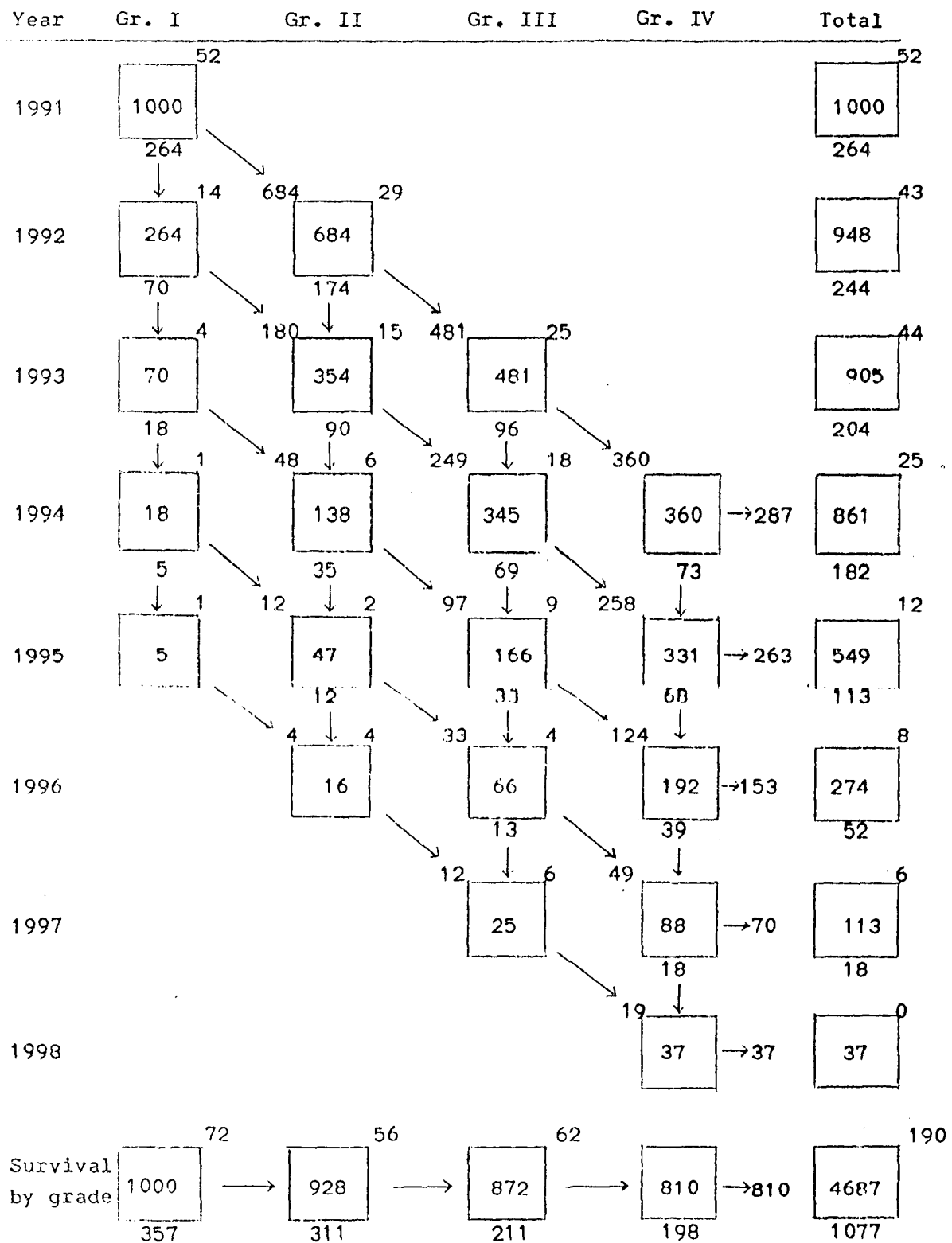


Diagram NO. 5. 27

(Wokha Rural)

Theoretical Pupil's Flow and Cohort Reconstruction.

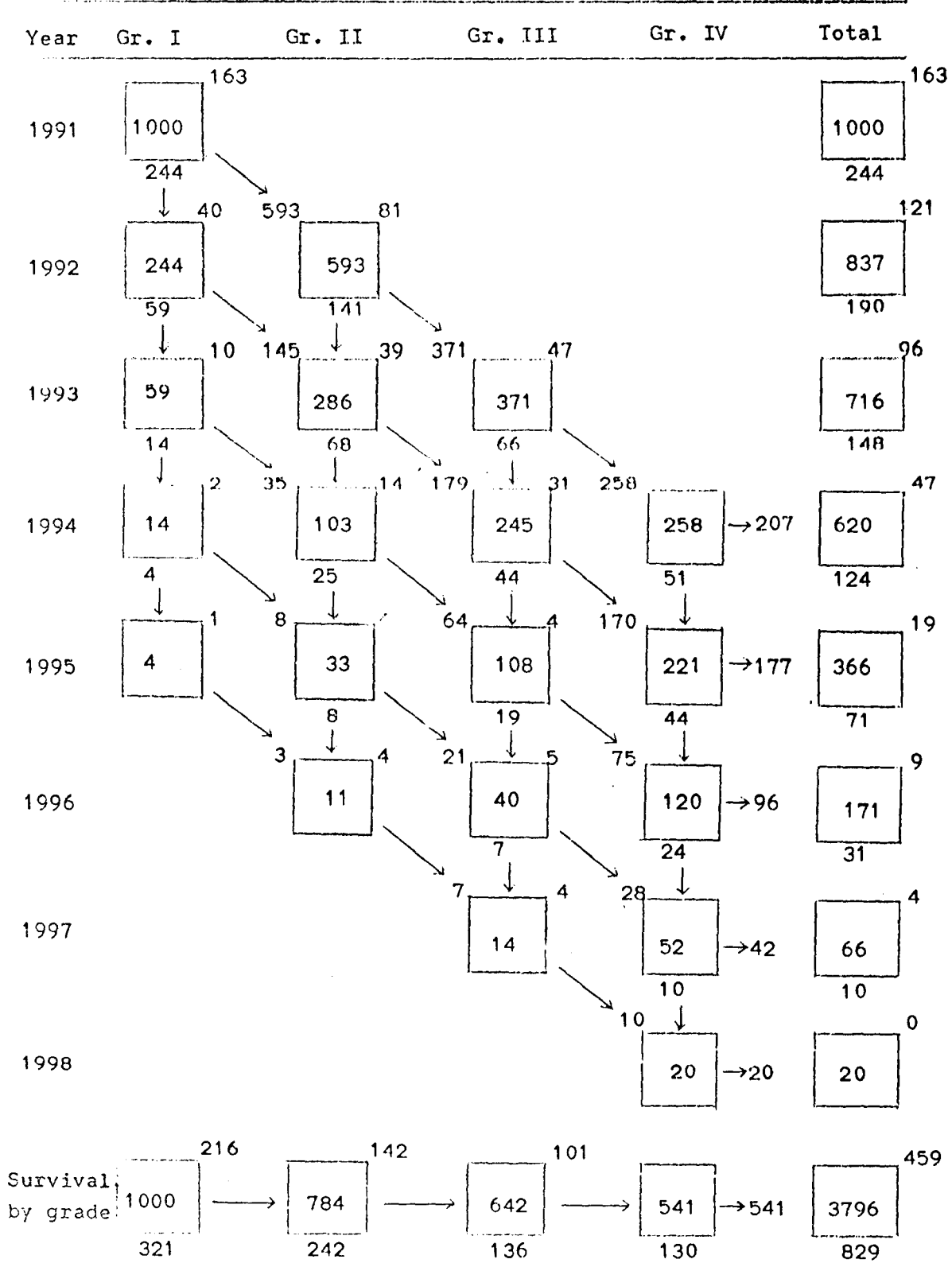
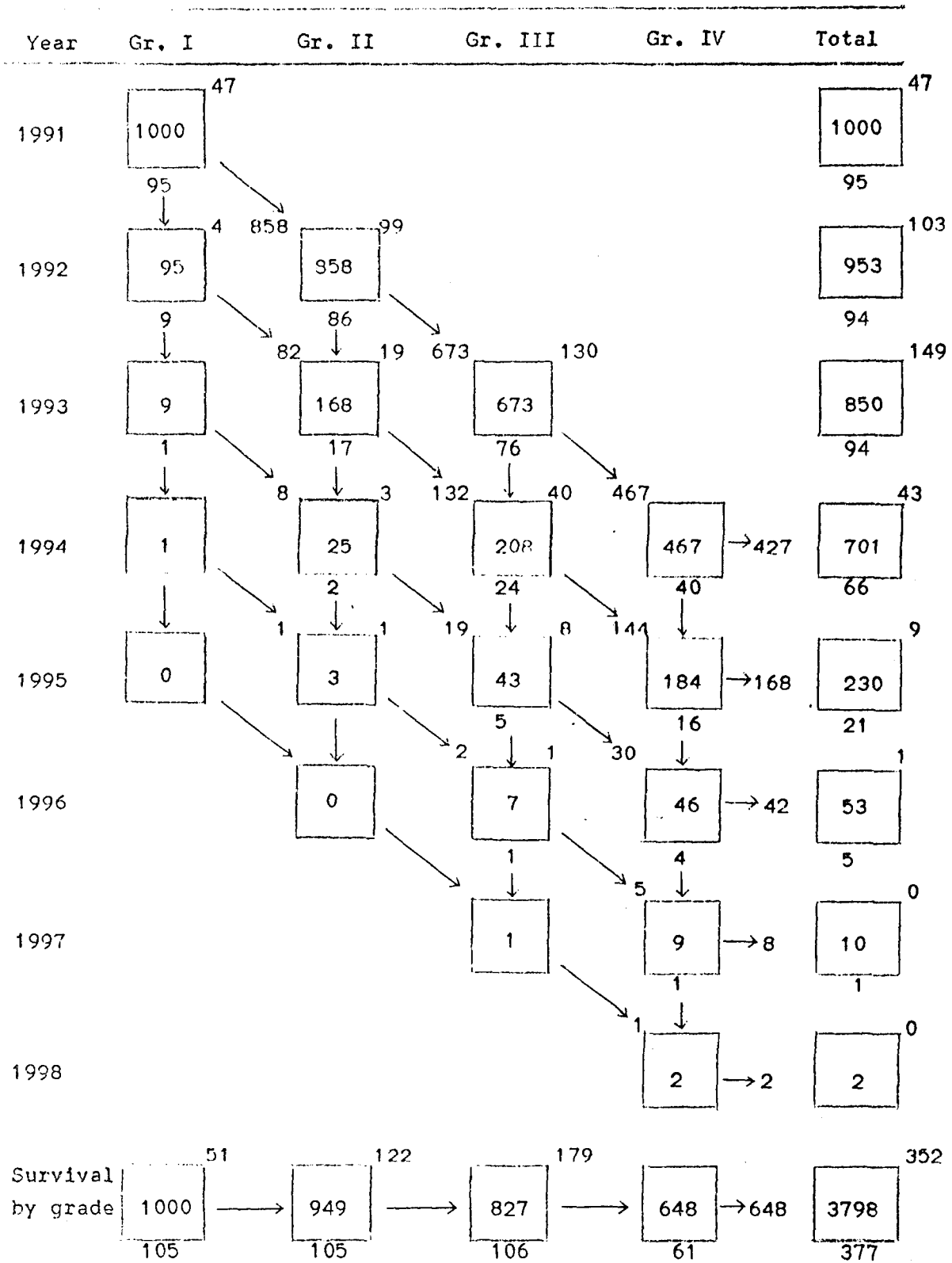


Diagram NO. 5.28

(Phek Rural)

Theoretical Pupil's Flow and Cohort Reconstruction.



On the basis of these flow charts, the educational wastage was determined in terms of pupil years wasted due to dropout, repetition and overall with respect to school location for the different districts which is shown in table NO. 5.12.

Table NO. 5.12

Showing the educational wastage in terms of pupil years wasted due to dropout, repetition and overall with respect to school location.

DISTRICTS	Pupil years wasted due to :					
	Dropout		Repetition		Overall	
	R	U	R	U	R	U
Kohima	1021	967	661	297	168	1264
Mokokchung	564	559	613	494	1177	1053
Tuensang	674	855	271	392	945	1297
Zunheboto	708	644	559	339	1267	983
Mon	520	945	927	433	1447	1378
Phek	923	943	283	589	1206	1532
Nagaland Total	774	856	547	493	1321	1295

Interpretation :

Table NO. 5.12 reveals the educational wastage in terms of pupil years wasted for the different districts with respect to school location as follows :-

(i) Educational wastage due to dropout. The data reveals that educational wastage due to dropout is more for urban schools as compared to that of rural schools for all the districts except Kohima, Mokokchung and Zunheboto, where educational wastage is more for rural schools as compared to urban schools in these districts.

When the educational wastage in terms of pupil years wasted due to dropout are arranged in decending order, we find the following ranking for both rural and urban schools.

R U R A L			U R B A N		
Districts	Pupil years wasted due to dropout	Rank	Districts	Pupil years wasted due to dropout	Rank
Wokha	1057	1	Wokha	1133	1
Kohima	1021	2	Kohima	967	2
Phek	923	3	Mon	945	3
Zunheboto	708	4	Phek	943	4
Tuensang	674	5	Tuensang	855	5
Mokokchung	564	6	Zunheboto	644	6
Mon	520	7	Mokokchung	559	7

The above ranking reveals that, the educational wastage in terms of pupil years wasted due to dropout for rural schools is found highest for Wokha followed by Kohima, Phek, Zunheboto, Tuensang, Mokokchung and least for Mon district.

With respect to urban schools, the same is found highest for Wokha district followed by Kohima, Mon, Phek, Tuensang and least for Zunheboto district.

The above analysis indicates that, Wokha district has the highest pupil years wasted due to dropout for both rural and urban schools, hence, contribute more to educational wastage as compared to other districts. While, rural schools in Mon and urban schools in Mokokchung are comparatively doing

much better as compared to rural and urban schools of other districts.

(ii) Educational wastage due to repetition.

Table NO. 5.12 reveals the educational wastage in terms of pupil years wasted for the different districts with respect to school location as follows :-

The districtwise analysis of the data reveals that educational wastage in terms of pupil years wasted due to repetition is more for rural schools as compared to that of urban schools for all the districts except Tuensang and Phek districts. For these two districts, educational wastage due to repetition is found more for urban schools as compared to that of rural schools.

When the educational wastage in terms of pupil years wasted due to repetition are arranged in decending order, we find the following ranking for both rural and urban schools.

R U R A L			U R B A N		
Districts	Pupil years wasted due to repetition	Rank	Districts	Pupil years wasted due to repetition	Rank
Mon	927	1	Phek	589	1
Kohima	661	2	Wokha	513	2
Mokokchung	613	3	Mokokchung	494	3
Wokha	575	4	Mon	433	4
Zunheboto	559	5	Tuensang	392	5
Phek	283	6	Zunheboto	339	6
Tuensang	271	7	Kohima	297	7

The above ranking shows that the educational wastage

in terms of pupil years wasted due to repetition for rural school is highest for Mon district followed by Kohima, Mokokchung, Wokha and the least being Phek district.

with respect to urban schools, the same is found highest for rural schools in Phek district followed by Wokha, Mokokchung, Mon, Tuensang, Zunheboto and the least being Kohima district.

This indicates that, Mon district for rural school and Phek district for urban school contributes more to educational wastage as compared to other districts. While, rural schools in Tuensang and urban schools in Kohima districts are comparatively doing better as compared to rural and urban schools of other districts.

(iii) Educational wastage due to overall (i.e, due to both dropout and repetition).

The districtwise analysis of the data reveals that educational wastage due to both dropout and repetition with respect to school location is more for rural schools as compared to urban schools for all the districts except Tuensang, Wokha and Phek. For these three districts, the same is more for urban schools as compared to that of rural schools. When the educational wastage in terms of pupil years wasted due to both dropout and repetition is arranged in descending order we find the following ranking for both rural and urban schools.

R U R A L			U R B A N		
Districts	Pupil years wasted due to dropout	Rank	Districts	Pupil years wasted due to dropout	Rank
Kohima	1682	1	Wokha	1646	1
Wokha	1632	2	Phek	1532	2
Mon	1447	3	Mon	1378	3
Zunheboto	1267	4	Tuensang	1292	4
Phek	1206	5	Kohima	1264	5
Mokokchung	1177	6	Mokokchung	1053	6
Tuensang	945	7	Zunheboto	983	7

The above analysis indicate that Wokha and Kohima districts contribute more to educational wastage in terms of pupil years wasted due to both dropout and repetition, while, rural schools in Tuensang district and urban school in Zunheboto are doing better than rural and urban schools in other districts.

The above analysis shows that the educational wastage in terms of pupil years wasted due to dropout is more for urban schools as compared to rural schools. While, educational wastage due to repetition is more for rural schools as compared to urban schools. But, when dropout and repetition are taken together, the educational wastage finally seems to be more for rural schools as compared to urban schools. It shows that rural schools are contributing more to educational wastage as compared to urban schools.

S E C T I O N - IIP A R T - II.

ANALYSIS AND INTERPRETATION OF THE EDUCATIONAL  
WASTAGE DATA DUE TO DROPOUT, REPETITION AND  
OVERALL (i.e, DUE TO BOTH DROPOUT AND REPETI-  
TION) FOR WHOLE NAGALAND WITH RESPECT TO SEX,  
LOCATION AND TOTAL NAGALAND.

(A) With respect to sex :

On the basis of promotion rate, repetition rate and dropout rate, the pupil's flow charts are constructed to show what will happen to a cohort of 1000 pupils entering grade I in 1991 for whole Nagaland with respect to sex, school location and total Nagaland, which are shown in diagram NO. 29 - 33.

Diagram NO. 5.32

(Total Urban, Nagaland)

Theoretical Pupil's Flow and Cohort Reconstruction.

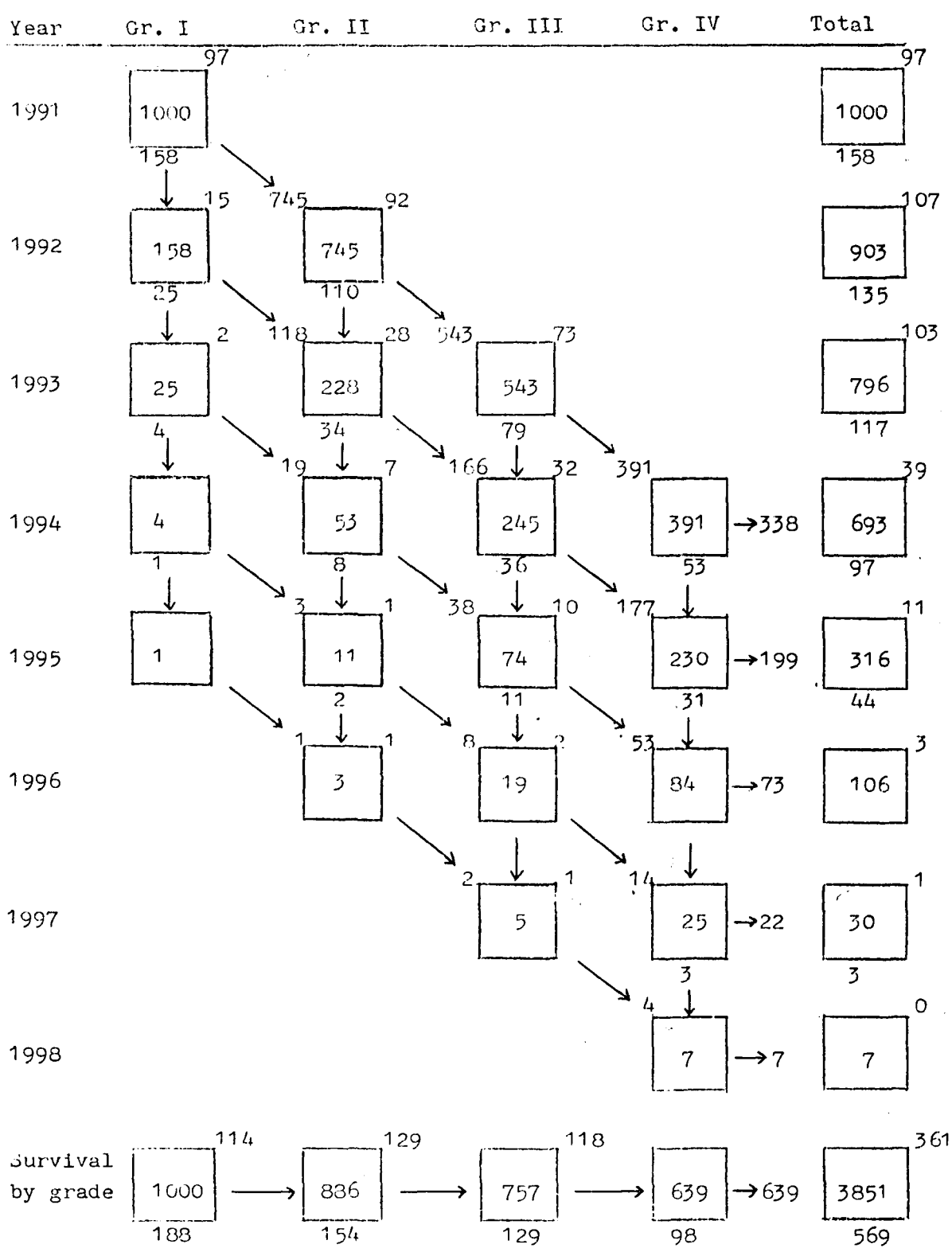


Diagram NO. 5.29  
(Total Male, Nagaland)

Theoretical Pupil's flow and Cohort Reconstruction.

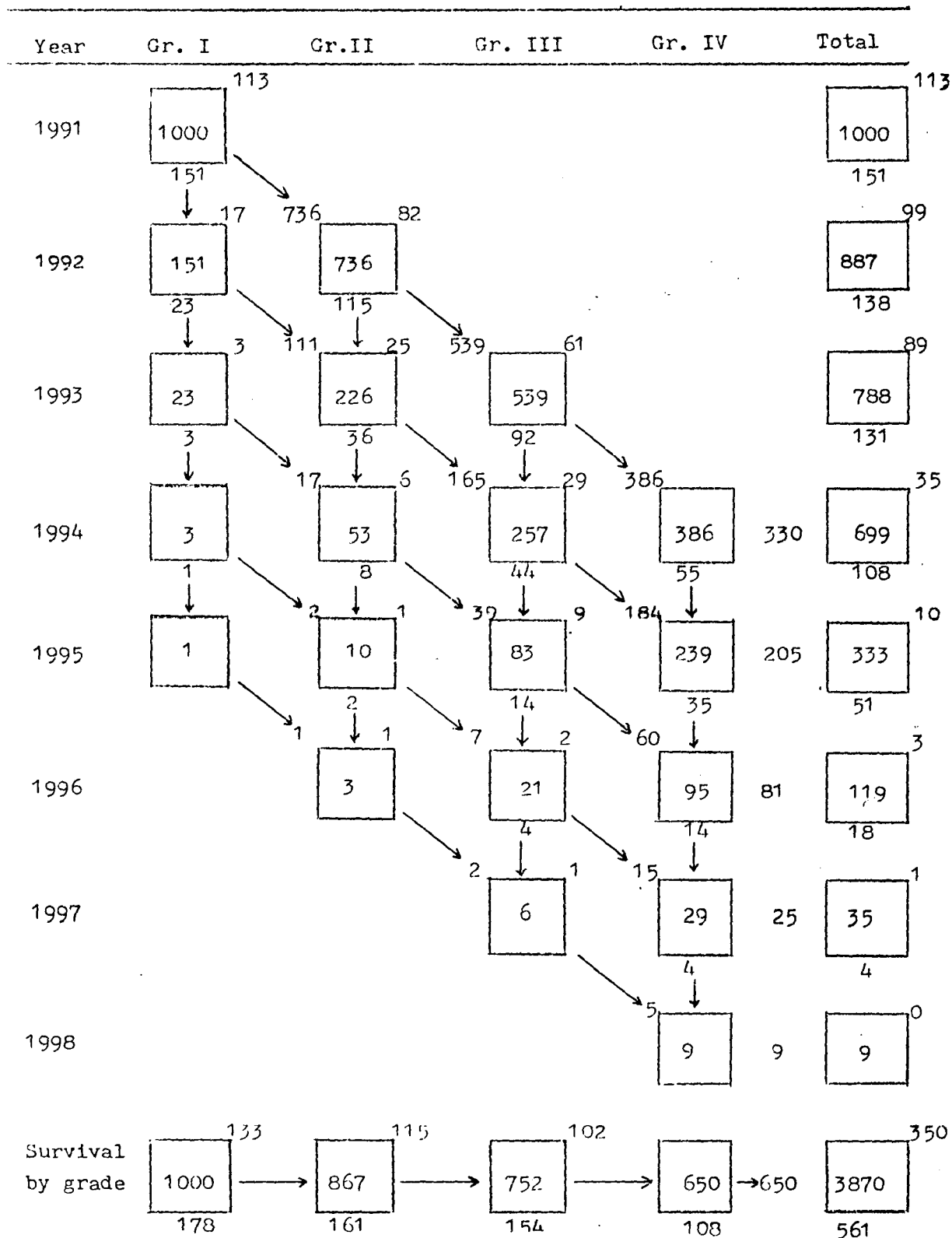


Diagram NO. 5.30

(Total Female, Nagaland)

Theoretical Pupil's Flow and Cohort Reconstruction.

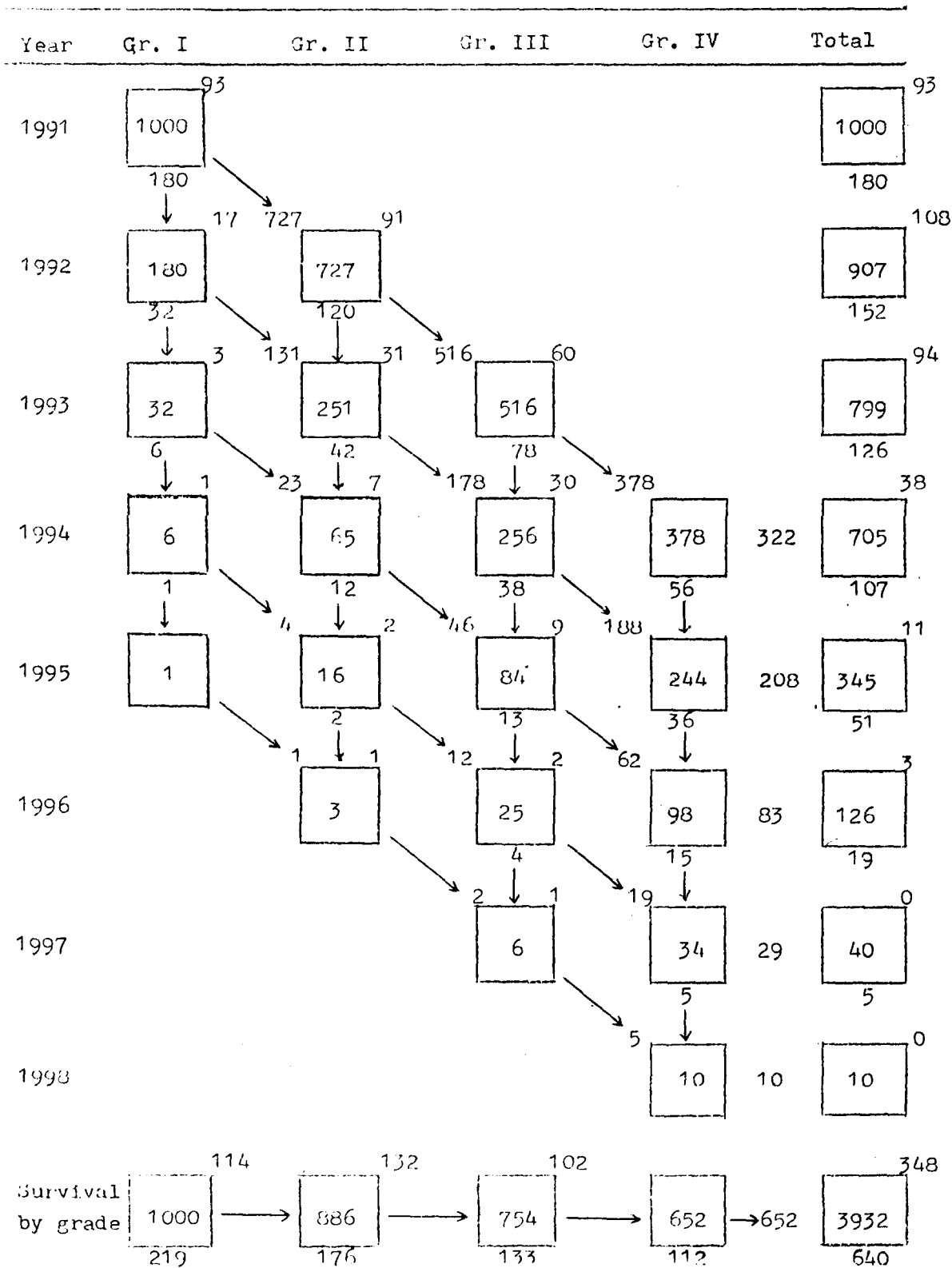


Diagram NO. 5.31  
 (Total Rural, Nagaland)  
 Theoretical Pupil's Flow and Cohort Reconstruction.

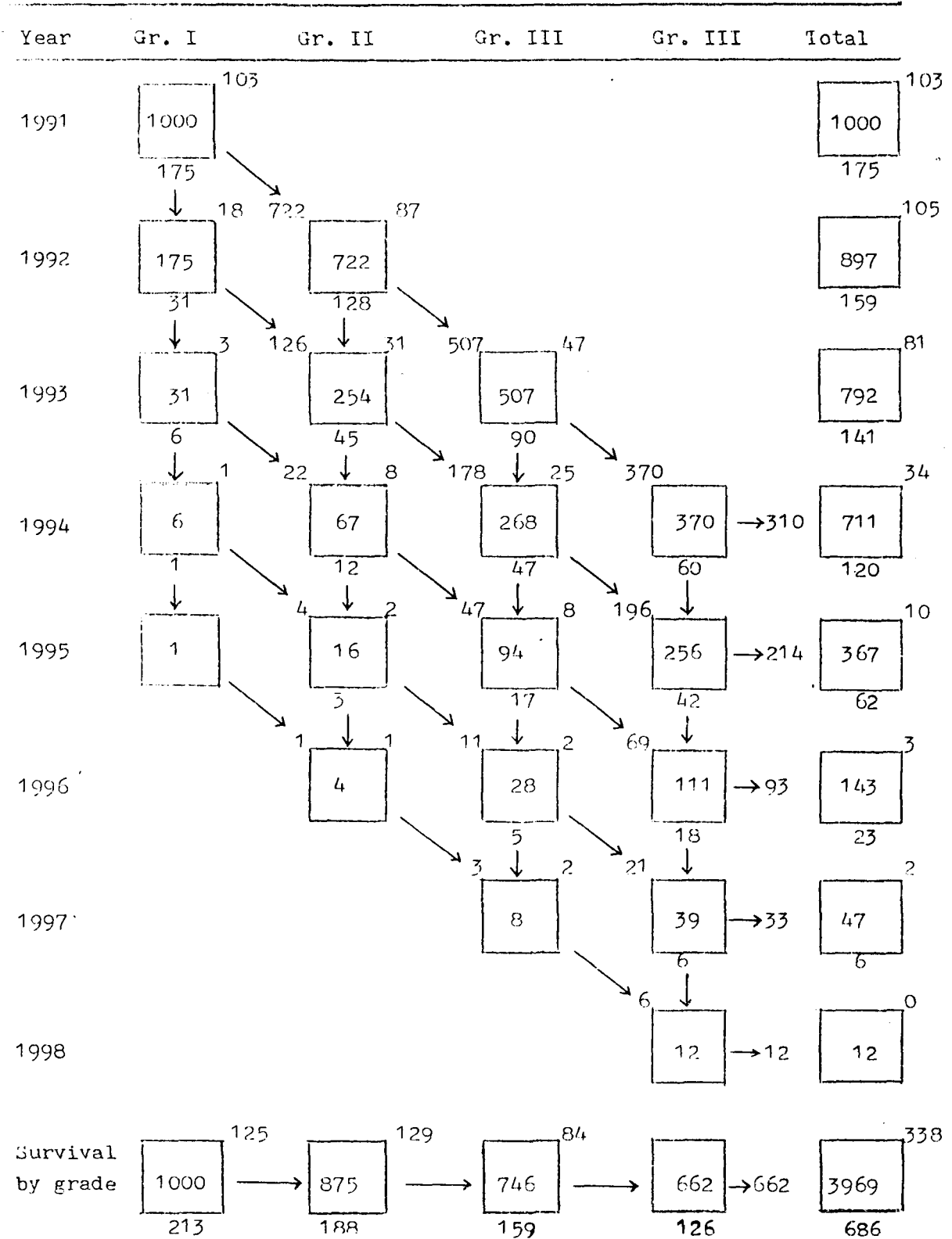
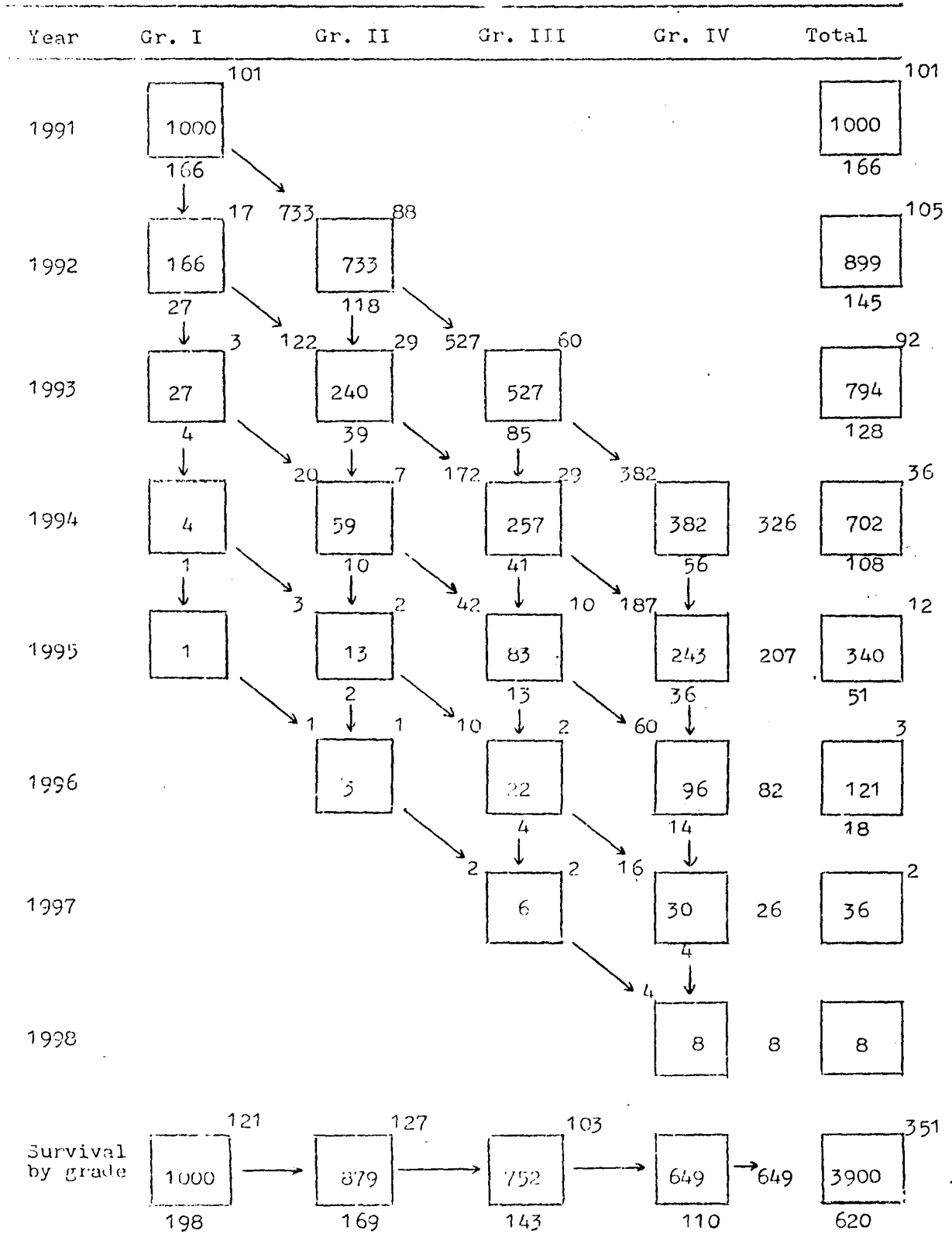


Diagram NO. 5.33

(Grand Total, Nagaland)

Theoretical Pupil's Flow and Cohort Reconstruction.



On the basis of the flow charts so constructed, the educational wastage is determined in terms of pupil years wasted due to dropout, repetition and overall (i.e, dropout and repetition for whole Nagaland with respect to sex, school location and total Nagaland as shown in table NO. 5.13.

Table NO. 5.13

Showing educational wastage for whole Nagaland in terms of pupil years wasted due to dropout, repetition and overall with respect to sex, school location and for whole Nagaland.

Sex/Location	Pupil years wasted due to		
	Dropout	Repetition	Overall
Male	793	478	1271
Female	823	501	1324
Rural	774	547	1321
Urban	856	493	1295
Total Nagaland	823	481	1304

Interpretation:

(A) With respect to sex : Table NO. 5.13 reveals the position of educational wastage in terms of pupil years wasted due to dropout, repetition and overall (i.e, both dropout and repetition) with respect to sex as follows :-

- (i) Educational wastage due to dropout: The data reveals that the educational wastage in terms of pupil years wasted due to dropout for whole Nagaland is more for female, (823 pupil years wasted) as compared to the male (793 pupil years wasted).

- (ii) Educational wastage due to repetition: The educational wastage in terms of pupil years wasted due to repetition for whole Nagaland is more for female (501 pupil years wasted as compared to that of male (478 pupil years wasted)).
- (iii) Educational wastage due to overall: The overall educational wastage in terms of pupil years wasted i.e, due to both dropout and repetition for whole Nagaland is more for female (1324 pupil years wasted) as compared to that of male (1271 pupil years wasted).

This shows that females are contributing more to educational wastage as compared to males in terms of pupil years wasted due to dropout and repetition.

(B) With respect to location : Table NO. 5.13 reveals the position of educational wastage in terms of pupil years wasted due to dropout, repetition and overall i.e, (dropout and repetition) for Nagaland with respect to location as follows :-

- (i) Educational wastage due to dropout: The educational wastage in terms of pupil years wasted due to dropout for whole Nagaland is more for urban schools (856 pupil years wasted) as compared to the rural schools, (774 pupil years wasted).
- (ii) Educational wastage due to repetition: With regard to educational wastage in terms of pupil years wasted due to repetition for the whole Nagaland is more for rural schools, (547 pupil years wasted) as compared to that of urban schools (439 pupil years wasted).
- (iii) Educational wastage due to overall: The overall educational wastage in terms of pupil years wasted due to both dropout and repetition for whole Nagaland is more for rural schools (1321 pupil years wasted) as compared to urban schools (1295 pupil years wasted).

This indicate that, pupil years wasted due to drop-out is more for urban schools as compared to rural schools. While, pupil years wasted due to repetition is more for rural schools as compared to urban schools.

(C) With respect to whole Nagaland (i.e, irrespective of sex and location):

Interpretation :

Table NO. 5.13 reveals the position of educational wastage in terms of pupil years wasted due to dropout and repetition for total Nagaland as follows :-

- (i) Educational wastage due to dropout: The educational wastage in terms of pupil years wasted due to dropout for total Nagaland is 823 pupil years.
- (ii) Educational wastage due to repetition: The educational wastage in terms of pupil years wasted due to repetition for total Nagaland is 481 pupil years.
- (iii) Educational wastage due to both: The educational wastage in terms of pupil years wasted due to both dropout and repetition for total Nagaland is 1304 pupil years.

The study shows that the educational wastage in terms of pupil years wasted due to dropout, repetition and both taken together is more for female as compared to male. It shows that females are contributing more to educational wastage. The analysis further shows that educational wastage is more for urban schools in the case of dropout. While, the same is more for rural schools in the case of repetition. But when dropout and repetition are taken together, the educational wastage finally seems to be more for rural schools as compared to urban

schools. It indicate that rural schools are contributing more to educational wastage than the urban schools. The analysis also points out that educational wastage for total Nagaland is more due to dropout as compared to repetition, which shows that dropouts are contributing more to educational wastage than the repeaters.

5. 3 SECTION - IIIANALYSIS AND INTERPRETATION OF THE EXTENT OF EDUCATIONAL WASTAGE IN TERMS OF THE PERCENTAGE OF PUPIL YEARS SPENT IN EXCESS.

The analysis and interpretation of this section is done in two parts :

Part I : Analysis and interpretation of the extent of educational wastage in terms of the percentage of pupil years spent in excess for the different districts with respect to sex and school location.

Part II : Analysis and interpretation of the extent of educational wastage in terms of pupil years spent in excess for whole Nagaland with respect to sex, school location and total Nagaland.

Part - IANALYSIS AND INTERPRETATION OF THE EXTENT OF EDUCATIONAL WASTAGE IN TERMS OF THE PERCENTAGE OF PUPIL YEARS SPENT IN EXCESS FOR THE DIFFERENT DISTRICTS WITH RESPECT TO SEX, AND SCHOOL LOCATION.(A) With respect to sex :

On the basis of the flow chart so, constructed as already described in section II, the extent of educational wastage in terms of the pupil years spent in excess with respect to sex is calculated for each district as explained in chapter IV.

The same is shown below in Table NO. 5.14.

Table NO. 5.14.

Showing the percentage of pupil years spent in excess for the different districts with respect to sex.

Districts	Total pupil years wasted		Total pupil years invested B		Percentage of pupil years spent in excess $\frac{L}{B} \times 100$	
	M	F	M	F	M	F
Kohima	1392	1410	1356	4038	38.08 (2)	34.91 (3)
Mokokchung	1059	1152	4051	3944	26.14 (7)	29.20 (7)
Tuensang	1063	1132	3731	3520	28.49 (5)	32.15 (4)
Zunheboto	1026	1179	3922	3911	26.16 (6)	30.14 (6)
Mon	1391	1424	4407	3960	31.56 (4)	35.95 (2)
Wokha	1553	1706	3725	4034	41.69 (1)	42.29 (1)
Phek	1400	1318	3788	4154	36.95 (3)	31.72 (5)
Nagaland	1271	1324	3871	3932	32.83	33.67

Note : Figures in the bracket indicate ranking.

Interpretation :-

Table NO. 5.14 reveals that percentage of pupil years spent in excess is more for female as compared to male for all the districts except Kohima and Phek. For these two districts the same is more for male as compared to female.

When the data for the percentage of pupil years spent in excess is arranged in decending order, we find the ranking of both male and female as follows :-

M A L E			F E M A L E		
Districts	Percentage of pupil years spent in excess	Rank	Districts	Percentage of pupil years spent in excess	Rank
Wokha	41.69	1	Wokha	42.29	1
Kohima	38.07	2	Mon	35.95	2
Phek	36.95	3	Kohima	34.91	3
Mon	31.56	4	Tuensang	32.15	4
Tuensang	28.49	5	Phek	31.72	5
Zunheboto	26.16	6	Zunheboto	30.14	6
Mokokchung	26.14	7	Mokokchung	29.20	7

The above ranking shows that the percentage of pupil years spent in excess in the case of male is highest for Wokha district followed by Kohima, Phek, Mon, Tuensang, Zunheboto and Mokokchung being the least.

With respect to female, the percentage of pupil years spent in excess is highest for Wokha district followed by Mon, Kohima, Tuensang, Phek, Zunheboto and the least being Mokokchung.

The ranking shows that, the extent of educational wastage in terms of the percentage of pupil years spent in excess is highest for both male and female in Wokha district, while, the same is lowest for Mokokchung district in the case of both male and female.

This indicate that, Wokha district contribute more to educational wastage in terms of the extent of pupil years spent in excess for both male and female, while, Mokokchung district is comparatively doing better as compared to males and females of other districts.

(B) With respect to school location.

On the basis of the flow chart so constructed, as already described in section II, the percentage of pupil years spent in excess with respect to school location is calculated for each district seperately as explained in chapter IV. The same is shown below in Table NO. 5.15.

Showing the percentage of pupil years spent in excess for the different districts with respect to school location.

Districts	Total pupil years wasted X		Total pupil years invested Y		Percentage of pupil years spent in excess $\frac{X}{Y} \times 100$	
	R	U	R	U	R	U
Kohima	1682	1264	4106	3500	40.96% (2)	36.11% (4)
Mokokchung	1177	1053	4038	3981	29.14% (6)	26.45% (6)
Tuensang	945	1247	3501	3740	26.99% (7)	33.34% (5)
Zunheboto	1267	983	3958	3891	32.00% (3)	25.26% (7)
Mon	1447	1378	4687	3774	30.87% (5)	36.51% (3)
Wokha	1632	1646	3796	4018	42.99% (1)	40.96% (1)
Phek	1206	1532	3798	4072	31.75% (4)	37.62% (2)
Whole Nagaland	1321	1295	3969	3851	33.28%	33.62%

( Figure in the bracket indicate ranking )

Interpretation :

Table NO. 5.15 reveals that the percentage of pupil years spent in excess is more urban schools as compared to that of rural schools for all the districts except Tuensang, Mon and Phek.

For these districts, the percentage of pupil years spent in excess is more for urban schools than the rural schools.

R U R A L			U R B A N		
Districts	Percentage of pupil years spent in excess	Rank	Districts	Percentage of pupil years spent in excess	Rank
Wokha	41.99	1	Wokha	40.96	1
Kohima	40.96	2	Phek	37.62	2
Zunheboto	32.00	3	Mon	36.51	3
Phek	31.75	4	Kohima	36.11	4
Mon	30.87	5	Tuensang	33.34	5
Mokokchung	29.14	6	Mokokchung	26.95	6
Tuensang	26.99	7	Zunheboto	25.26	7

The above ranking shows that, the percentage of pupil years spent in excess in the case of rural schools is highest for Wokha district followed by Kohima, Zunheboto, Phek, Mon, Mokokchung and least for Tuensang district.

With respect to urban school, the same is highest for Wokha district followed by Phek, Mon, Kohima, Tuensang, Mokokchung and least for Zunheboto district.

It indicate that Wokha district contribute more to educational wastage in terms of the percentage of pupil years spent in excess for both rural and urban schools, while rural schools in Tuensang and urban schools in Zunheboto are comparatively better as compared to rural and urban schools of other districts.

Part IIANALYSIS AND INTERPRETATION OF THE EXTENT OF EDUCATIONAL WASTAGE IN TERMS OF PUPIL YEARS SPENT IN EXCESS FOR WHO-LE NAGALAND WITH RESPECT TO SEX, SCHOOL LOCATION AND TOTAL NAGALAND.

On the basis of the flow chart so constructed, as described in section II, the percentage of pupil years spent in excess for the whole Nagaland is calculated with respect to sex, school location and total Nagaland as explained in chapter IV. The same is also shown below in Table NO. 5.16.

Table NO. 5.16.

Showing the percentage of pupil years spent in excess for the whole Nagaland with respect to sex, school location and for total Nagaland.

Nagaland		Total pupil years wasted	Total pupil years invested	Percentage of pupil years spent in excess
Sex	Male	1271	3871	32.83
	Female	1324	3932	33.67
Location	Rural	1321	3969	33.28
	Urban	1295	3851	33.62
Whole Nagaland		1304	3900	33.43

Interpretation :

(i) With respect to sex :

The percentage of pupil years spent in excess for whole Nagaland is more for female ( 33.67% ) as compared to male (32.83%).

(ii) With respect to location :

The percentage of pupil years spent in excess for the whole Nagaland with respect to school location is more for urban school (33.63%) as compared to rural schools (33.28%).

(iii) With respect to total Nagaland : (irrespective of sex & location)

The percentage of pupil years spent in excess for whole Nagaland is 33.43%. The above analysis indicate that, the percentage of pupil years spent in excess is more for female with respect to sex and urban schools with respect to school location. Hence, they are contributing more to educational wastage.

## Section IV

### 5.4.0 ANALYSIS AND INTERPRETATION OF DATA FOR INTERNAL EFFICIENCY OF THE SYSTEM OF PRIMARY EDUCATION FOR THE DIFFERENT DISTRICTS AND FOR WHOLE NAGALAND WITH RESPECT TO SEX, LOCATION AND TOTAL NAGALAND

The internal efficiency of the system of primary education is determined in terms of the following indices.

- (i) Coefficient of efficiency
- (ii) Educational wastage Ratio (input, output ratio)
- (iii) Average number of pupil years spent of per successful graduate
- (iv) Retention/survival rate.

5.4.1 Coefficient of efficiency : Coefficient of efficiency is one of the crucial indicators of internal efficiency of the system of primary education, which has already been described in chapter I and IV.

The coefficient of efficiency of the system of primary education is determined by the following formula.

$$\text{CE} = \frac{\text{No. of pupils who successfully completed the full educational cycle} \times \text{Normal length of schooling}}{\text{Pupil years actually spent by school completers}} \times 100$$
$$= \frac{P \times 4}{q} \times 100$$

By applying this formula, coefficient of efficiency of the primary education was determined.

Further, the analysis and interpretation of coefficient of efficiency is done in two parts.

Part I : The analysis and interpretation of the coefficient of efficiency of the different districts with respect to sex and school location.

Part II : The analysis and interpretation of coefficient of efficiency for the whole Nagaland with respect to sex, school location and total Nagaland.

#### Part I

#### ANALYSIS AND INTERPRETATION OF THE COEFFICIENT OF EFFICIENCY FOR THE DIFFERENT DISTRICTS WITH RESPECT TO SEX AND SCHOOL LOCATION

##### (A) With respect to sex :

On the basis of the data obtained from the flow chart, the coefficient of efficiency of the primary educational system is calculated for each district with respect to sex. Which is shown in table NO. 5.17:

Table NO. 5.17.

Showing the coefficient of efficiency for the different districts with respect to sex.

Districts	No. of pupil who successfully completed the full educational cycle		Pupil years actually spent		Coefficient of efficiency	
	P		Q		$\frac{P \times 4}{Q}$	
	M	F	M	F	M	F
Kohima	516	657	3456	4038	59.72 (6)	65.08 (5)
Mokokchung	748	698	4051	3944	73.86 (1)	70.79 (1)
Tuensang	667	597	3731	3520	71.51 (3)	67.84 (4)
Zunheboto	724	683	3922	3911	73.84 (2)	69.85 (2)
Mon	754	634	4407	3960	68.45 (4)	64.04 (6)
Wokha	543	582	3725	4034	58.31 (7)	57.71 (7)
Phek	597	709	3788	4154	63.04 (5)	68.27 (3)
Whole Nagaland	650	648	3871	3932	67.17	65.92

Note : Figures in the brackets indicate ranking.

Interpretation :

Table NO. 5.17 reveals the districtwise analysis of the data of coefficient of efficiency with respect to sex as follows :

The coefficient of efficiency of the system of primary education for the different districts is more for male as compared to female for all the districts except Kohima and Phek. For these two districts, the coefficient of efficiency is more for female as compared to male.

When the data of coefficient of efficiency is arranged in decending order, we find the following ranking for both male and female.

M A L E			F E M A L E		
Districts	Coefficient of efficiency	Rank	Districts	Coefficient of efficiency	Rank
Mokokchung	73.86	1	Mokokchung	70.79	1
Zunheboto	73.84	2	Zunheboto	69.85	2
Tuensang	71.51	3	Phek	68.27	3
Mon	68.45	4	Tuensang	67.84	4
Phek	63.04	5	Kohima	65.08	5
Kohima	59.72	6	Mon	64.04	6
Wokha	58.31	7	Wokha	57.71	7

The above ranking shows that the coefficient of efficiency of the system of primary education in the case of

male is highest for Mokokchung district followed by Zunheboto, Tuensang, Mon, Phek, Kohima and Wokha district being the least efficient.

The ranking further shows that, the coefficient of efficiency of the system of primary education in the case of female is highest for Mokokchung followed by Zunheboto, Phek, Tuensang, Kohima, Mon and Wokha being the least efficient.

The ranking further shows that coefficient of efficiency for both male and female is highest in case of Mokokchung district and lowest in case of Wokha district.

The analysis of the data further indicate that the coefficient of efficiency of the system of primary education for the different districts is more for male as compared to female with some exceptions of Kohima and Phek districts. Further, the analysis indicates that the coefficient of efficiency of the system of primary education is more efficient for Mokokchung district in the case of both male and female as compared to other districts, while Wokha district is found least efficient for both male and female.

(B) With respect to location :

On the basis of the data obtained from the flow chart so constructed, the coefficient of efficiency of the system of primary education is also calculated for each district with respect to location. This is shown in Table NO. 5.18.

Table NO. 5.18

Showing the coefficient of efficiency for the different district with respect to location.

Districts	No. of pupil who successfully completed the full educational cycle		Pupil years actually spent		Coefficient of efficiency	
	P		Q		$\frac{P \times 4}{Q}$	
	R	U	R	U	R	U
Kohima	606	559	4106	3500	59.03 (6)	63.88 (4)
Mokokchung	715	732	4037	3981	70.83 (2)	73.55 (2)
Tuensang	639	642	3501	3739	73.00 (1)	66.63 (3)
Zunheboto	673	727	3959	3891	68.00 (5)	74.74 (1)
Mon	810	599	4687	3774	69.13 (3)	63.49 (5)
Wokha	541	593	3796	4018	57.00 (7)	59.03 (7)
Phek	648	635	3798	4072	68.24 (4)	62.38 (6)
Whole Nagaland	662	639	3969	3851	66.72	66.37

Note : Figure in the bracket indicates ranking.

Interpretation :- Table NO. 5.18 reveals the districtwise analysis of the data of coefficient of efficiency with respect to school location as follows :-

The coefficient of efficiency is more for rural school as compared to urban school for all the districts except Kohima, Mokokchung, Zunheboto and Wokha. For these districts coefficient of efficiency is more for urban school as compared to rural school.

When the data of coefficient of efficiency is arranged in descending order, we find the following ranking for both rural and urban schools.

Districts	Rural		Urban		
	Coefficient of efficiency	Rank	District	Coefficient of efficiency.	Rank
Tuensang	73.00	1	Zunheboto	74.74	1
Mokokchung	70.83	2	Mokokchung	73.55	2
Mon	69.13	3	Tuensang	66.63	3
Phek	68.24	4	Kohima	63.88	4
Zunheboto	68.00	5	Mon	63.49	5
Kohima	59.03	6	Phek	62.38	6
Wokha	57.00	7	Wokha	59.03	7

The above ranking shows that the coefficient of efficiency of the system of primary education of rural schools is highest for Tuensang district followed by Mokokchung,

Mon, Phek, Zunheboto, Kohima and Wokha district being the least efficient.

The ranking further shows that, the coefficient of efficiency of the system of primary education in the case of urban school is highest for Zunheboto, Mokokchung, Tuensang, Kohima, Mon, Phek and least efficient for Wokha district.

The ranking further shows that, the coefficient of efficiency for rural schools is highest for Tuensang district and for urban schools in Zunheboto district. While the least efficient for both rural and urban school is found is Wokha district.

The analysis of the data further shows that, the coefficient of efficiency of the system of primary education for the different districts is more for rural schools as compared to urban schools with some exception of Kohima, Mokokchung, Zunheboto and Phek districts. The analysis also indicates that the coefficient of efficiency of the system of primary education is more efficient for rural schools in Tuensang and urban schools in Zunheboto districts as compared to rural and urban school of other districts, while the same is least efficient for Wokha district.

Part IIANALYSIS AND INTERPRETATION OF THE COEFFICIENT OF EFFICIENCY FOR WHOLE NAGALAND WITH RESPECT TO SEX, SCHOOL LOCATION AND TOTAL NAGALAND

On the basis of the data obtained from the flow chart so constructed, the coefficient of efficiency is calculated for whole Nagaland with respect to sex, location and for total Nagaland, which shown in table No. 5.19.

Table NO.5.19

Showing the Coefficient of efficiency for whole Nagaland with respect to sex, location and total Nagaland

NAGALAND	No. of pupils who successfully completed the full educational cycle. (p)	Pupil years actually spent (q)	Coefficient of efficiency  = $\frac{P \times 4}{q} \times 100$
Male	650	3871	67.17
Female	648	3932	65.92
Rural	662	3969	66.72
Urban	639	3851	66.37
Total	649	3900	66.56

Interpretation :

- (A) With respect to sex : Table NO. 5.19 reveals that the coefficient of efficiency of the system of primary education in Nagaland is more for male (67.17 percent) as compared to that female (65.92 percent).
- (B) With respect to location : Table No.5.19 shows that the coefficient of efficiency for the system of primary education is more for rural (66.72 percent) as compared to that of urban schools 66.37 percent.
- (C) With respect to total Nagaland : Table No. 5.19 reveals that the coefficient of efficiency of the system of primary education for total Nagaland is 66.56 percent.

The analysis of the data also indicates that, the coefficient of efficiency of the system of primary education is lagging far behind 100 percent efficiency for both male and female and for both rural and urban schools. Even for the whole Nagaland coefficient of efficient of efficiency is quite low.

The analysis of the data indicate that males are more efficient than females.

The same is also true of rural schools as compared to urban schools.

Hence, it is interpreted that males in Nagaland are more efficient as compared to females and rural schools are more efficient as compared to urban schools.

#### 5.4.2 WASTAGE RATIO (INPUT - OUTPUT RATIO)

Wastage ratio (I.O Ratio) is one of the measures of the extent of educational wastage. When the educational wastage is zero (0), this ratio is 1 (one) and when the value of this ratio becomes more than 1, it shows more wastage. As already explained in chapter I and chapter IV the educational wastage ratio or the input ratio is determined by the following formula :-

$$\text{Wastage Ratio} = \frac{\text{Pupil input years (total pupil years actually spent)}}{\text{Pupil output years (total pupil years which should have been spent)}}$$

$$= \frac{\text{Total pupil years actually spent}}{\text{School completers X normal length of schooling.}}$$

By applying this formula, Educational Wastage Ratio of the primary system of education is determined, for the different districts and for whole Nagaland with respect to sex, school location and total Nagaland.

The analysis and interpretation of educational wastage ratio is presented in two parts.

Part I : The first part presents the analysis and interpretation of the educational wastage ratio (i/o ratio) for the different districts with respect to sex and school location.

Part II : The second part presents the analysis and interpretation of the educational wastage ratio for whole Nagaland with respect to sex, school location and total Nagaland.

### Part I

#### ANALYSIS AND INTERPRETATION OF THE EDUCATIONAL WASTAGE RATIO (i/o Ratio) FOR THE DIFFERENT DISTRICTS WITH RESPECT TO SEX AND SCHOOL LOCATION.

##### (A) With respect to sex :

On the basis of the data obtained from the flow chart Educational wastage ratio or input output ratio is calculated for each district with respect to sex as shown table No. 5.20.

Table No. 5.20

Showing the educational wastage Ratio (input & output ratio)  
for the different districts with respect to sex.

District	Pupil output years (M)		Pupil output years (N)		Wastage ratio (input output ratio) $(\frac{M}{N})$	
	M	F	M	F	M	F
Kohima	3456	4038	2064	2628	1.67 (1)	1.53 (3)
Mokokchung	4051	3944	2992	2792	1.33 (5)	1.41 (6)
Tuensang	3731	3520	2668	2388	1.40 (4)	1.47 (4)
Zunheboto	3922	3911	2896	2732	1.35 (5)	1.06 (7)
Mon	4407	3960	3016	2536	1.46 (3)	1.56 (2)
Wokha	3725	4034	2172	2378	1.67 (1)	1.70 (1)
Phek	3788	4154	2388	2836	1.59 (2)	1.46 (5)
Whole Nagaland	3871	3932	2600	2532	1.49	1.51

Interpretation : Table NO. 5.20 reveals that the position of the districtwise analysis of the data of educational wastage ratio of the primary education system is more for female as compared to male for all the districts except Kohima,

Zunheboto and Phek. For these three districts, retention rate for male is more as compared to female.

The data for educational wastage ratio when arranged in decending order we find the following ranking for both male and female.

M A L E			F E M A L E		
Districts	Educational wastage ratio	Rank	Districts	Educational wastage ratio	Rank
Kohima	1.67	1	Wokha	1.70	1
Wokha	1.67	2	Mon	1.56	2
Phek	1.59	3	Kohima	1.53	3
Mon	1.46	4	Tuensang	1.47	4
Tuensang	1.40	5	Phek	1.46	5
Zunheboto	1.35	6	Mokokchung	1.41	6
Mokokchung	1.33	7	Zunheboto	1.06	7

The above ranking shows that the educational wastage ratio in the case of male is highest for Kohima and Wokha followed by Phek, Mon, Tuensang, Zunheboto and Mokokchung having the least educational wastage ratio.

With respect to female the educational wastage ratio is highest for Wokha district followed by Mon, Kohima, Tuensang, Phek and Mokokchung while the least is from Zunheboto district.

The ranking shows that the educational wastage ratio is highest for male in Kohima district and female in Wokha district, while the same is lowest for male in Mokokchung and female in Zunheboto district.

This indicate that males in Kohima and females in Wokha districts has the highest educational wastage ratio while the least for male is found in Mokokchung district and female in Zunheboto district.

Hence, it can be interpreted that males in Kohima and female in Wokha district contribute more to educational wastage as compared to males and females of other districts, while the least educational wastage for male is found in Mokokchung district and female in Zunheboto district.

(B) With respect to location :

On the basis of the data obtained from the flow chart the educational wastage ratio or (input output ratio) is calculated for each district with respect to school location as shown in Table NO. 5.21.

Table NO. 5.21

Showing educational wastage ratio (input output ratio)  
for the different districts with respect to school loc-  
ation.

Districts	Pupil input years (M)		Pupil output years (N)		Wastage ratio $(\frac{M}{N})$	
	R	U	R	U	R	U
Kohima	4106	3500	2424	2236	1.69 (2)	1.56 (4)
Mokokchung	4037	3981	2860	2928	1.41 (5)	1.36 (6)
Tuensang	3501	3740	2556	2492	1.37 (7)	1.50 (5)
Zunheboto	3959	3891	2692	2908	1.47 (3)	1.34 (7)
Mon	4687	3774	3240	2396	1.45 (5)	1.57 (3)
Wokha	3796	4016	2164	2372	1.75 (1)	1.69 (1)
Phek	3798	4072	2592	2540	1.46 (4)	1.60 (2)
Nagaland	3969	3851	2648	2556	1.49	1.51

Note : Figure in the bracket indicate ranking.

Interpretation :

The educational wastage ratio of primary education system is more for urban schools as compared to that of rural schools for all the districts except Kohima, Mokokchung, Zunheboto and Wokha. For these districts, the same is more for rural schools as compared to urban schools.

When the data for educational wastage ratio is arranged in decending order, we find the following ranking for both rural and urban schools.

R U R A L			U R B A N		
Districts	Educational wastage ratio	Rank	Districts	Educational wastage ratio	Rank
Wokha	1.75	1	Wokha	1.69	1
Kohima	1.69	2	Phek	1.60	2
Zunheboto	1.47	3	Mon	1.57	3
Phek	1.46	4	Kohima	1.56	4
Mon	1.45	5	Tuensang	1.50	5
Mokokchung	1.41	6	Mokokchung	1.36	6
Tuensang	1.37	7	Zunheboto	1.34	7

The above ranking shows that, the educational wastage ratio in the case of rural schools is highest for Wokha followed by Kohima, Zunheboto Phek, Mon ,

Mokokchung and least for Tuensang district.

With respect to urban schools the ranking further shows that the highest educational wastage ratio is found in Wokha district followed by Phek, Mon, Kohima Tuensang, Mokokchung and least for Zunheboto district.

This indicate that Wokha district has the highest educational wastage ratio for both rural and urban schools while the least for rural schools is found in Tuensang district and for urban school in Zunheboto district.

Hence, it can be interpreted that Wokha district contribute more to educational wastage for both rural and urban schools as compared to other districts, while the rural school in Tuensang and urban school in Zunheboto contribute least to educational wastage.

## Part - II

### ANALYSIS AND INTERPRETATION OF THE EDUCATIONAL WASTAGE RATIO (i/o Ratio) FOR WHOLE NAGALAND WITH RESPECT TO SEX, LOCATION AND TOTAL NAGALAND.

On the basis of the data obtained from the flow chart, the educational wastage ratio or i/o ratio is calculated for whole Nagaland, with respect to sex which is shown in Table No. 5.22.

Table NO. 5.22

Showing educational wastage ratio (i/o ratio) for whole Nagaland with respect to sex, location and total Nagaland.

Nagaland	Pupil input years M	Pupil output years N	Wastage ratio (i/o ratio) $(\frac{M}{N})$
Male	3871	2600	1.49
Female	3932	2532	1.51
Rural	3969	2648	1.49
Urban	3851	2556	1.51
Total	3900	2596	1.50

Interpretation : Table NO. 5.22 reveals the position of educational wastage ratio for whole Nagaland with respect to sex, school location and total Nagaland as follows :-

(A) With respect to sex :

With respect to sex the educational wastage ratio in Nagaland is more for female (1.51) as compared to male (1.49).

(B) With respect to location :

With respect to location the educational wastage ratio is more for urban schools (1.51) as compared to rural school (1.49).

(B) With respect to total Nagaland :

Table NO.5.22 reveals that the educational wastage ratio (i/o ratio) for total Nagaland is 1.50.

The above analysis indicates the following facts:-

- (i) Educational wastage ratio (i/o ratio) is more for female as compared to male.
- (ii) Educational wastage ratio is more for urban schools as compared to rural.

Thus, we find that females are contributing more to educational wastage with respect to location, urban school are contributing more to educational wastage. The educational wastage for all Nagaland (i/e 1.50) is also quite high which indicates that there are huge educational wastage on the whole in Nagaland.

However, analysis of the data indicates that there is no much difference in the educational wastage ratio between male and female and rural and urban. Therefore, it can be taken as negligible educational wastage ratio is almost equal for both male and urban, rural and urban location.

## 5.4.3.

AVERAGE NUMBER OF PUPIL YEARS SPENT PER SUCCESSFUL GRADUATES.

The average number of pupil years spent per successful graduate provide a clear indication as to how much time on an average pupil takes to complete 4 years schooling.

The average number of pupil years spent by per successful graduate is calculated by deviding the total number of pupil years actually spent (V) by the total number of successful graduates.

$$\text{Average} = \frac{V}{U}$$

This is calculated for the different districts as well as for whole Nagaland with respect to sex, school location and for total Nagaland.

Further, the analysis and interpretation of the data of the average number of pupil years spent per successful graduate is presented in two parts.

Part I :- Analysis and interpretation of the data the average number of pupil years spent by per successful graduates for the different districts with respect to sex and school location.

Part II :- Analysis and interpretation of the data for the average number of pupil years spent in by per successful graduates for whole Nagaland with respect to sex, school location and total Nagaland.

Part I

ANALYSIS AND INTERPRETATION OF THE DATA FOR THE AVERAGE NUMBER OF PUPIL YEARS SPENT BY PER SUCCESSFUL GRADUATE FOR THE DIFFERENT DISTRICTS WITH RESPECT TO SEX AND SCHOOL LOCATION.

(A) With respect to sex :

On the basis of the data obtained from the flow chart that is, total pupil years actually spent and total number of successful graduates, the average number of pupil years spent by per successful graduate is calculated for the different districts with respect to sex which is shown in table NO. 5.23.

Table NO. 5.23

Showing the average number of pupil years spent by per successful graduate for the different districts with respect to sex.

Districts	Total pupil years actually spent		Total number of successful graduate		Average No of pupil year spent by per successful graduate	
	(V)		(U)		Avg. = $\frac{V}{U}$	
	M	F	M	F	M	F
Kohima	3456	4038	516	657	6.70 (2)	6.14 (3)
Mokokchung	4051	3944	748	698	5.45 (6)	5.65 (7)
Tuensang	3731	3520	667	597	5.59 (5)	5.90 (4)
Zunheboto	3922	3911	723	683	5.42 (7)	5.72 (6)
Mon	4407	3966	754	634	5.84 (4)	6.25 (2)
Wokha	3725	4034	543	582	6.86 (1)	6.93 (1)
Phek	3788	4154	597	709	6.34 (3)	5.86 (6)
Nagaland	3871	3932	650	648	5.95	6.07

Note : Figure in the bracket indicate ranking.

Interpretation : Table NO. 5.23 reveals the position the average number of pupil years spent by per successful graduate for the different district with respect to sex as follows :-

The average number of pupil years spent by per successful graduate is more for female as compared to male for all the districts except Kohima and Phek.

Where the same is more for these two districts for male as compared to that of female.

When the data for the average number of pupil years spent by per successful graduate is arranged in descending order we find the following ranking for both male and female.

M A L E			F E M A L E		
Districts	Average number of pupil years spent per successful graduate	Rank	Districts	Average number of pupil years spent per successful graduate	Rank
Wokha	6.86	1	Wokha	6.93	1
Kohima	6.70	2	Mon	6.25	2
Phek	6.34	3	Kohima	6.14	3
Mon	5.84	4	Tuensang	5.90	4
Tuensang	5.59	5	Phek	5.86	5
Mokokchung	5.45	6	Zunheboto	5.72	6
Zunheboto	5.42	7	Mokokchung	5.65	7

The above ranking shows that the average number of pupil years spent by per successful graduate is highest for male in Wokha district followed by Kohima, Phek, Mon, Tuensang, Mokokchung and least for Zunheboto district.

With respect to female the average pupil year spent by per successful graduate is highest for Wokha district followed by Mon, Kohima, Tuensang, Phek, Zunheboto and least for Mokokchung district.

The analysis shows that the average number of pupil year spent by per successful graduate is highest for Wokha district for both male and female while the least for male is found in Zunheboto and female in Mokokchung districts.

Hence, it can be interpreted that Wokha district contribute more to educational wastage in term of the average number of pupil years spent for both male and female, while male in Zunheboto and female in Mokokchung district contribute least to educational wastage as compared to male and female of other districts.

(B) With respect to school location :

On the basis of the data obtained from the flow chart i.e. total pupil years actually spent and total number of successful graduate, the average number of pupil years spent by per successful graduate is calculated for the different districts with respect to location which is shown in table NO. 5.24.

Table NO. 5.24

Showing the average number of pupil years spent by per successful graduates for the different districts with respect to location.

Districts	Total pupil years actually spent.		Total number of successful graduate		Average number of pupil years spent by per successful graduate	
	(V)		(U)		$\frac{V}{U}$	
	R	U	R	U	R	U
Kohima	4160	3500	606	559	6.77 (2)	6.26 (4)
Mokokchung	4038	3981	715	732	5.65 (6)	5.44 (6)
Tuensang	3501	3739	639	623	5.48 (7)	6.00 (5)
Zunheboto	3959	3891	673	727	5.88 (3)	5.35 (7)
Mon	4687	3774	810	599	5.79 (5)	6.30 (3)
Wokha	3796	4018	541	593	7.02 (1)	6.77 (1)
Phek	3798	4072	648	635	5.86 (4)	6.41 (2)
Nagaland	3969	3851	662	639	5.99	6.03

Note : Figures in the bracket indicate ranking.

Interpretation : Table NO. 5.24 reveals the position of the average number of pupil years spent by per successful graduates for the different districts with respect to school location as follows :-

The average number of pupil year spent by per successful graduate is more for urban schools as compared to rural schools for all the districts except Kohima, Mokokchung, Zunheboto and Wokha.

When the data for the average number of pupil years spent by per successful graduate are arranged in descending order, we find the following ranking for both rural and urban schools.

R U R A L			U R B A N		
Districts	Average number of pupil year spent per successful graduate	Rank	Districts	Average number of pupil year spent per successful graduate	Rank
Wokha	7.02	1	Wokha	6.77	1
Kohima	6.77	2	Phek	6.41	2
Zunheboto	5.88	3	Mon	6.30	3
Phek	5.86	4	Kohima	6.26	4
Mon	5.79	5	Tuensang	6.00	5
Mokokchung	5.65	6	Mokokchung	5.44	6
Tuensang	5.48	7	Zunheboto	5.35	7

The above ranking shows that the average number of pupil years spent by per successful graduate is highest for rural schools in Wokha district followed by Kohima, Zunheboto, Pehk, Mon, Mokokchung and least for Tuensang district.

With respect to urban schools the same is highest for Wokha districts followed by Phek, Mon, Kohima, Tuensang, Mokokchung and least to Zunheboto district.

The analysis shows that Wokha district has the highest average number of pupil year spent by per successful graduate for both rural and urban schools as compared to other districts, while, the least for rural schools is found in Tuensang district and urban schools in Zunheboto district.

Hence, it can be interpreted that rural schools in Tuensang district and urban school in Zunheboto are doing better as compared to rural and urban schools of other districts. While, Wokha district contribute more to educational wastage for both rural and urban schools.

## Part II

### ANALYSIS AND INTERPRETATION OF THE DATA FOR THE AVERAGE NUMBER OF PUPIL YEARS SPENT BY PER SUCCESSFUL GRADUATES FOR WHOLE NAGALAND WITH RESPECT TO SEX LOCATION, AND TOTAL NAGALAND

On the basis of the data obtained from the flow chart i.e total pupil years actually spent, and total number of successful graduates, the average number of pupil years spent

by per successful graduate is calculated for the whole Nagaland with respect to sex, location and total Nagaland, which is shown in Table NO. 5.25.

Table NO. 5.25

Showing the average number of pupil years spent by per successful graduates for whole Nagaland with respect to sex, location and total Nagaland.

Nagaland	Total pupil years actually spent. (V)	Total number of successful graduates. (U)	Average number of pupil years spent per successful graduates $(\frac{V}{U})$
Male	3871	650	5.95
Female	3932	648	6.07
Rural	3969	662	5.99
Urban	3851	639	6.03
Total Nagaland	3900	649	6.00

Interpretation :

Table NO. 5.25 reveals the position of the average number of pupil years spent by per successful graduates with respect to sex, location and as a whole as follows :

- (A) With respect to sex : The above table reveals that the average number of pupil years spent by per successful graduate is more for Female (6.07 years) as compared to that of Male (5.95 years).
- (B) With respect to location : Table NO. 5.25 also reveals the position of the average number of pupil years spent by per successful graduate is more for Urban schools(6.03 years) as compared to that of Rural schools ( 5.99 years).
- (C) With respect to total Nagaland : The study of Table NO. 5.25 reveals that the average number of pupil years spent by per successful graduate for total Nagaland is found to be 6 years.

The above analysis indicates the following facts :-

- (1) Average number of pupil years spent by per successful graduate is more for female as compared to male.
- (2) The same is also more for urban as compared to rural schools.

Thus, we found that females are spending more time to graduate as compared to males which also indicate that they are contributing more to educational wastage. With respect to location, urban schools are contributing more to educational wastage in the form of spending more years to graduate than the rural schools.

## 5.4.4

Retention/Survival rate

The retention rate or survival rate indicates the holding power of the system of primary education. With the help of the flow chart, retention rate was determined for grade II, III and IV for the different districts and for whole Nagaland with respect to sex, location.

Further, the analysis and interpretation of the data for this section is present in two parts.

Part I : Analysis and interpretation of the data of Retention/Survival rate for the different districts with respect to sex and school location.

Part II : Analysis and interpretation of the data of retention/survival rate for whole Nagaland with respect to sex, school location and total Nagaland.

Part I

ANALYSIS AND INTERPRETATION OF THE DATA FOR RETENTION/SURVIVAL RATE FOR THE DIFFERENT DISTRICTS WITH RESPECT TO SEX, AND SCHOOL LOCATION.

(A) With respect to sex :

On the basis of the flow charts so constructed, the retention rate for grade II, III and IV are determined for the different districts with respect to sex and school location as shown in table NO. 5.26

Table NO. 5.26

Showing the retention rate for grade II, III and IV, for the different districts with respect to sex.

District	Retention rate in percentage for					
	Grade II		Grade III		Grade IV	
	M	F	M	F	M	F
Kohima	78.2 (6)	92.0 (3)	67.1 (6)	76.2 (2)	51.6 (7)	65.7 (4)
Mokokchung	86.0 (5)	88.2 (4)	80.8 (2)	74.6 (4)	74.8 (2)	69.8 (2)
Tuensang	86.8 (4)	80.8 (6)	76.0 (4)	68.9 (7)	66.8 (4)	59.7 (6)
Zunheboto	93.5 (2)	87.5 (5)	80.4 (3)	75.1 (3)	72.4 (3)	68.3 (3)
Mon	92.8 (3)	87.5 (5)	81.5 (1)	73.9 (6)	75.4 (1)	63.4 (5)
Wokha	73.6 (7)	93.0 (1)	65.4 (7)	74.0 (5)	54.3 (6)	58.2 (7)
Phek	94.1 (1)	92.3 (2)	74.2 (5)	85.1 (1)	59.6 (5)	70.9 (1)
Nagaland	86.7	88.6	75.2	75.4	65.0	65.2

Interpretation : Table NO. 5.26 reveals the position of retention rate for grade II, III and IV for the different districts with respect to sex as follows :-

(a) For grade II , the analysis of the data reveal that the retention rate is more for female as compared to male in all the districts except Tuensang, Zunheboto, Mon and Phek. For these four districts the retention rate is more for male as compared to female.

The data of retention rate when arrange in descending order, we find the following ranking for both male and female.

Districts	Male		Female		
	Retention rate	Rank	Districts	Retention rate	Rank
Phek	94.1	1	Wokha	93.0	1
Zunheboto	93.5	2	Phek	92.3	2
Mon	92.8	3	Kohima	92.0	3
Tuensang	86.8	4	Mokokchung	88.2	4
Mokokchung	86.0	5	Zunheboto	87.5	5
Kohima	78.2	6	Mon	87.5	6
Wokha	73.6	7	Tuensang	80.8	7

The above ranking shows that the retention rate for male is highest for Phek district followed by Zunheboto, Mon, Tuensang, Mokokchung, Kohima and the least retention rate being Wokha.

The ranking further shows that retention rate for female is highest for Wokha district followed by Phek, Kohima, Mokokchung, Zunheboto, Mon and Tuensang being the least.

The analysis of the data shows that retention rate is more for female as compared to male in all the districts except in Tuensang, Zunheboto, Mon and Phek districts. For these districts retention rate is more for male as compared to female. Further, the highest retention rate for male is found in Phek district and female in Wokha district, While, the least retention rate for male is found in Wokha and female in Tuensang district.

Thus, it can be interpreted that males in Wokha and females in Tuensang district contribute more to educational wastage in the state as compared to males and females of other districts. Hence special attention should be given to these two districts. Further males in Phek district and females in Wokha district are doing better as compared to male and female of other districts.

(b) For grade III, the analysis of the data reveals that retention rate is more for female for all the districts except Mokokchung, Tuensang, and Mon. For these districts retention rate is more for male.

The retention rate when arranged in descending order we find the following ranking for both male and female.

Grade III

Districts	Male		Female		
	Retention rate	Rank	Districts	Retention rate	Rank
Mon	81.5	1	Phek	85.1	1
Mokokchung	80.8	2	Kohima	76.2	2
Zunheboto	80.4	3	Zunheboto	75.1	3
Tuensang	76.0	4	Mokokchung	74.6	4
Phek	74.2	5	Wokha	74.0	5
Kohima	67.1	6	Mon	73.9	6
Wokha	65.4	7	Tuensang	68.9	7

The above ranking shows that the retention rate for male is highest in Mon district followed Mokokchung, Zunheboto, Tuensang, Phek, Kohima and the least retention rate found in Wokha district.

With respect to female the ranking further shows that the highest retention rate is found in Phek district followed by Kohima, Zunheboto, Kokokchung, Wokha, Mon and the least by Tuensang district.

The analysis indicate that males in Mon district and females in Phek district has the highest rate of retention. While males in Wokha district and female in Tuensang district has the lowest retention rate.

Thus, it can be interpreted that males in Wokha district and females in Tuensang district contribute more to educational wastage, While males in Mon district and females in Phek district are doing better as compared to males and females of other districts.

(c) For grade IV , the analysis of the data reveals that retention rate is more for female as compared to male for all the districts except Mokokchung, Tuensang, Zunheboto and Mon districts. For these districts, the retention rate is more for male as compared to male.

The retention rate when arranged in decending order we find the following rank for both male and female.

Districts	Male		Female		
	Retention rate	Rank	Districts	Retention rate	Rank
Mon	75.4	1	Phek	70.9	1
Mokokchung	74.8	2	Mokokchung	69.8	2
Zunheboto	72.4	3	Zunheboto	68.3	3
Tuensang	66.8	4	Kohima	65.7	4
Phek	59.6	5	Mon	63.4	5
Wokha	59.3	6	Tuensang	59.7	6
Kohima	51.6	7	Wokha	58.2	7

The above ranking shows that the highest retention rate for male is found in Mon district followed by Mokokchung, Zunheboto, Tuensang, Phek, Wokha while the least is from Kohima district.

With respect to female the highest retention rate is found in Phek district followed by Mokokchung, Zunheboto, Kohima, Mon, Tuensang and the least being Wokha district.

The analysis indicate that the retention rate for male is highest in Mon district, and female in Phek district while, the least retention rate for male is found in Kohima district and female in Wokha district.

Thus, it can be interpreted that males in Kohima district and female in Wokha district are contributing more to educational wastage. While male in Mon district and females in Phek district are doing much better as compared to other districts.

(B) With respect to school location :

On the basis of the flow chart constructed, the retention rate or survival rate is calculated for grade II, III and IV for different district with respect to school location which is shown in table NO. 5.27.

Table NO. 5.27

Showing the retention rate for grade II, III and IV for different district with respect to school location.

Districts	Retention rate in percentage for					
	Grade II		Grade III		Grade IV	
	R	U	R	U	R	U
Kohima	90.3 (3)	81.0 (7)	71.5	70.6	60.6 (6)	56.6 (7)
Mokokchung	84.3 (5)	90.2 (4)	77.5	77.9	71.5 (2)	73.2 (1)
Tuensang	83.8 (6)	83.7 (6)	69.2	75.3	63.9 (5)	62.4 (4)
Zunheboto	87.9 (4)	93.1 (1)	73.2	82.9	67.4 (3)	72.7 (2)
Mon	92.8 (2)	88.0 (5)	87.2	70.2	81.0 (1)	58.9 (6)
Wokha	78.4 (7)	91.8 (3)	64.2	77.6	54.1 (7)	59.3 (5)
Phek	94.9 (1)	92.1 (2)	82.6	74.7	64.7 (4)	63.5 (3)
Nagaland	87.5	88.6	74.6	75.7	66.2	64.3

Interpretation : Table NO. 5.27 reveals the position of retention/survival rate for grade II, III and IV with respect to school location as follows :-

(a) For grade II, the analysis of table NO. 5.27 reveals that the retention rate for urban schools is more for all the districts as compared to rural schools except Kohima, Tuensang Mon and Phek. For these four districts the retention rate for rural school is more as compared to that of urban schools.

The retention rate when arranged in decending order, we finding the following ranking for both rural and urban schools as follows :-

Grade II

Districts	Rural		Urban		
	Retention rate	Rank	Districts	Retention rate	Rank
Phek	94.9	1	Zunheboto	93.1	1
Mon	92.8	2	Phek	92.1	2
Kohima	90.3	3	Wokha	91.8	3
Zunheboto	87.0	4	Mokokchung	90.2	4
Mokokchung	84.3	5	Mon	88.0	5
Tuensang	83.8	6	Tuensang	83.7	6
Wokha	78.4	7	Kohima	81.0	7

The above ranking shows that retention rate for rural school is highest for Phek district, followed by Mon, Kohima, Zunheboto, Mokokchung, Tuensang while the least retention rate is found in Wokha district.

With respect to urban schools the highest retention rate is found in Zunheboto district followed by Phek, Wokha, Mokokchung, Mon, Tuensang while the least retention rate is found in Kohima district.

The analysis further shows that retention rate for rural school is highest for Phek district and urban school in Zunheboto district, while the least retention rate for rural school is found in Wokha and urban school in Kohima.

This indicate that rural school in Phek and urban school in Zunheboto are doing better as compared to rural and urban schools of other districts. While rural schools in Wokha and urban in Kohima are contributing more to educational wastage.

(b) For grade III, table NO.5.27 reveals that the retention rate for urban schools is more for all the districts except Kohima, Mon and Phek districts. For these districts retention rate for rural schools is more as compared to urban school. When the retention rate are arranged in decending order, we find the following ranking for both rural and urban schools.

Grade III

Districts	Rural		Urban		
	Retention rate	Rank	Districts	Retention rate	Rank
Mon	81.5	1	Phek	85.1	1
Mokokchung	80.8	2	Kohima	76.2	2
Zunheboto	80.4	3	Zunheboto	75.1	3
Tuensang	76.0	4	Mokokchung	74.6	4
Phek	74.2	5	Wokha	74.0	5
Kohima	67.1	6	Mon	73.9	6
Wokha	65.4	7	Tuensang	68.9	7

The above ranking shows that the retention rate for rural schools is found highest for Mon district followed by Mokokchung, Zunheboto, Tuensang, Phek, Kohima and the least being Wokha district.

With respect to urban location the highest retention rate is found in Phek district followed by Kohima, Zunheboto, Mokokchung, Wokha, Mon and the least being Tuensang.

The analysis indicate that the highest retention rate for rural school is found in Mon district and for rural school is found in Mon district and for Urban school in Phek district. While the lowest retention rate for rural school is found in Wokha district and for urban school in Tuensang district.

Hence, it can be interpreted that rural school in Mon and urban school in Phek are more efficient as compared to rural and urban schools of other district, while rural school in Wokha and urban schools in Tuensang district are contributing more to educational wastage.

(d) For grade IV , the table No.5.27 reveals that the retention rate in grade IV is more for rural schools as compared to that of urban schools for all the districts except Mokokchung, Zunheboto and Wokha. For these three districts retention rate is more for urban schools as compared to that of rural schools.

The data of retention rate for grade IV when arranged in decending order, we find the following ranking for both rural and urban schools.

## Grade IV

Districts	Rural		Urban		
	Retention rate	Rank	Districts	Retention rate	Rank
Mon	81.0	1	Mokokchung	73.2	1
Mokokchung	71.5	2	Zunheboto	72.7	2
Zunheboto	67.4	3	Phek	63.5	3
Phek	64.7	4	Tuensang	62.4	4
Tuensang	63.9	5	Wokha	59.3	5
Kohima	60.6	6	Mon	58.9	6
Wokha	54.1	7	Kohima	56.6	7

The above ranking shows that the retention rate for grade IV for rural school is highest for Mon district followed by Mokokchung, Zunheboto, Phek, Tuensang, Kohima and least for Wokha district.

With respect to urban schools retention rate is highest for Mokokchung district followed by Zunheboto, Phek, Tuensang, Wokha, Mon and the least being Kohima district.

The above analysis indicate that the highest retention rate in grade IV for rural schools is found in Mon district and urban school in Mokokchung district, while the least for rural school is found in Wokha district and for urban school in Kohima district.

Thus, it can be interpreted that rural schools in Mon district and urban schools in Mokokchung district are more efficient as compared to rural and urban schools of other districts, while rural schools in Wokha and urban schools in Kohima are contributing more to educational wastage.

## Part II

### ANALYSIS AND INTERPRETATION OF THE DATA OF RETENTION/SURVIVAL RATE FOR WHOLE NAGALAND WITH RESPECT TO SEX, SCHOOL LOCATION AND FOR TOTAL NAGALAND.

On the basis of the flow chart so constructed the retention rate for grade II, III and IV are calculated for whole Nagaland with respect to sex, school location and total Nagaland. Which is shown in table No. 5.28.

Table NO. 5.28

Showing the retention rate for grade II, III and IV for whole Nagaland with respect to sex, school location and total Nagaland.

Table NO. 5.28

Nagaland	Retention rate for grade II in percentage	Retention rate for grade III in percentage	Retention rate for grade IV in percentage
Male	86.7	75.2	65.0
Female	88.6	75.4	65.2
Rural	87.5	74.6	66.2
Urban	88.6	75.7	64.3
Nagaland as a whole	87.0	75.3	64.9

Interpretation :

Table NO. 5.28 reveals the position of retention rate or survival rate for grade II, III and IV, with respect to sex, location and total Nagaland.

(A) With respect to sex : Table NO. 5.28 reveals the position of the retention rate for grade II, III and IV with respect to sex in Nagaland as follows :

(a) The Table reveals that the retention rate for grade II is found more for female (88.6 percent) as compared to male (86.7 percent).

(b) With respect to grade III, the retention rate is found more in the case of female (75.4 percent) as compared to that of male (75.2 percent).

(c) Further, the retention rate for grade IV is found more for female (65.2 percent) as compared to that of male (65.0 percent).

The analysis indicate that, the retention rate for all the grade (i.e, grade II, III, and IV ) is found more in the case of female. Therefore, it can be interpreted that retention rate for female is more as compared to that of male.

However, it is also found that, the differences of retention rate among the grades for male and female is not much and are almost negligible, hence, they can also be treated as equal.

(B). With respect to location :

Table NO. 5.28 shows the position of retention rate for grade II, III and IV with respect to school location as follows :-

(a) The table revealed that, the retention rate for grade II is found more for urban schools (88.6 percent) as compared to rural schools (87.5 percent).

(b) With respect to grade III, the retention rate is found more in urban schools (75.7 percent) as compared to that of rural schools (74.6 percent).

- (c) Further, the retention rate for grade IV is found more for rural schools (66.2 percent) as compared to that of urban schools, (64.3 percent).

The analysis indicate that the retention rate of all the grades are found more for urban schools except in grade IV where retention rate for rural school is more.

Therefore, it can be interpreted that retention rate for urban schools is more as compared to that of rural schools with some exceptions.

(C) With respect to total Nagaland :

Table NO.5. 28 revealed the position of retention rate for grade II, III and IV for Nagaland as a whole as follows :-

- (a) The retention rate for total Nagaland in grade II is found to be 87 percent.
- (b) The retention rate for grade III for total Nagaland is found to be 75.3 percent.
- (c) The retention rate for grade IV for total Nagaland is found to be 64.9 percent.

The study reveals that the holding power of primary school system decreases as they proceeds to higher grades.

5. 5            SECTION - V.

ANALYSIS AND INTERPRETATION OF DATA WITH REGARD TO THE CAUSES OF EDUCATIONAL WASTAGE.

To find out the causes of educational wastage (i.e, dropout and failure) data was collected through 'Teacher's Inventory' from primary school teachers, headmasters, sub-inspector of schools and teacher educators. The data was collected from 170 respondents. The responses were obtained on three point scale with the following score values.

- (i) Not at all - 0
- (ii) To some extent - 1
- (iii) To a great extent - 2

The number of responses for each scale and their percentage value were calculated. Further, score value, significance value in percentage and rank value for each cause was computed.

For the sake of convenience, the 'teacher inventory' was divided into five parts and so, the interpretation was also done in five parts.

- Part I : Causes related to economic factors.
- Part II : Causes related to educational practice.
- Part III : Causes related to educational management.
- Part IV : Causes related to poor and unattractive holding power of the school.
- Part V : Causes related to social factors.
- Part VI : Comparative study of the causal factors.

Part I : CAUSES RELATED TO ECONOMIC FACTORS.

This part contains three items. Table NO. 5.29 shows the number of responses, their percentage value, score value, significance value and ranking of the responses with regard to the causes related to economic factors.

Table NO. 5.29

Showing the responses, their percentage value, score value, significance value and ranking of the responses with regard to the causes related to economic factors.

Causes related to economic factors	Responses and their percentage value			Score value	Significance value	Rank value
	Not at all	To some extent	To a great extent			
1. Inability of the parents to meet the expenditure on the education of their children.	16 (9.41)	100 (58.82)	54 (31.76)	208	61.17	2
2. Parents wants their children to supplement the family income through seeking jobs.	43 (25.30)	66 (38.82)	61 (35.88)	188	55.29	3
3. Parents need the help of their children in their family and in their occupation.	24 (14.11)	79 (46.47)	67 (39.41)	213	62.64	1
T o t a l	83 (48.87)	245 (144.09)	182 (107.65)	609	179.61	
Average percentage value	16.29	48.03	35.68	-	59.89	

Interpretation:

1. Table NO. 5.29 reveals that the cause which is most responsible for dropout and failure with regard to economic factor is, 'parents need the help of their children in their family and in their occupation'. This has a significance value of 62.64 percent.

It indicates that parents keep their children busy in their family and in their occupation and that they do not get time for their study at home due to engagement in such activities.

2. The next important cause in order of significance was 'inability of parents to meet the expenditure of the education of their children'. The significance value for this is 61.17 percent.

It appears that most of the parents are poor and cannot afford to meet the expenditures on the education of their children like, buying text books, school uniforms etc. When these basic needs are not provided, the child failed or tend to dropout from school.

3. The third important economic cause for educational wastage in order of significance was that, 'parents wants their children to supplement the family's income through seeking jobs'. The significance value for this factor being 55.29 percent.

It indicates that due to poverty of the parents, they want their children to help them in meeting the expenditure of the family. It can also be interpreted here that,

parents do not realised the need of education for their children and so, instead of sending them to school, they are held back to assist the family when they reached a workable age.

All the causes enumerated under economic factor is highly responsible for educational wastage in Nagaland. The average percentage value for this being 59.89 percent.

Part II : CAUSES RELATED TO EDUCATIONAL PRACTICE.

This part contains 12 items. Table NO. 5.30 shows the number of responses given by the respondents, their percentage value, score value, significance value and the rank value with regard to the causes related to educational practice.

Table NO. 5.30

Showing responses, their percentage value, score value, significance value and ranking of the responses with regard to the causes related to educational practice.

Causes related to educational practice	Responses and their percentage value			Score value	Significance value	Rank value
	Not at all	To some extent	To a great extent			
1. Irregularity in school attendance.	17 (10.00)	90 (52.94)	63 (37.06)	216	63.52	1
2. Pupils inability to understand the subject.	40 (23.53)	77 (45.29)	53 (31.18)	183	53.82	4
3. Lack of interest/enthusiasm on the part of the students	52 (18.82)	68 (40.00)	70 (41.17)	208	61.17	2

Causes related to educational practice.	Responses and their percentage value.			Score value	Significance value	Rank value
	Not at all	To some extent	To a great extent			
4. Lack of individual attention by the teachers because of high enrolment.	62 (36.47)	53 (31.18)	55 (32.35)	163	47.94	7
5. Heavy workload for children in school.	105 (61.76)	42 (24.71)	23 (13.53)	88	25.38	11
6. Difficulty in following the teachers language and pronunciation.	84 (49.41)	66 (38.82)	20 (11.76)	106	31.17	10
7. Fear from school.	120 (70.58)	40 (23.53)	10 (5.88)	60	17.67	12
8. Lack of suitable curriculum as per the pupils needs.	41 (24.12)	85 (50.00)	44 (25.88)	173	50.88	6
9. Ineffective teaching methods.	44 (25.88)	71 (41.76)	55 (32.35)	181	53.23	5
10. Wrong system of examination.	84 (49.35)	48 (28.24)	38 (22.36)	124	36.47	10
11. Incompetencies of teachers in teaching the content.	47 (27.65)	88 (51.76)	35 (20.59)	158	46.47	8
12. Poor economic achievement.	35 (20.59)	79 (46.47)	56 (32.94)	191	56.17	3
13. Total	711 (418.46)	807 (474.47)	522 (307.05)	1851	544.36	
Average value in percentage.	34.87	39.55	25.58	154.25	45.36	

Interpretation:

1. Table NO. 5.3.0 reveals that the causes related to educational practice is significantly responsible for the child's dropping out and failure in school. Its significance value being 45.36 percent.
2. The table above also reveals that, the most important cause related to educational practice is 'irregularity in school attendance', which has a significance value of 63.52 percent securing 52.94 percent 'to some extent' and 37.06 to a great extent.

It is due to the fact that economically poor parents need the help of their children, especially looking after their younger brothers and sisters, while, their parents go to work. Sometimes, they are also engaged in the occupation of their parents and so, they become irregular in the school, which later on leads the child to dropout from school or fail in the class.

3. The second important cause revealed in the Table above is 'lack of interest, enthusiasm on the part of the students'. The significance value for this cause being 61.17 percent, with 40 percent responses 'to some extent' and 41.17 percent responses 'to a great extent'.

It seems that due to irregularity of the student in the class the child's arrear of works go on accumulating until he finds himself unable to clear this backlog of work. Hence, he lost his interest and enthusiasm, as he could not cope with the lesson. Later on, this lead him to dro-

or fail in his class.

4. The next important cause related to educational practice is 'poor academic achievement'. The significance value being 56.17 with 46.47 percent responses 'to some extent' and 32.94 percent 'to a great extent'.

It may be due to lack of interest and enthusiasm for study on the part of the child as well as, lack of study habits and guidance at home the child becomes academically poor.

5. The next important cause related to educational practice revealed in the Table above is 'inability to understand the subject'. The significance value being 53.82 percent with a score of 45.29 percent 'to some extent' and 31.18 percent 'to a great extent'.

It may be due to defective curriculum that is, curriculum not according to the needs and interests of the child. Most of the children could not understand the subject as it was not relevant with their life situation. It can also be interpreted here that ineffective method of teaching the subject may also result in the inability to understand the subject which later on leads to educational wastage.

6. The next important cause for educational wastage is 'Ineffective teaching methods'. The significance value for this is 53.23 percent, with 41.76 percent responses 'to some extent' and 32.35 percent 'to a great extent'.

It may be due to the fact that most of the Primary school teachers are unqualified and untrained, and so, th-

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eir method of teaching the subject is ineffective, unmotivating and dull which is significantly contributing to student's failure and dropouts.

7. Another important cause for educational wastage related to educational practice were 'lack of suitable curriculum as per the pupils' needs, lack of individual attention by the teachers because of high enrolment, incompetency of teachers in teaching the content. Their significance value being 50.88 percent, 47.94 percent and 46.47 percent respectively.

It seems that due to lack of suitable curriculum, that is, curriculum not according to the needs, interest and relevancy with the life situation of the children. Most of the student dropout from school as they lose interest in studies. Moreover, individual attention is not given to the children who need special attention due to high enrolment. This may also be an important cause of failure or dropping out from school.

8. The other causes for dropout and failure related to educational practice were 'wrong system of examination', 'difficulty in following the teachers language and pronunciation', 'Heavy workload for children in school', and fear from school'. Their significance value being 36.47 percent 31.17 percent 25.38 percent and 17.64 percent respectively.

Thus, the causes related to educational practice are found to be highly responsible for educational wastage in primary schools of Nagaland.

Part III. CAUSES RELATED TO EDUCATIONAL MANAGEMENT :

This part contains 12 items. Table NO.5.31 shows the number of responses given by the respondent, their percentage value, score value, significance value and rank value of the responses with regard to educational management.

Table NO.5.31

Showing the responses, their percentage value, score value, significance value and ranking of the responses with regard to the causes related to educational management.

Causes related to educational management.	Responses and their percentage value			Score value	Significance Value	Rank value
	Not at all	To some extent	To a great extent			
1. Admitting student throughout the year.	69 (40.59)	51 (30.00)	50 (29.41)	151	44.41	9
2. Lack of adequate teaching aids	13 (6.47)	68 (40.00)	91 (53.53)	250	73.52	1
3. Lack of teachers instructional hand book	36 (21.18)	69 (40.59)	65 (38.24)	199	58.52	4
4. Lack of edl. facilities for further studies	38 (22.35)	53 (31.18)	79 (46.47)	211	62.05	2
5. Rigidity in school timings	95 (55.88)	44 (25.88)	31 (18.24)	106	31.17	11
6. Lack of qualified teachers	55 (32.35)	50 (29.41)	65 (38.23)	180	52.94	7
7. Absence of variety of teaching	68 (39.95)	48 (28.24)	54 (32.37)	156	45.88	8
8. Ineffective method of supervision and inspection in school	40 (23.53)	66 (38.82)	64 (37.65)	194	57.05	6

Causes related to educational management.	Responses and their percentage value			Score value	Significance value	Rank value
	Not at all	To some extent	To a great extent			
9. Age heterogeneity of pupils in the class.	65 (38.24)	71 (41.76)	34 (20.00)	139	40.88	10
10. Lack of school at walkable distance	102 (60.00)	41 (24.12)	27 (15.88)	95	27.94	12
11. Lack of orientation and refresher courses for teachers	38 (22.36)	62 (36.47)	70 (41.18)	202	59.41	3
12. Lack of facilities for undergoing in-service teacher training course	40 (23.53)	63 (37.06)	67 (39.41)	197	57.94	4
T o t a l	659	686	697	2080	611.71	
Average value in percentage	54.92	57.16	58.08	173.38	50.97	

Interpretation :

1. The study of table NO.5.3<sup>1</sup> reveals that the causes related to educational management was very much responsible for educational wastage in primary school. This has a significance value of 50.97 percent to its credit with 57.16 percent responses 'to some extent' and 58.68 percent 'to a great extent'.
2. The most important cause among the causes related to educational management was 'lack adequate teaching aids. It has a significant value of 73.52 with a score of 40 percent 'to some extent' and 53.53 percent 'to a great extent'.

It seems that Govt. does not provide sufficient teaching aids, to the primary schools, and the limited teaching aids available, are not effectively used. Hence teaching becomes monotonous and unattractive to the student which may also result in dropout and failure.

3. The next important cause was lack of educational facilities for further studies of the students. This has a significant value of 62.05 percent.

It appears that in most of the villages, middle schools and High school are not attached. Therefore, poor parents cannot afford to send their children to outside their village for further studies of their children which may also results in educational wastage.

4. The next important causes related to educational management was 'lack of orientation and refresher courses for teachers', lack of instructional handbook for teachers, lack of facilities for undergoing inservice teacher training. Their significance value being 59.41 percent, 58.52 percent, 57.94 percent respectively.

It indicates that most of the teachers do not get the facilities or avail the chance to attend the orientation and refresher courses as well as inservice teacher training, as a result of which they are not exposed to the latest techniques of teaching which may adversely effect the childs learning as the teaching becomes unattractive and unmotivating. Hence, it losses the holding power the child and lead to failure or dropping out from school.

It may also be due to lack of instructional handbook, most of the teachers do not know how to go about with their lessons, which leads to uninteresting dull teaching. This may also be an important cause of dropout and failure.

5. The other important causes related to educational management according to the order of significance were 'ineffective method of supervision and inspection in schools', 'lack of qualified teachers', 'absence of variety of teaching', 'admitting students throughout the year', 'Rigidity in school, timing' and 'lack of school at walkable distance. Their significance value being 57.05 percent, 52.94 percent, 45.88 percent, 44.41 percent, 31.17 percent and 27.94 percent respectively.

It appears that timely supervision and inspection on the part of the administration are neglected, as a result of which teachers become less sincere in their work, which also contribute much to educational wastage. In short all the above causes mentioned have more or less contributed to the students dropout and failure in schools.

#### Part IV CAUSES RELATED TO POOR AND UNATTRACTIVE HOLDING POWER OF THE SCHOOLS.

This part contains 8 (eight) items. Table NO. 5.32 shows the number of responses given by the respondents, their percentage value, significance value, and the rank of the responses related to poor and unattractive holding power of the school.

##### Table NO.5.32

Showing the responses, their percentage value, score value,

significance value, and the rank of the responses with the cause related to unattractive holding power of the school.

Causes related to poor and unattractive holding power of the school	Responses and their percentage.			Score value	Significance value	Rank value
	Not at all	To some extent	To a great extent			
1. Lack of physical facilities like comfortable furnitures, distinct blackboard, playground, spacious-classroom, drinking water, and toilet facilities.	26 (15.03)	51 (30.00)	93 (54.72)	237	69.70	1
2. Lack of monetary assistance like stipend	36 (21.17)	77 (45.29)	57 (33.53)	191	56.17	4
3. Lack of incentive like free text books, uniforms etc.	33 (19.41)	72 (42.35)	65 (38.24)	202	59.41	2
4. Lack of enough co. curricular activities	35 (20.59)	83 (48.42)	52 (30.59)	187	55.00	5
5. Lack of recreational activities	37 (21.76)	74 (43.53)	59 (34.04)	192	56.47	3
6. Lack of games and sports facilities	40 (23.05)	65 (35.24)	65 (38.24)	173	50.88	6
7. Absence of mid-day meals.	87 (31.76)	43 (25.29)	40 (23.53)	123	36.17	7
8. Non attractive school environment.	50 (29.41)	57 (33.53)	43 (37.06)	187	55.00	5
T o t a l	344 (187.09)	522 (307.05)	494 (289.95)	1492	438.8	-
Average value in percentage.	43 (22.86)	65.25 (38.44)	61.75 (36.24)	186.5	54.85	-

Interpretation :

1. Table NO.5.32 that the causes related to poor and unattractive holding power of the school is highly significant. The score being 38.38 percent 'to some extent' and 36.24 percent to a great extent. The significant value for this is 54.85 percent. Thus it can be interpreted that the causal factor related to poor and unattractive holding power of the school is effectively contributing to educational wastage.

2. All the causes enumerated under this head had significant effect upon the problem of child's dropping out and failure. The least significant out of them securing a value of 36.17 percent.

3. The most significant cause among the causes was 'lack of physical facilities like comfortable furnitures, distinct blackboard, playground, spacious classrooms, drinking water, and toilet facilities securing 30 percent responses 'to some extent and 54.74 percent to a great extent, the significance value being 69.70 percent.

It is found that majority of the Government primary schools do not have physical facilities. Due to lack of these basic facilities which are very much needed, children are not motivated or attracted. Hence, they dropped out from school or failed in their studies.

4. The second most important cause revealed by the table above was 'lack of incentive like free text books and uniforms', its score being 42.35 percent 'to some extent', and 38.24 percent 'to a great extent, having a significant value of 59.47 perc-

ent .

It is interpreted that parents being poor cannot afford their children's education. Therefore, in order to help the poor parents Government should provide incentives like free textbooks, uniforms etc. However due to lack of this provision in the state most of the children are not retained in schools.

5. The other important causes were 'lack of recreational activities', 'lack of monetary assistance' 'like stipends', 'lack of enough cocurricular activities', 'unattractive school environment' and 'absence of mid-day meals'. Their significance value were 56.47 percent, 56.17 percent, 55 percent, 55 percent and 50.88 percent respectively.

Thus, poor and unattractive holding power of the school was to a great extent responsible for dropping out and failure in primary schools of Nagaland.

#### Part V CAUSES RELATED TO SOCIAL FACTORS.

This part contains 6 (six) items. Table NO.5.33 shows the number of responses given by the respondent, their percentage value, score value, significance value and the rank of the responses with regard to the causes related to social factors.

#### Table NO. 5.33

Showing the responses, their percentage value, score value and ranking of the responses with regard to the causes related to social factors.

Causes related to social factors	Responses and their percentage.			Score value	Significance value	Rank
	Not at all	To some extent	To a great extent			
1. Very little or no relationship between school and community	42 (24.71)	75 (44.12)	53 (31.18)	181	53.23	4
2. Bad company of the child	34 (20.00)	58 (24.12)	78 (45.88)	214	62.94	3
3. No seperate school for girls	109 (64.11)	39 (22.94)	32 (12.94)	103	30.29	6
4. The child's inability to adjust with friends and teachers.	63 (37.06)	65 (38.24)	42 (24.07)	149	43.82	5
5. Lack of awareness among parents in particular and the community in general about the importance of education	20 (11.77)	36 (21.18)	114 (67.06)	264	77.64	2
6. Inability of parents to help their children education because of their illiteracy	5 (2.94)	39 (22.94)	126 (74.12)	291	85.58	1
T o t a l	273 (160.59)	312 (173.54)	446 (255.88)	1202	353.5	
Average value in percentage	26.76	28.92	42.65	200.33	58.92	

Interpretation :

Table NO. 533. reveals the following :-

1. The causes related to social factor are also the significant causes which are responsible for the child's failure and dropping out of school. The significant value for this factor being 58.92

percent with the response of 28.92 percent to some extent and 42.65 percent to a great extent.

2. The most important cause under this head was 'inability of parents to help their children's education because of their illiteracy'. The significant value for this was 85.58 percent.

It indicates that most of the parents are illiterate, hence, they could not help their children in their lesson, as a result of which their children leave the school early.

3. Another highly significant cause was lack of awareness among parents in particular and the community in general about the importance of education. This has a significant value of 74.64 percent with the response of 21.18 percent 'to some extent', and 67.06 percent 'to a great extent'.

It seems that uneducated parents and the community has not still fully realised the need and importance of education for their children, they are not fully supported or encouraged by their parents for their education, hence most of these children dropped out from school.

4. The next important cause was 'bad company of the child' having a significance value of 62.94 percent, and a response of 24.12 percent 'to some extent' and 62.94 percent 'to a great extent'.

It indicates that most of the dropouts and failure were due to 'Bad company of the child.

5. The other important causes of dropout and failure related to social factors according to the order of significance were 'Very little or no relationship between the school and the commun-

ity' and the child's inability to adjust with friends and teachers. Their significance value being 53.23 percent and 43.82 percent respectively.

It seems that there is poor relationship between the school and the community which may also be a responsible cause of for educational wastage.

Thus, the causes related to social factor is an important factor which is responsible for dropout and stagnation in primary education in Nagaland.

#### COMPARATIVE STUDY OF THE CAUSAL FACTORS

The Table NO.5.34 shows the comparative analysis of the different causal factors in terms of their average values in percentage, significance value in percentage, and rank value with regard to the causes of educational wastage.

Table NO.5.34

Showing the causal factors in terms of their average value in percentage, significance value in percentage and rank value.

Causal Factors	Average value in percentage			Signi- fica- nce value	Rank value
	Not at all	To some extent	To a great extent		
1. Economic factors.	16.29	48.03	35.68	59.89	1
2. Educational practice.	34.87	39.55	25.58	45.36	5
3. Educational management.	54.92	57.16	58.08	50.97	4
4. Poor and unattractive holding power of the school.	22.86	38.38	36.24	54.85	3
5. Social factors.	26.76	28.92	42.65	58.92	2

Interpretation:

Table No. 5.34. reveals the followings :

1. All the causal factors enumerated above are highly responsible for bringing educational wastage into the primary system of education in Nagaland. The table reveals that all the causal factors are having a significance value of not less than 50.97 percent except that of causal factors related to educational practice.

2. Among the causal factors, the highly responsible factor in order of significance is economic factor, which is securing an average value of 16.29 percent 'to some extent' and 48.03 percent 'to a great extent' with a significance value of 59.89 percent.

It shows that among all the causal factors, economic factor is mostly responsible for educational wastage in the state.

3. The next important causal factor responsible for educational wastage is social factor, securing a significance value of 58.92 percent with 26.76 percent to 'to some extent' and 28.92 percent 'to a great extent'.

4. The other important causal factors in the order of their significance value were 'Poor and unattractive holding power of the school' and 'Educational management' having a significance value of 54.85 percent and 50.97 percent respectively.

S E C T I O N VI5.6 ANALYSIS AND INTERPRETATION OF DATA WITH REGARD TO THE  
OPINION FOR REDUCING EDUCATIONAL WASTAGE.

To seek the opinion for reducing educational wastage, data was collected through the opinionaire from primary school teachers, headmasters, sub-inspectors of schools and teacher educators from Nagaland College of Education (NCE) and State Council of Educational Research and Training (SCERT) and District Institute of Education Kohima. The data was collected from 222 respondents. These responses were obtained on three point scale with the following score values.

- (i) To some extent - 0
- (ii) To a great extent - 1
- (iii) Very much - 2

The number of responses for each scale and their percentage value were calculated. Further, score value, significance value in percentage and rank value for each opinion were computed. This opinionaire was divided into 5 parts and so, the interpretation was also done in 5 parts.

- Part I : Opinions related to educational practice.
- Part II : Opinions related to educational management.
- Part III : Opinions related to increasing the attractive and holding power of the school
- Part IV : Opinions related to teacher training.
- Part V : Opinions related to social factors.

Part I : OPINIONS RELATED TO EDUCATIONAL PRACTICE.

This part of the opinion contains 12 items. Table NO. 5.35 shows the number of responses, their percentage value, score value, significance value and ranking of the responses related to educational practice.

Table NO. 5.35

Showing the responses, their percentage value, score value, significance value and ranking of the responses with regard to the opinions related to educational practice.

Opinions related to educational Practice	Responses and their percentage value			Score value	Significance value	Rank
	Not at all	To some	To a great extent			
1. Persuading the parents and guardians to send their children regularly to school.	74 (33.33)	66 (29.73)	82 (36.94)	230	51.80	9
2. Requesting the teachers to devote more time with the students in difficult subject.	44 (21.62)	77 (34.68)	97 (43.69)	271	61.03	4
3. Making the subject more interesting and motivating by using effective teaching methods.	33 (14.86)	78 (35.14)	111 (50.00)	300	67.56	1
4. Giving special classes to slow learners	78 (35.14)	75 (33.78)	79 (35.59)	233	52.47	8
5. Giving individual attention to students by reducing the class size	117 (52.70)	59 (26.58)	46 (20.72)	151	34.00	10
6. Requesting the teachers to be slow and clear in their speech.	68 (30.63)	75 (33.78)	79 (35.79)	233	52.47	8

Opinions related to educational Practice	Responses and their percentage value			Score value	Significance value	Rank
	Not at all	To some extent	To a great extent			
7. Creating fearless and congenial atmosphere in schools.	68 (30.63)	70 (31.53)	84 (37.84)	238	53.60	7
8. Adopting suitable teaching methods	47 (18.02)	82 (36.03)	93 (45.95)	268	60.36	5
9. Adopting suitable curriculum as per the needs and interest of the children.	40 (21.17)	80 (36.94)	102 (41.89)	284	63.96	2
10. Training the teachers for content teaching.	43 (19.37)	76 (34.23)	103 (46.40)	282	63.51	3
11. Introducing the system of internal assessment in schools	56 (25.23)	68 (30.63)	98 (44.14)	264	59.45	6
Total	672 302.70	806 363.05	974 438.95	2754	620.21	
Average value in percentage	27.5	33.00	39.90		56.38	

### Interpretation.

1. Table NO. 5.35 shows that the opinion for reducing educational wastage related to educational practice is highest for the item NO 3 which state that educational wastage can be reduced by 'Making the subject more interesting and motivating by using effective method of teaching'. This has a significance value of 67.56 percent.

This indicate that by making the subject more interesting and motivating by using effective method, the educational wastage in primary schools can be reduced.

2. The next important opinions were 'Adapting suitable curriculum as per the needs and interest of the children' and 'Training the teachers for content teaching'. These has significance values of 63.96 percent and 63.51 percent respectively.

It indicates that by adapting suitable curriculum according to the needs and interest of the children and also by training the teachers in teaching the content, educational wastage can be reduced to a great extent.

3. Another opinion for reducing educational wastage is 'Requwating the teachers to devote more time with the students in difficult subject'. The significance value for this opinion is 61.03 percent.

4. The next important opinions in the order of significance are 'Adapting suitable teaching methods' and 'Introducing the system of internal assesment in schools' which has a significance value of 60.36 percent and 59.45 percent respectively.

Majority of the respondent were of the opinion that by adapting suitable teaching methods and by introducing the system of internal assesment in primary schools, educational wastage in the form of dropout and stagnation can be reduced.

5. The other important opinions in order of their significance are 'Creating fearless and congenial atmosphere in

schools' 'Giving special classes to slow learners', 'Requesting the teachers to be slow and clear in their speech' and 'Persuading the parents and guardians to send their children to school'. The significance value for these opinions being 53.60 percent, 52.47 percent, 52.47 percent and 51.80 percent respectively.

Thus, all the opinions enumerated above for reducing educational wastage with regard to educational practice are important as none of the opinion scores less than 51.80 percent.

The total significance value for this factor is 56.38 percent which indicates that there is a need to improve educational practice in order to reduce educational wastage.

#### Part II : OPINIONS RELATED TO EDUCATIONAL MANAGEMENT.

This part of the opinion contains 12 items. Table NO.5.36 shows the number of responses, their percentage value, score value, significance value and ranking of the responses with regard to the opinions related to educational management.

#### Table NO. 5.36

Showing the responses, their percentage value, score value, significance value and ranking of the responses with regard to the opinions related to educational management.

Opinions related to educational management.	Responses and their percentage.			Score value	Significance value	Rank value
	To some extent	To a great extent	Very much			
1. Adopting uniform system of admission in the school.	77 (34.68)	59 (26.58)	86 (38.74)	231	52.02	7
2. Providing teaching aids to school.	53 (23.87)	78 (35.14)	91 (40.59)	260	58.55	4
3. Providing teachers hand book for teacher guidance.	64 (28.23)	69 (31.08)	89 (40.09)	247	55.63	6
4. Providing facilities for further studies of the teachers.	50 (22.52)	71 (31.98)	101 (45.50)	273	61.48	3
5. Having flexible school hours of worth to suit the children who has to assist their parents at home.	139 (62.61)	52 (23.42)	31 (13.96)	114	25.67	11
6. Appointing qualified teachers.	38 (17.12)	63 (28.38)	121 (54.04)	305	68.69	1
7. Providing effective supervision and inspection of schools.	40 (18.02)	87 (39.19)	95 (42.79)	277	62.38	2
8. Providing variety of teaching in the school by appointing the required number of teachers in the school.	60 (27.03)	66 (29.73)	96 (43.24)	258	58.10	5
9. Making suitable grouping of children to have older children in a separate section so as to avoid them from feeling of awkwardness in the class of younger children.	132 (59.46)	69 (31.08)	21 (9.45)	111	25.00	12

Opinions related to educational management.	Responses and their percentage.			Score value	Significance value	Rank value
	To some extent	To a great extent	Very much			
10. Providing school at walkable distance.	100 (45.05)	58 (26.13)	64 (28.83)	186	41.89	8
11. Making provision for double promotion for talented and extraordinary intelligent students.	120 (54.05)	64 (28.83)	38 (17.12)	140	31.53	10
12. Appointing lady teachers.	105 (47.30)	65 (29.28)	52 (23.42)	169	38.06	9
T o t a l	978 (439.94)	801 360.82	885 397.77	2571	579	
Average value in percentage.	36.66	30.06	33.14		48.25	

### Interpretation :

1. Table No. 5.36 reveals that the opinions for reducing educational wastage related to educational management is found to be highest for 'Appointing qualified teachers', which has a significance value of 68.69 percent with a score of 28.38 percent 'to a great extent' and 58.04 percent 'very much'.

This indicates that the appointment of qualified teachers is of prime importance in order to reduce educational wastage in primary stage.

2. The second important opinion is 'Providing supervision and inspection of schools'. The significance value being 62.38 per-

cent with 39.19 responses 'to a great extent' and 42.79 percent 'very much'.

It seems that most of the respondent viewed effective supervision and inspection of schools would reduce the child dropping out and failure in school.

3. 61.48 percent of the respondent were also of the opinion that in order to reduce educational wastage, facilities for further studies of the teachers should be given. 31.98 percent of the responses were 'to a great extent' and 45.50 percent responded 'very much'.

4. The next two important opinions are 'Providing teaching aids to schools' which has a significance value of 58.55 percent with 35.14 percent 'to a great extent' and 40.59 percent 'very much', while the other opinion is 'Providing variety of teaching in schools by appointing the required number of teachers' having a significance value of 58.10 percent with 29.73 percent 'to a great extent' and 43.24 percent 'very much'.

It appears that majority of the respondent were of the opinion that educational wastage can be reduced by providing teaching aids to schools and providing variety of teaching in the school by appointing the required number of teachers.

Other important opinions in order of their significance are, 'Providing school at walkable distance', 'Appointing lady teachers', 'Making provision for double promotion for talented and extraordinary intelligent students', 'Having

flexible school hours of work to suit the children who assist their parents at home' and 'Making suitable grouping of children to have older children in a separate section so as to avoid them from feeling of awkwardness in the class of younger children'. Their significance value being 41.89 percent, 38.06 percent, 31.53 percent, 25.67 percent and 25 percent respectively.

3. The next important opinion is 'Providing incentive like free textbooks and uniforms'. This has a significance value of 45.49 percent with a score of 32.43 percent 'to a great extent' and 29.28 percent 'very much'. Majority of the respondent feels that due to poverty of the parents, children are withdrawn from school. Therefore, in order to reduce educational wastage, textbooks uniform etc, should be provided.

4. The other opinion to reduce educational wastage in order of their significance were, 'Providing enough opportunities of co-curricular activities' and 'providing mid-day meal'. Their significance value being, 43.46 percent, 42.56 percent and 26.12 percent respectively.

5. Majority of the respondent also feels that educational wastage in primary school can be reduced by 'Providing teachers handbook for teacher guidance' (55.63 percent) and 'Adapting uniform system of admission in the school (52.02 percent).

Part III : OPINION RELATED TO INCREASING THE ATTRACTIVE AND HOLDING POWER OF THE SCHOOL.

This part of the opinion contains 6 items. Table NO. 5.37 shows the number of responses, their percentage value, sc-

ore value, significance value and ranking of the responses with the regard to the opinion related to increasing the attractive and holding power of the school.

Table NO. 5.37.

Showing the responses, their percentage value, significance value and ranking of the responses with regard to the opinions related to increasing the attractive and holding power of the schools.

Opinions related to increasing the attractive and holding power of the school.	Responses and their percentage value			score value	Significance value	Rank
	Not at all	To some extent	To a great extent			
1. Providing environment congenial for effective study such as, spacious classrooms, comfortable furnitures, distinct blackboard, drinking water and toilet facilities.	46 (20.72)	72 (32.43)	104 (46.85)	280	63.06	1
2. Providing incentive like, free textbooks and uniforms	85 (38.29)	72 (32.43)	65 (29.28)	202	45.49	3
3. Providing monetary assistance like stipends.	72 (32.43)	85 (38.29)	65 (29.28)	215	48.42	2
4. Providing mid-day meal.	137 (61.71)	54 (24.32)	31 (14.00)	116	26.12	6
5. Providing enough opportunities of co. curricular activities	65 (29.28)	121 (54.50)	36 (16.22)	193	43.46	4
6. Providing enough recreational activities	79 (35.59)	97 (43.69)	46 (20.72)	189	42.56	5
Total	484 (218.2)	501 (225.66)	347 (156.35)	1195	269.11	
Average value in percentage	36.33	37.61	26.05		44.85	

Interpretation :

1. The study of Table No.5.37 shows that opinion for reducing educational wastage related to increasing the attractive and holding power of the school is found highest for 'Providing environment congenial for effective study such as, 'spacious classroom, comfortable furniture, distinct blackboard, drinking water and toilet facilities'. This has a significant value of 63.06 percent.

It appears that, majority of the respondents felt the need to provide environment congenial for effective study, which will reduce educational wastage in primary schools.

2. The second important opinion is 'Providing monetary assistance like stipends. The significance value being 48.42.

This indicates that by providing monetary assistance like, stipends will reduce educational wastage in primary schools is a great extent.

3. The next important opinion is 'Providing incentive like free textbooks and uniforms'. This has a significance value of 45.49 percent with a score of 32.43 percent 'to a great extent' and 29.28 percent 'very much'. Majority of the respondent feels that due to poverty of the parents, children are withdrawn from school. Therefore, in order to reduce educational wastage, textbooks uniform etc, should be provided.

4. The other opinion to reduce educational wastage in order of their significance were, 'Providing enough opportunities of co-curricular activities' and 'providing mid-day meal'. Their significance value being, 43.46 percent, 42.56 percent and

26.12 percent respectively.

Part IV OPINIONS RELATED TO TEACHER TRAINING.

This part of the opinion contains 3 items. Table NO.5.38 shows the number of responses, their percentage value, score value, significance value and ranking of the responses related to Teacher Training.

Table NO. 5.38

Showing the responses, their percentage value, score value, significance value and ranking of responses with regard to the opinion related to teacher training.

Opinions related to Teacher Training	Responses and their percentage			Score Value	Significance Value	Rank value
	To some extent	To a great extent	Very much			
1. Providing regular refresher and orientation courses for teachers.	38 (17.12)	89 (40.45)	95 (42.79)	279	62.83	3
2. Providing facilities for undergoing junior teacher training courses for untrained teachers.	25 (11.26)	95 (42.79)	102 (45.95)	299	67.34	1
3. Giving demonstration classes for teachers using more effective techniques of teaching by experts.	40 (18.02)	74 (33.33)	108 (48.65)	290	65.31	2
Total	103 (46.04)	258 (116.57)	305 (137.39)	868	195.48	
Average value in percentage	15.46	38.85	45.79	-	65.16	

Interpretation : The study of Table NO.5.38. reveals the following :

1. The opinions for reducing educational wastage with regard to teacher training is most significant for 'providing facilities for undergoing junior teacher training courses for untrained teachers'. This has a significance value of 67.34 percent where 42.79 percent respondent viewed this opinion necessary 'to a great extent' while, 45.95 percent responded 'very much'. Majority of the respondent were of the view that if the primary school teachers were trained, that would help in reducing educational wastage.

2. The second significant opinion given by the respondent in reducing educational wastage is that of 'giving demonstration classes for teachers using more effective method of teaching by experts. The significance value being 65.31 percent.

It indicates that demonstration classes with effective techniques of teaching by experts be given to primary school teachers, retain students from dropout and also motivate the students for learning.

3. The next important opinion is that of 'providing regular refresher and orientation courses for teachers'. Its score being 40.45 percent 'to a great extent' and 42.79 percent 'very much' having a significance value of 62.83 percent.

Thus, all the opinions enumerated under this factor seems to be all significant as non of the items score less than 62.83 percent as its significance value.

Part V OPINIONS RELATED TO SOCIAL FACTORS.

This part contains 7 items. Table NO. 5.39 shows that number of responses, their percentage value, score value, significance value and the ranking of the responses with regard to the opinions related to social factor.

Table NO. 5.39

Showing the number of responses, their percentage value, score value, significance value and the ranking of the responses.

O P I N I O N S	Responses and their percentage value.			Score value	Significance value	Rank value
	To some extent	To a great extent	Very much			
1. Organising parent teacher meet for better understanding among them and their needs.	65 (20.28)	61 (27.48)	96 (43.24)	253	56.98	5
2. Helping the child to avoid bad company.	36 (16.22)	82 (36.94)	104 (46.85)	290	65.31	3
3. Educating the parents about the importance of education, so that they develop a positive attitude towards education	50 (22.52)	111 (50.00)	61 (27.48)	233	52.47	6
4. Helping the child through parents and teachers in his adjustment problem.	40 (18.02)	70 (31.53)	112 (50.45)	294	66.21	2

O P I N I O N S	Responses and their percentage value.			Score value	Significance value	Rank value
	To some extent	To a great extent	Very much			
5. Introducing adult education programmes for parents, so that in turn, they can help their children in their studies.	62 (27.93)	90 (40.54)	70 (31.53)	230	51.80	7
6. Helping the child to develop proper study habit at home.	32 (14.41)	69 (31.08)	121 (54.50)	311	70.04	1
7. Educating the parents on how to help their children in their studies like providing space, fixing time for them to study, making the study materials available.	58 (26.13)	66 (29.73)	98 (44.14)	262	59.00	4
T o t a l	343 (154.51)	549 (247.30)	662 (298.19)	1873	422.41	-
Average value in percentage.	22.07	35.32	42.59	-	60.34	-

Interpretation :

1. The opinion related to social factor is found to be highly significant, in reducing educational wastage. This has a significance value of 60.36 percent with a score of 35.32 percent 'to some extent' and 42.59 percent 'very much'.
2. The most significant opinion in order of significance is 'Helping the child to develop proper study habit at home', securing 31.08 percent 'to a great extent' and 54.50 percent 'very much' with a significance value of 70.64 percent.

It indicates that by helping the child to develop proper study habits at home, educational wastage can be reduced.

3. The next significant opinions is 'helping the child through parent and teachers in his adjustment problems'. This has a score of 31.53 percent 'to a great extent', and 50.45 percent 'very much'. The significant value being 66.21 percent.

It appears that dropping out and failure (educational wastage) can be reduced by helping the child in his adjustment problems.

4. The next important opinion is 'helping the child to avoid bad company'. 36.94 percent respondent reported this 'to a great extent' and 46.85 percent respondent responded 'very much'. The significance value being 65.31 percent.

5. The next two opinions were more or less equally significant. These are 'educating the parents on how to help their children in their study like providing space for their study, fixing their time for study, making the study materials available' etc, and also 'organising parent teacher meet for better understanding among them and their needs'. Their significance value being 59.00 percent and 56.98 percent respectively.

6. The next significant opinion in order of their significance are 'Educating the parents about the importance of education so that, they develop a positive attitude toward education' and 'Introducing adult education programmes for parents so that in turns they can help their children in their study'. These has a significance value of 52.47 percent and 51.80 percent respectively.

Part VI COMPARATIVE STUDY OF THE OPINIONS.

Table NO. 5.40 shows the position of the comparative study of the opinions for reducing educational wastage.

Table NO. 5.40

Showing the position of the opinions for reducing educational wastage in terms of the average value in percentage, their significance value and ranking of their responses.

O P I N I O N S	Average value in percentage.			Significance value	Rank value
	To some extent	To a great extent	Very much		
1. Opinions related to educational practice.	27.05	33.00	39.90	56.38	3
2. Opinions related to educational management.	36.66	30.06	33.14	48.25	4
3. Opinions related to increasing the attractive and holding power of the school.	36.33	37.61	26.05	44.85	5
4. Opinions related to teacher training	15.46	38.85	45.79	65.16	1
5. Opinions related to social factors.	22.07	35.32	42.59	60.34	2

Interpretation :

An analysis of Table NO.5.40 reveals the following :-

1. The most significant opinion for reducing educational wastage as revealed in the Table above is that of the opinion related to Teacher Training, which has a significance value of 65.16.
2. The second important opinion for reducing educational wastage in order of significance is found to be 'opinions related to social factor'. Having a significance value of 60.34 percent.
3. The other important opinions for reducing educational wastage in the order of significance are; opinion related to 'educational practice', opinion related to 'educational management' and opinion related to 'increasing the attractive and holding power of the school'. Their significance value being, 56.38 percent, 48.25 percent and 44.85 percent respectively.

Thus, all the opinions enumerated above are found to be responsible for reducing educational wastage in the state as none of the opinions score less than 44.85 percent.

CHAPTER - IVFINDINGS, ACTION PROGRAMMES, CONCLUSIONS AND SUGGESTIONS.6. A FINDINGS OF THE STUDY :

The findings of the study are presented under the following sections :-

- 6.1 Section I : Findings of the flow rates such as promotion rate, repetition rate and dropout rate for the different districts and for whole Nagaland with respect to sex, grade and school location.
- 6.2 Section II : Findings of the educational wastage data due to dropout, repetition and overall (i.e, due to both dropout and repetition) in terms of the pupil years wasted for the different districts and for whole Nagaland with respect to sex, school location and for total Nagaland.
- 6.3 Section III : Findings of the extent of educational wastage in terms of the percentage of pupil years spent in excess for the different districts and for whole Nagaland with respect to sex, school location and for total Nagaland.
- 6.4 Section IV : Findings of the internal efficiency of the system of primary education for the different districts and for whole Nagaland with respect to sex, school location and for total Nagaland.

6.5 Section V : Findings of the causes of educational wastage.

6.6 Section VI : Findings of the opinions for reducing educational wastage.

Each of the above section is presented in two parts. The first part presents the findings of the different districts and the second part presents the findings of the whole Nagaland.

#### 6.1 SECTION I

FINDINGS OF THE FLOW RATES SUCH AS PROMOTION RATE, REPETITION RATE AND DROPOUT RATE FOR THE DIFFERENT DISTRICTS AND FOR WHOLE NAGALAND WITH RESPECT TO SEX, SCHOOL LOCATION AND FOR TOTAL NAGALAND.

The findings of this section is presented in two parts :-

Part I : Findings of the flow rates such as promotion rate, repetition rate and dropout rate for the different districts with respect to sex and school location.

Part II : Findings of the flow rates such as promotion rate, repetition rate and dropout rate for the whole Nagaland with respect to sex, school location and for total Nagaland.

#### Part I

FINDINGS OF THE FLOW RATES SUCH AS PROMOTION RATE, REPETITION RATE AND DROPOUT RATE FOR THE DIFFERENT DISTRICTS WITH RESPECT TO GRADE, SEX AND SCHOOL LOCATION.

(A) With respect to grade and sex :

(1) Promotion rate :

(a) For grade I, promotion rate is more for male as compared to female for all the districts except Kohima, Mokokchung and Wokha. For these three districts, promotion rate is more for female as compared to male.

The promotion rate for grade I is found highest in Phek district and lowest in Wokha district. With respect to female, the promotion rate is highest for Mokokchung district, while, the lowest is found in Wokha district.

It indicate that, the promotion rate for grade I is more for male as compared to female for all the districts with some exceptions. Further, it indicate that males in Phek district and females in Mokokchung district are doing better than males and females of other districts, while, Wokha district is contributing more to educational wastage, in the case of both male and female.

(b) For grade II, the promotion rate is more for male as compared to female for all the districts except Mon and Phek.

The highest promotion rate in the case of male, is found in Mokokchung district and lowest in Mon district. With respect to female, the highest promotion rate is found in Phek district and lowest in Wokha district.

It shows that male in Mokokchung and female in Phek district are comparatively doing better than males and females of other districts, While, male in Mon district and female in Phek district are contributing more to educational wastage.

(c) For grade III, promotion rate is more for female, as compared to male, for all the districts except Mokokchung. The highest promotion rate for grade III, is found in Tuensang dist-

riect for both male and female, while, the least for male is found in Kohima district and female in Wokha district.

This indicate that for grade III, Tuensang district is found more efficient for both male and female as compared to male and female of other districts, while, male in Kohima district and female in Wokha district are having the least promotion rate.

(d) For grade IV, the promotion rate is more for male as compared to female for all the districts except Wokha and Phek. The promotion rate is found highest for male and female in Tuensang district and lowest for Wokha district, in case of male and Tuensang district in the case of female.

The study indicates that male and female in Tuensang district are doing better as compared to male and female of other districts, while, male in Wokha district and female in Mon district are contributing more to educational wastage.

(ii) Repetition rate :

(a) For grade I, repetition rate is more for female as compared to male for all the districts except Mon. The highest repetition rate for male is found in Mon district and female in Wokha district, while, the lowest for both male and female is found in Tuensang district.

It shows that males in Mon district and females in Wokha district are contributing more to educational wastage, while, both male and female in Tuensang district are comparatively better than males and females of other districts.

(b) For grade II, repetition rate is more for female as compared to male for all the districts except Mokokchung, Tuensang, Mon and Wokha. The highest repetition rate for male is found in Mon district and female in Wokha district, while, the least repetition rate for male is found in Zunheboto and female in Mokokchung district.

This shows that male in Mon district and female in Wokha district contribute more to educational wastage, while, male in Zunheboto and female in Mokokchung district are better as compared to other districts.

(c) For grade III, repetition rate is more for male as compared to female for all the districts except Kohima, Mokokchung and Zunheboto. Repetition rate is highest for male in Mon district and lowest in Tuensang district, while, for female, it is found highest in Mokokchung district and lowest in Tuensang district.

This indicate that male in Mon district and female in Mokokchung district are contributing more to educational wastage, while, both male and female in Tuensang district are doing better as compared to male and female of other districts.

(d) For grade IV, repetition rate is more for female as compared to that of male for all the districts except Wokha and Phek districts.

The highest repetition rate for both male and female are found in Wokha and Mon districts respectively, while the least is found in Tuensang district in the case of both

male and female. This indicate that males in Wokha district and females in Mon district are contributing more to educational wastage.

(iii) Dropout rate :

(a) For grade I, dropout rate is more for female as compared to male for all the districts except Kohima, Mokokchung and Wokha. The highest dropout rate for male is found in Wokha and female in Tuensang district. While, the same is found least for male in Zunheboto district and female in Wokha district.

This indicate that male in Wokha district and female in Tuensang district are contributing more to educational wastage, while, male in Zunheboto district and female in Wokha district are doing better as compared to male and female of other districts.

(b) For grade II, dropout rate is found more for female as compared to male for all the districts except Zunheboto and Phek. The highest promotion rate for male is found in Phek district and female in Wokha district, while, the least for male is found in Mokokchung district and female in Phek district.

This shows that male in Phek district and female in Wokha district contribute more to educational wastage in the form of dropout. While, male in Mokokchung district and female in Wokha district are better as compared to male and female of other districts.

(c) For grade III, dropout rate is more for female as compared

to male for all the districts except Kohima, Mokokchung, Zunheboto and Phek. Dropout rate is found highest for male in Kohima district and female in Wokha district, while the least for male is found in Mon district and female in Mokokchung district. This indicate that male in Kohima district and female in Wokha district contribute more to educational wastage in the form of dropout.

(B) With respect to school location :

(i) Promotion rate :

(a) For grade I, the promotion rate is more for urban schools for all the districts except Kohima, Tuensang and Phek. Promotion rate for rural school is found highest in Phek district and urban school in Zunheboto district. Further, the least promotion rate for rural school is found in Wokha and urban school in Tuensang district. It indicate that rural schools in Phek and urban schools in Zunheboto district are doing better as compared to rural and urban schools of other districts, while rural school in Wokha and urban school in Phek contribute more to educational wastage.

(b) For grade II, promotion rate is more for urban school as compared to rural school for all the districts except Kohima, Tuensang and Phek. The highest promotion rate for rural school is found in Phek district and urban school in Zunheboto district. While, the least promotion rate for rural school is found in Wokha district and urban school in Phek district. The study shows that rural schools in Phek and urban schools in Zunheboto are comparatively better than rural and urban

schools of other districts, while, rural schools in Wokha and urban schools in Phek district are contributing more to educational wastage.

(c) For grade III, Promotion rate is more for rural schools for all the districts except Kohima, Mokokchung and Phek districts. The promotion rate for grade III is found highest for rural schools in Tuensang district and urban school in Mokokchung district, while the least for rural school is found in Kohima district and urban school in Wokha district.

The study indicate that rural school in Tuensang district and urban school in Mokokchung district are comparatively better than rural and urban schools of other districts, while rural schools in Kohima district and urban schools in Wokha district contribute more to educational wastage as compared to other districts.

(d) For grade VI, promotion rate is more for urban schools for all the districts as compared to rural schools except Phek district. The highest promotion rate for rural schools in grade IV is found in Phek district, while, the lowest promotion rate is found in Kohima district. With respect to urban schools, the same is found highest in Tuensang district and lowest in Phek district.

This indicate that rural school in Phek district and urban schools in Tuensang district are doing better as compared to rural and urban schools of other districts, while rural schools in Kohima district and urban schools in Phek

district are contributing more to educational wastage.

(ii) Repetition rate :

(a) For grade I, repetition rate is more for rural schools as compared to urban schools for all the districts except Mokokchung, Tuensang and Phek districts. Repetition rate is highest for rural schools in Mon district and urban schools in Wokha district. While, the lowest repetition rate for rural schools is found in Tuensang district and urban schools in Zunheboto district.

This indicate that rural schools in Mon and urban schools in Wokha are contributing more to educational wastage as compared to rural and urban schools of other districts. While, rural schools in Tuensang and urban schools in Zunheboto are doing better as compared to rural and urban schools of other districts.

(b) For grade II, repetition rate is more for rural schools as compared to urban schools for all the districts except Tuensang and Phek. The highest repetition rate for rural schools in grade II, is found in Mon district and urban schools in Phek district. While, the same is found lowest for rural schools in Tuensang district and urban schools in Zunheboto district.

The study indicate that rural schools in Mon and urban schools in Phek district are contributing more to educational wastage, while, rural schools in Tuensang and urban schools in Zunheboto are doing better as compared to rural and urban schools of other districts.

(c) For grade III, repetition rate is more for rural schools as compared to urban schools for all the districts except Tuensang and Phek districts. For rural schools, the incidence of repetition rate is highest in Kohima district and urban schools in Mon district. While, the lowest repetition rate for rural schools is found in Tuensang district for both rural and urban schools.

This shows that rural schools in Kohima district and urban schools in Mon district are contributing more to educational wastage, while Tuensang district is doing better for both rural and urban schools as compared to other districts.

(d) For grade IV, repetition rate is more for rural schools as compared to urban schools for all the districts except Phek. The incidence of repetition rate is highest for rural schools in Kohima district and urban schools in Phek district. While, the lowest repetition rate for rural schools is found in Phek district and urban schools in Tuensang district.

The study shows that, rural schools in Kohima district and urban schools in Phek district are contributing more to educational wastage, while, rural schools in Phek and urban schools in Tuensang are doing better, as compared to rural and urban schools of other districts.

(iii) Dropout rate :

(a) For grade I, dropout rate is more for rural schools as compared to urban schools for all the districts except Kohima and Phek districts. The incidence of dropout rate for grade I is found highest for rural schools in Wokha district and urban

schools in Kohima district. While, the same is found lowest for rural schools in Phek district and urban schools in Zunheboto district.

The study indicate that rural schools in Wokha and urban schools in Kohima contribute more to educational wastage in the form of dropout. While, rural schools in Phek district and urban schools in Zunheboto are doing better as compared to rural and urban schools of other districts.

(b) For grade II, dropout rate is more for urban schools as compared to rural schools for all the districts except Mokokchung, Zunheboto, Tuensang and Wokha. The incidence of dropout rate is highest for rural schools in Zunheboto district and urban schools in Mon district. While, the same is found least for rural schools in Mon district and urban schools in Tuensang district.

This indicate that, rural schools in Zunheboto district and urban schools in Mon district contribute more to educational wastage, while rural schools in Mon district and urban schools in Tuensang district are doing better as compared to rural and urban schools of other districts.

(c) For grade III, dropout rate is more for urban schools as compared to rural schools for all the districts except Mokokchung and Phek districts. The highest dropout rate in grade III for rural schools is found in Phek district and urban schools in Wokha district. While, the same is least for rural schools in Zunheboto district and urban schools in Mokokchung district.

This indicate that rural schools in Phek district and urban schools in Wokha district are contributing more to educational wastage in the form of dropout. While, rural schools in Zunheboto district and urban schools in Mokokchung district are comparatively doing better than rural and urban schools of other districts.

## Part II

### FINDINGS OF THE FLOW RATES SUCH AS PROMOTION RATE, REPETITION RATE AND DROPOUT RATE FOR THE WHOLE NAGALAND WITH RESPECT TO GRADE, SEX, SCHOOL LOCATION AND FOR TOTAL NAGALAND.

(A) With respect to grade and sex :

(i) Promotion rate.

- (a) For grade I, promotion rate is more for male as compared to female .
- (b) For grade II, the same is more for male as compared to female .
- (c) For grade III, promotion rate is more for female as compared to male .
- (d) For grade IV, promotion rate is more for male as compared to female .
- (e) The highest promotion rate for male is found in grade IV and lowest in grade III.
- (f) The highest promotion rate for female is found in grade IV and lowest in grade II.

The above findings indicate that, promotion rate is more for male as compared to female for all the grades

except in grade III. This indicate that female contribute more to educational wastage as compared to male.

(ii) Repetition rate :

- (a) For grade I, repetition rate is more for female as compared to male.
- (b) For grade II, repetition rate is more for female as compared to male.
- (c) For grade III, repetition rate is more for male as compared to female.
- (d) For grade IV, the same is more for female as compared to male
- (e) The highest repetition rate for male is found in grade III and lowest in grade IV.
- (f) The highest repetition rate for female is found in grade I and lowest in grade IV.

This indicate that repetition rate is more for female in all the grades except in grade III. This further, shows that females are cotributing more to educational wastage in the form of dropout as compared to male.

(iii) Dropout rate :

- (a) For grade I, dropout rate is more for male as compared to female.
- (b) For grade II, dropout rate is more for female as compared to male.
- (c) For grade III, dropout rate is more for female as compared to male.
- (d) The highest dropout rate for male is found in grade III and lowest in grade II.

- (e) The highest dropout rate for female is found in grade II and lowest in grade I.

This indicate that, dropout rate is more for female as compared to male for all the grades except in grade I. This further indicate that females are contributing more to educational wastage in the form of dropout as compared to that of male.

(B) With respect to school location :

(i) Promotion rate :

- (a) For grade I, promotion rate is more for urban schools as compared to that of rural schools . . . . .
- (b) For grade II, the same is more for urban schools as compared to rural schools.

For grade III, promotion rate is more for rural schools as compared to urban schools.

- (d) For grade IV, Promotion rate is more for urban schools as compared to rural schools.
- (e) The highest promotion rate for rural school is found in grade IV and lowest in grade II.
- (f) The highest promotion rate for urban school in found in grade IV and lowest in grade III.

This indicate that, promotion rate is more for urban schools for all the grades except in grade III, which further indicate that, urban schools contribute more to educational wastage as compared to rural schools.

(ii) Repetition rate :

- (a) For grade I, repetition rate is more for rural schools as compared to urban schools.

- (b) For grade II, the same is more for rural schools as compared to urban schools.
- (c) For grade III, repetition rate is more for rural schools as compared to urban schools.
- (d) For grade IV, the same is more for rural schools as compared to urban schools.
- (e) The highest repetition rate for rural schools is found in grade I, while, the same is found least in grade IV.
- (f) The highest repetition rate for urban schools is found in grade III, and lowest in grade I.

This indicate that, repetition rate is more for rural schools in all the grades as compared to urban schools, which further shows that, rural schools contribute more to educational wastage in the form of repetition.

(iii) Dropout rate :

- (a) For grade I, dropout rate is more for rural schools as compared to urban schools.
- (b) For grade II, dropout rate is more for urban schools as compared to rural schools.
- (c) For grade III, dropout rate is more for urban schools as compared to rural schools.
- (d) The highest dropout rate for rural schools is found in grade II and lowest in grade III.
- (e) The highest dropout rate for urban schools is found in grade III and lowest in grade I

This indicate that, dropout rate is more for urban schools in all the grades except grade III. Hence, urban

schools contribute more to educational wastage in the form of dropout.

(C) With respect to total Nagaland : (irrespective of sex and location)

(i) Promotion rate :

The promotion rate for total Nagaland with respect to different grades are as follows :-

(a) For grade I, the promotion rate is 73.27%, for grade II, 71.85%, for grade III, 72.51% and for grade IV, promotion rate is 85.26 %.

(b) The promotion rate for Nagaland is highest for grade IV, followed by grade I, III and least for grade II.

(ii) Repetition rate :

The repetition rate for total Nagaland with respect to different grades are as follows :-

(a) For grade I, repetition rate is 16.59%, for grade II, 16.16%, for grade III, 10.08% and for grade IV, 14.74 %.

Repetition rate is found highest for grade I, followed by grade II, III and least for grade IV.

(iii) Dropout rate :

The dropout rate for total Nagaland with respect to grade is as follows :-

(a) The dropout rate for grade I is 10.4%, for grade II, 11.99% and grade III, 11.41%.

(b) The dropout rate is highest for grade II, followed by grade III, and least dropout rate is found in grade I

## 6.2 SECTION II

FINDINGS OF THE EDUCATIONAL WASTAGE DATA DUE TO DROPOUT, REPETITION AND OVERALL (i.e, DUE TO BOTH DROPOUT AND REPETITION ) IN TERMS OF PUPIL YEARS WASTED FOR THE DIFFERENT DISTRICTS AND FOR WHOLE NAGALAND WITH RESPECT TO SEX, SCHOOL LOCATION AND FOR TOTAL NAGALAND.

The findings of this section is presented in two parts:-

- Part I : Findings of educational wastage data due to dropout, repetition and overall in terms of pupil years wasted for the different districts with respect to sex, grade and school location.
- Part II : Findings of educational wastage data : due to dropout, repetition and overall (i.e, due to both dropout and repetition ) in terms of pupil years wasted for whole Nagaland with respect to sex, school location and for total Nagaland.

### Part I

FINDINGS OF EDUCATIONAL WASTAGE DATA DUE TO DROPOUT, REPETITION AND OVERALL IN TERMS OF PUPIL YEARS WASTED FOR THE DIFFERENT DISTRICTS WITH RESPECT TO SEX AND SCHOOL LOCATION.

#### (A) With respect to sex :

The following are the findings in this regard :-

##### (1) Educational wastage due to dropout :

The educational wastage in terms of pupil years wasted due to dropout is more for female as compared to male for all the districts except Kohima and Phek districts.

The educational wastage in terms of pupil years wasted due to dropout is highest for males in Phek district and females

in Wokha district, while, the same is least for both male and female in Mokokchung district.

This indicate that male in Phek district and female in Wokha district are contributing more to educational wastage in terms of pupil years wasted due to dropout, while, male and female of Mokokchung district are comparatively better as compared to male and female of other districts.

(ii) Educational wastage due to repetition :

Educational wastage in terms of pupil years wasted due to repetition is more for female as compared to male for all the districts except Mokokchung, Tuensang, Zunheboto and Wokha.

Educational wastage due to repetition is highest for Mon district in the case of both male and female, while, the lowest for male is found in Kohima district and female in Tuensang district.

This indicates that Mon district contributes more to educational wastage in terms of pupil years wasted due to repetition, while, male in Kohima district and female in Tuensang district are doing better as compared to male and female of other districts.

(iii) Educational wastage due to both dropout and repetition:

The educational wastage due to both dropout and repetition (overall) in terms of pupil years wasted is more for female as compared to male for all the districts except Phek district.

The educational wastage due to both dropout and repetition in terms of pupil years wasted is found highest for Wokha district in the case of both male and female, while, the same is found lowest for Zunheboto district in the case of male and Tuensang district in the case of female.

This shows that, Wokha district contribute more to educational wastage in terms of pupil years wasted due to both dropout and repetition in the case of both male and female, while, male in Zunheboto district and female in Tuensang district are comparatively better as compared to male and female of other districts.

(B) With respect to school location :

(i) Educational wastage due to dropout :

Educational wastage in terms of pupil years wasted due to dropout is more for urban schools as compared to rural schools for all the districts except Kohima, Mokokchung, and Zunheboto.

Educational wastage in terms of pupil years wasted due to dropout is highest for Wokha district in the case of both rural and urban schools, while, the least for rural schools is found in Mon district and urban schools in Zunheboto district.

This indicate that, Wokha district is contributing more to educational wastage in the case of both rural and urban schools, while, rural schools in Mon district and urban schools in Zunheboto are doing better as compared to rural and urban schools of other districts.

(ii) Educational wastage due to repetition :

Educational wastage (in terms of pupil years wasted due to repetition is more for rural schools as compared to urban schools for all the districts except Tuensang and Phek districts.

Educational wastage in terms of pupil years wasted due to repetition is found highest for rural schools in Mon district and urban schools in Phek district, while, the least for rural school is found in Tuensang district and urban schools in Kohima district.

(iii) Educational wastage due to both dropout and repetition ;

(Overall).

Educational wastage in terms of pupil years wasted due to both dropout and repetition is more for rural schools as compared to that of urban schools for all the districts except Tuensang, Wokha and Phek.

The educational wastage in terms of pupil years wasted due to both dropout and repetition is found highest for rural schools in Kohima district and urban schools in Wokha district, while, the same is lowest for rural schools in Tuensang district and urban schools in Zunheboto district.

This shows that, rural schools in Kohima district and urban schools in Wokha district are contributing more to educational wastage in terms of pupil years wasted, while rural schools in Tuensang district and urban schools in Zunheboto are doing better as compared to rural and urban schools of other districts.

Part II

FINDINGS OF EDUCATIONAL WASTAGE DATA DUE TO DROPOUT, REPETITION AND OVERALL IN TERMS OF PUPIL YEARS WASTED FOR WHOLE NAGALAND

WITH RESPECT TO SEX, SCHOOL LOCATION AND FOR TOTAL NAGALAND.

(A) With respect to sex :

The following are the findings in this regard :

(i) Educational wastage due to dropout :

Educational wastage in terms of pupil years wasted due to dropout for whole Nagaland is more for female as compared to that of male.

(ii) Educational wastage due to repetition :

The educational wastage in terms of pupil years wasted due to repetition for whole Nagaland is more for female as compared to that of male.

(iii) Educational wastage due to both dropout and repetition :

The overall educational wastage (i.e, educational wastage due to both dropout and repetition) in terms of pupil years wasted for whole Nagaland is more for female as compared to that of male.

(B) With respect to school location :

The following are the findings in this regard :-

(i) Educational wastage due to dropout :

Educational wastage in terms of pupil years wasted due to dropout for whole Nagaland is more for urban school as compared to that of rural school.

(ii) Educational wastage due to repetition :

Educational wastage in terms of pupil years wasted due to repetition for whole Nagaland is more for rural schools

as compared to that of urban schools.

(iii) Educational wastage due to both dropout and repetition :  
(Overall)

The educational wastage due to both dropout and repetition for whole Nagaland is more for rural schools as compared to urban school.

(C) With respect to Total Nagaland : (irrespective of sex and location ).

The following are the findings in this regard :

(1) Educational wastage due to dropout :

The educational wastage in terms of pupil years wasted due to dropout for total Nagaland is 823 pupil years wasted.

(ii) Educational wastage due to repetition :

The educational wastage in terms of pupil years wasted due to repetition for total Nagaland is 481 pupil years wasted.

(iii) Educational wastage due to both dropout and repetition :

The educational wastage in terms of pupil years wasted due to both dropout and repetition (overall) for total Nagaland is 1304 pupil years wasted.

### 6. 3 SECTION III

FINDINGS OF THE EXTENT OF EDUCATIONAL WASTAGE IN TERMS OF THE PERCENTAGE OF PUPIL YEARS SPENT IN EXCESS FOR THE DIFFERENT DISTRICT AND FOR WHOLE NAGALAND WITH RESPECT TO SEX, SCHOOL LOCATION AND FOR TOTAL NAGALAND.

The findings of this section is presented in two parts :-

Part I : Findings of the extent of educational wastage in terms of the percentage of pupil years spent in excess for the different districts with respect to sex and school location.

Part II : Findings of the extent of educational wastage in terms of the percentage of pupil years spent in excess for whole Nagaland with respect to sex, school location and for total Nagaland.

#### Part I

#### FINDINGS OF THE EXTENT OF EDUCATIONAL WASTAGE IN TERMS OF THE PERCENTAGE OF PUPIL YEARS SPENT IN EXCESS FOR THE DIFFERENT DISTRICTS WITH RESPECT TO SEX AND SCHOOL LOCATION.

##### (A) With respect to sex :

The extent of educational wastage in terms of the percentage of pupil years spent in excess is more for female as compared to male for all the districts except Kohima and Phek districts.

The highest percentage of pupil years spent in excess for both male and female is found in Wokha district, while, the same is found least for both male and female in Mokokchung district.

This indicate that Wokha district contribute more to educational wastage in the form of pupil years spent in excess in the case of both male and female, while, both male and female in Tuensang district are comparatively better than male and female of other districts.

(B) With respect to school location :

The extent of educational wastage in terms of the percentage of pupil years spent in excess is more for urban schools as compared to rural schools except Kohima, Mokokchung, Zunheboto and Wokha districts

The percentage of pupil years spent in excess is highest for both rural and urban schools in Wokha district, while, the same is found least for rural schools in Tuensang district and urban schools in Zunheboto district.

This indicate that Wokha district contribute more to educational wastage in the form of the percentage of pupil years spent in excess for both rural and urban schools, while, rural schools in Tuensang district and urban schools in Zunheboto are comparatively better as compared to urban and rural schools of other districts.

Part II

FINDINGS OF THE EXTENT OF EDUCATIONAL WASTAGE IN TERMS OF PUPIL YEARS SPENT IN EXCESS FOR WHOLE NAGALAND WITH RESPECT TO SEX, SCHOOL LOCATION AND FOR TOTAL NAGALAND.

(A) With respect to sex :

The percentage of pupil years spent in excess for whole Nagaland with respect to sex is more for female as compared to male.

(B) With respect to school location :

The percentage of pupil years spent in excess for whole Nagaland with respect to school location is more for urban schools as compared to that of rural school.

(C) With respect to total Nagaland :(irrespective of sex and school location ).

The percentage of pupil years spent in excess for total Nagaland is 33.43%.

#### 6.4 SECTION IV

#### FINDINGS OF THE INTERNAL EFFICIENCY OF THE SYSTEM OF PRIMARY EDUCATION FOR THE DIFFERENT DISTRICTS AND FOR WHOLE NAGALAND WITH RESPECT TO SEX, SCHOOL LOCATION, AND FOR TOTAL NAGALAND.

The internal efficiency of the system of primary education is determined by the following four indices. The findings of these indices are presented as follows :-

- 6.4.1 Findings of the coefficient of efficiency for the system of primary education for the different districts and for whole Nagaland with respect to sex, school location and for total Nagaland.
- 6.4.2 Findings of the educational wastage ratio (i/o ratio) for the different districts and for whole Nagaland with respect to sex, school location and for total Nagaland.
- 6.4.3 Findings of the average number of pupil years spent by per successful graduate for the different districts and for whole Nagaland with respect to sex, school location and for total Nagaland.
- 6.4.4 Findings of retention rate for the different districts and for whole Nagaland with respect to sex, school location and for total Nagaland.

6. 4. 1 FINDINGS OF THE COEFFICIENT OF EFFICIENCY FOR THE SYSTEM OF PRIMARY EDUCATION FOR THE DIFFERENT DISTRICTS AND FOR WHOLE NAGALAND WITH RESPECT TO SEX, SCHOOL LOCATION AND FOR TOTAL NAGALAND.

The findings of this section is presnted in two parts

Part I : Findings of the coefficient of efficiency for the system of primary education for the different districts with respect to sex and school location.

Part II : Findings of the coefficient of efficiency for the system of primary education for whole Nagaland with respect to sex, school location and for total Nagaland.

Part I

FINDINGS OF THE COEFFICIENT OF EFFICIENCY FOR THE DIFFERENT DISTRICT WITH RESPECT TO SEX AND SCHOOL LOCATION.

(A) With respect to sex :

The coefficient of efficiency of the system of primary education for the different districts is more for male as compared to female for all the districts except Kohima and Phek districts.

The coefficient of efficiency is highest for both male and female in Mokokchung district, while, the same is least efficient for Wokha district in the case of both male and female.

This indicate that, coefficient of efficiency of the system of primary education for the different districts is found most efficient in Mokokchung district in the case of both male and female, while, Wokha district is comparatively least

efficient as compared to other districts.

(B) With respect to school location :

The coefficient of efficiency of the system of primary education for the different districts is more for rural schools as compared to urban schools for all the districts except Kohima, Mokokchung, Zunheboto and Wokha districts.

The coefficient of efficiency for the system of primary education for rural schools is highest for Tuensang district, while, the same is least efficient for Wokha district.

The coefficient of efficiency for the system of primary education for urban schools is highest in Zunheboto district, while, the same is least for Wokha district.

This indicate that, the coefficient of efficiency for the system of primary education is found more efficient for Tuensang district in the case of rural schools and Zunheboto district in the case of urban schools, while, Wokha district is found least efficient for both rural and urban schools.

## Part II

### FINDINGS OF THE COEFFICIENT OF EFFICIENCY FOR THE SYSTEM OF PRIMARY EDUCATION FOR WHOLE NAGALAND WITH RESPECT TO SEX, SCHOOL LOCATION AND FOR TOTAL NAGALAND.

(A) With respect to sex :

The coefficient of efficiency for the system of primary education for whole Nagaland with respect to sex is more for male as compared to female.

(B) With respect to school location :

The coefficient of efficiency for the system of primary education for the whole Nagaland with respect to school location is more for rural school as compared to urban school,

(C) With respect to total Nagaland :

(irrespective of sex and location)

The coefficient of efficiency for the system of primary education for total Nagaland is 66.56%.

6.4.2. FINDINGS OF THE EDUCATIONAL WASTAGE RATIO (i/o ratio) FOR THE DIFFERENT DISTRICTS AND FOR WHOLE NAGALAND WITH RESPECT TO SEX, SCHOOL LOCATION AND FOR TOTAL NAGALAND.

The findings of this section is presented in two parts :-

Part I: Findings of educational wastage ratio ( i/o ratio) for the different districts with respect to sex and school location.

Part II: Findings of educational wastage ratio (i/o rratio) for the whole Nagaland with respect to sex, school location and total Nagaland.

Part I

FINDINGS OF EDUCATIONAL WASTAGE RATIO (i/o ratio) FOR THE DIFFERENT DISTRICTS WITH RESPECT TO SEX AND SCHOOL LOCATION.

The following are the findings in this regard :-

(A) With respect to sex :

The educational wastage ratio of the primary edu-

cation system for the different districts with respect to sex is more for female as compared to male for all the districts with some exception.

The educational wastage ratio for male is highest in Kohima district, while, the lowest is found in Mokokchung district.

With respect to female, educational wastage ratio (i/o ratio) is highest for Wokha and lowest for Zunheboto district.

This indicate that educational wastage ratio is more for female as compared to male. Further, the wastage ratio for male is highest in Kohima district and female in Wokha district, while, the least for male is found in Mokokchung district and female in Zunheboto district. This shows that male in Kohima and female in Wokha contribute more to educational wastage as compared to male and female of other districts. While, male in Mokokchung district and female in Zunheboto district are doing better.

(B) With respect to location :

The educational wastage ratio (i/o ratio) in the primary education system is more for urban schools as compared to rural schools with some exception.

The highest educational wastage ratio (i/o ratio) for rural school is found in Wokha and lowest in Tuensang district. With respect to urban school is highest for Wokha district and lowest for Zunheboto district.

This indicate that, urban schools contribute more to educational wastage as compared to rural schools. Further Wokha district has the highest educational wastage ratio for both rural and urban schools, while, the least for rural school is found in Tuensang district and urban schools in Zunheboto district.

This shows that rural and urban schools in Wokha district contribute more to educational wastage as compared to rural and urban schools of other districts.

## Part II

### FINDINGS OF EDUCATIONAL WASTAGE RATIO (i/o ratio) FOR WHOLE NAGALAND WITH RESPECT TO SEX, SCHOOL LOCATION AND FOR TOTAL NAGALAND.

(A) With respect to sex :

The educational wastage ratio for whole Nagaland with respect to sex is more for female as compared to male.

(B) With respect to school location :

Educational wastage ratio ( i/o ratio) for whole Nagaland is more for urban school as compared to rural school.

(C) With respect to total Nagaland : (irrespective of sex)

The educational wastage ratio for total Nagaland is 1.50.

6.4.3 FINDINGS OF THE AVERAGE NUMBER OF PUPIL YEARS SPENT BY PER SUCCESFUL GRADUATE FOR THE DIFFERENT DISTRICTS AND FOR WHOLE NAGALAND WITH RESPECT TO SEX, SCHOOL LOCATION AND FOR TOTAL NAGALAND.

The findings of this section is presented in two parts :-

Part I : Findings of the average number of pupil years spent by per succesful graduate for the different districts with respect to sex, school location.

Part II : Findings of the average number of pupil years spent by per succesful graduate for whole Nagaland with respect to sex, school location and for total Nagaland.

Part I

FINDINGS OF THE AVERAGE NUMBER OF PUPIL YEARS SPENT BY PER SUCCESFUL GRADUATE FOR THE DIFFERENT DISTRICTS WITH RESPECT TO SEX AND SCHOOL LOCATION .

(A) With respect to sex ;

The average number or pupil years spent by per succesful graduate is more for female as compared to that of male for all the districts except Kohima and Phek districts.

The average number of pupil years spent by per succesful graduate is highest for Wokha district in the case of both male and female, while, the least for male is found in Zunheboto district and female in Mokokchung district.

This indicate that, Wokha district contribute more

to educational wastage in terms of the percentage of pupil years spent by per succesful graduate, while, Zunheboto district for male and Mokokchung district for female are doing better than the rest of the districts.

(B) With respect to school location :

The average number of pupil years spent by per succesful graduate is more for rural school as compared to urban school for all the districts except Tuensang, Mon and Phek districts.

The average number of pupil years spent by per succesful graduate is highest for Wokha district in the case of both rural and urban schools, while, the same is least for rural school in Tuensang district and urban school in Zunheboto district.

This shows that Wokha district is contributing more to educational wastage in terms of the percentage of pupil years spent by per succesful graduate in the case of both rural and urban schools, while, rural school in Tuensang district and urban school in Zunheboto district are comparatively better as compared to rural and urban schools of other districts.

Part II

FINDINGS OF THE AVERAGE NUMBER OF PUPIL YEARS SPENT BY PER SUCCESFUL GRADUATE FOR WHOLE NAGALAND WITH RESPECT TO SEX, SCHOOL LOCATION AND FOR TOTAL NAGALAND.

(A) With respect to sex :

The average number of pupil years spent by per su-

successful graduate with respect to sex is more for female as compared to male.

(B) With respect to location :

The average number of pupil years spent by per successful graduate with respect to school location is more for urban school as compared to that of rural school.

(C) With respect to total Nagaland ; (irrespective of sex and school location).

The average number of pupil years spent by per successful graduate for total Nagaland is 6 years.

6. 4. 4. FINDINGS OF RETENTION/ SURVIVAL RATE FOR THE DIFFERENT DISTRICTS AND FOR WHOLE NAGALAND WITH RESPECT TO SEX, SCHOOL LOCATION AND FOR TOTAL NAGALAND.

The findings of this section is presented in two parts :-

Part I : Findings of retention / survival rate for the different districts with respect to grade, sex and school location.

Part II : Findings of retention/survival rate for whole Nagaland with respect to grade, sex, school location and for total Nagaland.

Part I

FINDINGS OF THE RETENTION/SURVIVAL RATE FOR THE DIFFERENT DISTRICTS WITH RESPECT TO GRADE, SEX, AND SCHOOL LOCATION.

(A) With respect to GRADE AND SEX :

(a) For grade II, the retention rate is more for female as compared to male for all the districts except Zunheboto, Mon, Tuensang and Phek districts.

The retention rate for male in grade II is highest in Phek district and lowest in Wokha district. While, the same is found highest for female in Wokha district and lowest in Tuensang district.

This indicate that retention/survival rate in grade II is more for female as compared to male for all the districts with some exception. Further, it shows that male in Wokha district and female in Tuensang district are contributing more to educational wastage as compared to male and female of other districts, while , male in Phek district and female in Wokha district are comparatively better as compared to male and female of other districts.

(b) For grade III, retention rate is more for female for all the districts except Mokokchung, Tuensang, Zunheboto and Mon districts.

The highest retention rate for male is found in Mon district and female in Phek district, while the same is lowest for male in Wokha district and female in Tuensang district.

This indicate that male in Mon district and female in Phek district are comparatively better, while, male in Wokha district and female in Tuensang district are contributing more to educational wastage as compared to male and female of other districts.

(c) For grade IV, retention rate is more for female as compared to male for all the districts except Mokokchung, Tuensang, Zunheboto and Mon.

The retention rate for male is found highest in Mon district and female in Phek district. While, the same is lowest for male in Kohima district and female in Wokha district.

This indicate that male in Mon district and female in Phek district are comparatively better, while, Male in Kohima district and female in Wokha district are contributing more to educational wastage.

(B) With respect to school location :

(a) For grade II, the retention/ survival rate for urban school is more for all the districts as compared to rural school except Kohima, Tuensang, Mon and Phek.

✓The retention rate for grade II in the case of rural school is highest for Phek district and urban school in Zunheboto district, while, the least retention rate for rural school is found in Wokha district and urban school in Kohima district.

This indicate that rural school in Phek district and urban school in Zunheboto district are comparatively better, while rural school in Wokha district and urban school in Kohima district are having the least retention rate, thereby contributing more to educational wastage.

(b) For grade III, the retention rate for urban school is more for all the districts as compared to rural school except Kohima, Mon and Phek districts.

The highest retention rate for rural school is found in Mon district and urban school in Phek district. While, the same is found least for rural school in Wokha district and urban school in Tuensang district.

This shows that rural school in Mon district and urban school in Phek district are comparatively better, while rural school in Wokha and urban school in Tuensang district are contributing more to educational wastage, as compared to rural and urban school of other districts.

(c) For grade IV, the retention rate for rural school is more as compared to urban school for all the districts except Mokokchung, Zunheboto and Wokha districts.

The retention rate for grade IV is found highest for rural school in Mon district and urban school in Mokokchung district, While, the least retention rate for rural school is found in Wokha district and urban school in Kohima district.

The study indicate that rural school in mon district and urban school in Mokokchung district are comparatively better, while, rural school in Wokha district and urban school in Kohima district are having the least retention rate as compared to rural and urban school of other districts.

## Part II

### FINDINGS OF RETENTION / SURVIVAL RATE FOR WHOLE NAGALAND WITH RESPECT TO GRADE, SEX, SCHOOL LOCATION AND FOR TOTAL NAGALAND.

(A) With respect to grade and sex :

The retention rate for grade II is found more for

female as compared to male.

(b) The retention rate for grade III is more for female as compared to male.

(c) The retention rate for grade IV is found more for female as compared to that of male.

The study indicate that retention rate for all the grades (i.e, II, III, IV) is found more for female as compared to male. Hence, male contribute more to educational wastage.

(B) With respect to school location :

(a) The retention rate for grade II is found more for urban school as compared to rural school.

(b) The retention rate for grade III is more for urban school as compared to rural school.

(c) Further, the retention rate for grade IV is more for rural school as compared to urban school.

The study indicate that, retention rate is more for urban school for all the grades except in grade IV. This indicate that urban school are comparatively better as compared to rural school.

(C) With respect to total Nagaland: (irrespective of sex and location.).

(a) The retention rate for total Nagaland in grade II is 87.9%

(b) The retention rate for grade III for total Nagaland is 75.3%

(c) The retention rate for grade IV for total Nagaland is 64.9%

The study found that, the holding power of primary school system decreases as they proceed to higher grades.

5. 5      SECTION VFINDINGS REGARDING THE CAUSES OF EDUCATIONAL WASTAGE.

The findings with regard to the causes of educational wastage has been presented under the following parts:-

- Part I    : Causes related to economic factors.
- Part II   : Causes related to educational practice.
- Part III  : Causes related to educational management.
- Part IV   : Causes related to poor and unattractive holding power of the schools.
- Part V    : Causes related to social factors.
- Part VI   : Findings regarding the comparative study of the causal factors.

Part : I.    CAUSES RELATED TO ECONOMIC FACTORS.

The following are the findings in this regard:-

1. Majority of the respondents reported that the cause which is most responsible for dropout and failure with regard to economic factor is that 'Parents need the help of their children in the family and in their occupation'.
2. Majority of the respondents expressed that 'inability of the parents to meet the expenditure on the education of their children' is a responsible cause for educational wastage.
3. The next important cause of educational wastage as viewed by the respondents is that 'parents want their children to supplement the family's income through seeking jobs'.

Part : II. CAUSES RELATED TO EDUCATIONAL PRACTICE.

The following are the findings in this regard :-

1. Majority of the respondents reported that, the most important cause related to educational practice is 'irregularity in school attendance'.
2. Majority of the respondents expressed that 'lack of interest and enthusiasm on the part of the students to study as an important cause of educational wastage.
3. Poor academic achievement on the part of the student is also found as an important cause of educational wastage.
4. Most of the respondents felt that 'inability of the students to understand the subject is responsible for pupil's dropping out and failure in schools.
5. Ineffective teaching methods is also found to be the most important cause of educational wastage.
6. Majority of the respondents felt that 'lack of suitable curriculum as per the pupil's needs, and lack of individual attention on the part of the teachers' are important causes of educational wastage.
7. It appears that the other important causes related to educational practice are 'wrong system of examination', 'difficulty in following the teachers language', 'heavy workload in schools', and 'fear from schools'.

Part : III. CAUSES RELATED TO EDUCATIONAL MANAGEMENT.

1. Majority of the respondents expressed that 'lack of adequate teaching aid is an important factor of educational wastage.
2. It is also found that 'lack of educational facilities for further studies of the students' is an important cause of educational wastage.
3. Majority of the respondents are of the view that 'lack of orientation and refresher courses for teachers 'lack of instructional handbooks' and 'lack of facilities for undergoing inservice teacher training courses' are also important causes of educational wastage.
4. The other important causes related to educational practice viewed by the respondent are 'ineffective method of supervision and inspection in schools', 'lack of qualified teachers', 'absence of variety of teaching', 'admitting students throughout the year', 'rigidity in school timing' and 'lack of school at walkable distance'.

Part : IV. CAUSES RELATED TO POOR AND UNATTRACTIVE HOLDING POWER OF THE SCHOOLS.

The following are the findings in this regard :-

1. The study revealed that the most significant cause related to poor and unattractive holding power of the schools are 'lack of physical facilities like comfortable fu-

- rnitures, distinct blackboard, playground, spacious classroom, drinking water, and toilet facilities'.
2. Majority of the respondents viewed that 'lack of incentives like free textbooks, uniforms, are responsible for the childs dropping out and failure in schools.
  3. Majority of the respondents felt that lack of recreational activities, lack of monetary assistance like stipends, lack of enough cocurricular activities, unattractive school environment, and absence of midday meals are the important causes of educational wastage.

Part : V. CAUSES RELATED TO SOCIAL FACTORS.

The following are the findings in this regard:-

1. Majority of the respondents felt that the most important cause of educational wastage related to social factor is 'Inability of the parents to help their children's education because of their illiteracy.
2. Another highly significant cause as viewed by the respondents is 'lack of awareness among parents in particular, and the community in general about the importance of education.
3. For majority of the respondents 'bad company of the child' is also a responsible factor of dropping out and failure.
4. Lack of proper co-ordination that is 'little or no relationship between the school and community' is also found

to be a responsible cause of educational wastage.

Part : VI. FINDINGS REGARDING THE COMPARATIVE STUDY OF THE CAUSAL FACTORS.

1. The comparative study of the causal factors reveals that, the most highly significant factor contributing to educational wastage is 'the economic factor'.
2. The next important causal factor in order of significance which is responsible for educational wastage is the 'social factor'.
3. The other important factor in order of significance are 'poor and unattractive holding power of the school' and 'educational management'.
4. The least important factor among the causal factors is found to be factor related to 'educational practice'.

6. 6 SECTION VI

FINDINGS REGARDING THE OPINIONS FOR REDUCING EDUCATIONAL WASTAGE.

The findings with regard to the opinion for reducing wastage has been presented under the following heads :-

- Part I : Opinions related to educational practice.
- Part II : Opinions related to educational management.
- Part III : Opinions related to increasing the attractive and holding power of the school.
- Part IV : Opinions related to teacher training programmes.
- Part V : Opinions related to social factor.

Part VI : Findings regarding the comparative study of the opinions for reducing educational wastage.

Part : I. OPINIONS RELATED TO EDUCATIONAL PRACTICE.

The following are the major findings regarding the opinions related to educational practice, for reducing educational wastage.

1. Majority of the respondents are of the opinion that educational wastage can be reduced by making the subject more interesting and motivating by using effective method of teaching.
2. Majority of the respondents are also of the opinion that by adapting suitable curriculum as per the needs and interest of the children and also by training the teachers for content teaching, educational wastage can be reduced.
3. Another important opinion viewed by the majority of the respondent for reducing educational wastage is requesting the teachers to devote more time with the students in difficult subject.
4. Majority of the respondent are of the opinion that by adapting suitable teaching methods, and by introducing the system of internal assesment in primary schools, educational wastage can be reduced.
5. The other important opinions viewed by majority of the

respondents, in order of their significance are creating fearless and congenial atmosphere in schools, giving special classes to slow learners, requesting the teachers to be slow and clear in their speech, and persuading the parents and guardians to send their children regularly to schools.

The study found that, all the opinions enumerated above for reducing educational wastage with regard to educational practice are important, as none of the opinion score less than 51.80 percent.

#### Part : II. OPINIONS RELATED TO EDUCATIONAL MANAGEMENT.

The following are the major findings of the study:-

1. Majority of the respondents are of the opinion that educational wastage can be reduced by appointing qualified teachers.
2. Majority of the respondents also viewed that effective supervision and inspection of schools at regular intervals would reduce educational wastage.
3. Majority of the respondents are also of the opinion that educational wastage can be reduced by giving facilities for further studies of the teachers, so that they become more efficient in their teaching.
4. For majority of the respondent, it is felt that educational wastage can be reduced by providing teaching aids to schools, and also by providing variety of teaching in



2. Majority of the respondents are of the opinion that provision of monetary assistance like stipends will help in reducing educational wastage.
3. It is also observed by the respondents that providing free textbooks and uniforms to poor children would help in reducing educational wastage in the state.
4. Other important opinions viewed by the respondents in order of their significance are providing opportunities for co-curricular activities, providing mid-day meals.

Part : IV. OPINIONS RELATED TO TEACHER TRAINING PROGRAMMES.

The following are the major findings of the study:-

1. Majority of the respondent felt that educational wastage can be reduced by giving training facilities to primary school teachers.
2. Majority of the respondents also viewed that giving demonstration classes for teachers, using more effective methods of teaching by experts will help the students learn better and thus will reduce educational wastage.
3. It is also seen that majority of the respondents expressed that providing regular and refresher courses and orientation courses for teachers, will help in reducing educational wastage to some extent.

All the opinions enumerated under this factor seems to be all significant, as non of the items score less than 62.83 percent as its significant value.

Part : V. OPINIONS RELATED TO SOCIAL FACTOR.

The following are the major findings under this heads :-

1. Majority of the respondent are of the opinion that educational wastage can be reduced by helping the child to develop proper study habits at home.
2. Majority of the respondents are also of the opinion that educational wastage can be reduced by helping the child in his adjustment problem.
3. Majority of the respondent also felt that helping the child to avoid bad company may lead to less educational wastage.
4. Most of the respondents felt that educational wastage can be reduced by educating the parents on, how to help their children in their studies like providing space, fixing the time for their study, making the study materials available, and also organising parent teachers meet will reduce educational wastage.
5. Majority of the respondent are also of the opinion that educational wastage can be reduced by educating the parents on the importance of education so that, they may develop a positive attitude towards education. Also, to introduce adult education programme for parents so that in turn, they can help their children in their study.
6. All the opinions enumerated above, seems to be very significant as none of the opinion score less than 51.80

percent as its significant value.

Part : VI. FINDINGS REGARDING THE COMPARATIVE STUDY OF THE  
OPINIONS FOR REDUCING EDUCATIONAL WASTAGE.

The following are the findings of the comparative study of the opinions for reducing educational wastage.

1. The study found that the most significant opinion for reducing educational wastage is that of the opinions related to teacher training.
2. The next important opinion as revealed by the study is that of the opinion related to social factor.
3. The other important opinions for reducing educational wastage in order of significance are :-  
Opinions related to educational practice, Opinions related to educational management, and opinions related to increasing the attractive and holding power of the schools.

## VI. B ACTION PROGRAMMES FOR REDUCING EDUCATIONAL WASTAGE.

The findings of the study reveals that, the rate of educational wastage in the state is alarmingly high. Unless some drastic measures are taken to check these growing problems, the state can never achieve its dream of universalisation of primary education in the state. The investigator felt that unless and untill we device specific means of obsorbing children into the schools and stimulating healthy conditions with a view to re-tain them in the school the problem remain unsolved.

The reasons and causes of educational wastage in the state vary from school to school, place to place (location) and even from individual to individual, (sex). Therefore, it is very difficult to suggest a single remedial measure or action programme for reducing educational programme.

However, keeping in view of the opinions given by the teachers, teacher educators, Inspector of schools, the investigator has suggested some remedial measures or action programmes with a hope that, they can be used for reducing educational wastage in the state.

The following are the action programmes suggested for reducing educational wastage :-

### 1. PROGRAMMES RELATED TO TEACHER TRAINING.

According to one of the latest study on teacher education, it is found that, in our state (Nagaland) still 62.12 percent of our teachers are not trained. This may be one

probable reason why there is more educational wastage in the state.

The following are some of the suggestions given:-

(1) Teacher training facilities should be provided to all the primary school teachers, so that they will equipt themselves with the latest techniques of teaching and become efficient in their profession.

(2) It is also suggested that regular refresher and orientation courses should be given to all the primary school teachers, and also ensure that every teacher attend these courses at regular intervals, so as to keep themself aware of the latest development taking place in the field of education.

(3) Another suggestion is that seminars, symposiums, and conferences for primary schools teachers be held once in every year where the problems of primary education in the state and the probable solutions can be discussed and remedial step can be taken up through the co-operation of all the teachers.

(4). It is also suggested that demonstrations classes given by experts would help the primary school teachers in teaching the content.

## II. PROGRAMMES RELATED TO SOCIAL PROBLEMS :

Illiteracy, Ignorance, Superstitions, indifferent attitude towards education etc, are some of the major social problems. The following suggestions are made by the investigator in this regard.

### (1). Social Education/Adult Education :

A strong public opinion has to be created through

adult education programme for overcoming social superstitions as well as realisation of the good in Education.

Educated parents are the best insurance for education of their children. If we could make the adult appreciate the value of education, and awaken them to their sense of duty and responsibility to the rising generation, the problem of educational wastage could be solved. Therefore, adult education programme should be carried out sincerely in the villages. This is important particularly in the case of women, where programmes like child care, home management, preparation of food, without loss of nutrients, knitting tailoring, embroidery, sanitation and health, folk songs and folk dances, cottage industries and reading of religious books, this will enable parents to know many things -literacy, family planning and welfare, health and sanitation, vocational and economic development, freedom from superstitions and social taboos etc. Thus adult and social education would not only make them more enlightened citizens, but help them to understand and appreciate the value of education for which they would not only enrol their children, but retain them longer in schools.

(2) Exhibitions of charts/Pictures in the village :

It is also suggested that in order to create awareness about the importance of education to the parents and the people in general, pictures depicting the advantages of schooling can also be shown in the villages. Charts about various vocations can be exhibited and people can be explained how education can benefit the youngsters.

(3) Better parent - teachers contact :

Better parent teachers contact should be organised, where the problem of educational wastage, their grave consequences, and their probable solution may be discussed. Talks may be given to the parents about the value of education and its utility as a long term investment. Ways and means of involving the parents in the programme for reducing educational wastage can be in sought. Thus, in order to facilitate the parents, teachers and community to have better understanding among themselves, programmes like -

1. Parent -Teacher Association should be established.
2. Parent day should be celebrated by inviting the parents into the school.

(4) Adjusting the school hours, holidays and vacations. to meet the economic needs of the community.

To minimize the incidence of educational wastage among primary school children in Nagaland, it is very essential that school hours, and vacations are adjusted in such way that they can assist their parents when they are needed most, and also study in schools. For example, as most of the Naga parents are cultivators, the school hours may be adjusted according to the convenience of the community, and school vacation may be synchronised with the sowing and harvesting period of the major crops. Similar suitable patterns may also be thought for other communities.

(5) Developing proper study habits :

It is observed that most of the Naga children in primary schools, do not have a regular study habit. They study only one week or some days before the examination. During this time they study very hard, but as they could not cover all the lessons within a short span of time, they fail in the examination. These failures do not like to study again in the same institution. Every parent and guardian desire that their children pass, but they fail to encourage and see that their children study their lessons regularly.

It is therefore, suggestion that parents and guardians be taught to help their children to develop regular study habits by providing space for their study, fixing the time for their study, and also, by making the study materials available.

### III. PROGRAMMES RELATED TO EDUCATIONAL PRACTICE :

Following are the suggestions given in this regard:

#### (1) Irregularity in school attendance :

Irregularity in school is one of the major cause for low achievement of pupil and their failure. In order to check this problem the following suggestions are given :-

(i) It is suggested that the school may keep a day record of the attendance of the pupil. If a school finds that any particular student is not coming to school regularly, the class teacher may contact the child's parents and also persuade them to send their child regularly to school. It is possible that a sympathetic and understanding of the problem of the child to meet their problems by the teacher would make the child attend

the school regularly.

(ii) Attendance scholarship may also be given to the children to motivate them to come to school regularly.

(2) Teaching methods :

It is suggested that the different subject taught in the school should be made more interesting and motivating by using effective teaching methods. Children becomes academically poor when they are not interested and motivated in their lesson which later lead them to failure and dropout from school. Therefore, the subject teacher by knowing the needs and interest of the students, should select/adapt the most suitable method which he feels most suited for his subject. For primary schools students in general, story telling method play way method activity based teaching method, that is learning by doing, may be most suitable for children of this age group.

(3) Curriculum :

It is also suggested that the curriculum should be framed according to the local needs and interest of the Naga children. It is very often found that the textbook prescribed for primary school children that, it has no relevance with the life situation of the local children, therefore, they feel difficulty in learning the subject because the theoretical part which they study in their textbook has no relevance with their practical life.

(4) Evaluation :

Due to the many defects that exist in our examination system, many children fail in the promotion examination. Therefore, in order to make evaluation more realistic, the system of internal assesment should be introduced where the teacher will make a continous and regular assesment of the child in their day to day performance. In this the teacher will evaluate not only the scholastic achievement, but also their performance in co-curricular activities, personality qualities, health information, attendance etc.

This will help in evaluating the achievement of the child in a more systemetic and scientific manner and will also remove some of the defects of our present examination system.

(5) Creation of congenial atmosphere :

Creation of free and congenial atmosphere on the part of the teachers in the schools is also very much recommended this will facilitate - the childs free expressions of needs and difficulties. Also this will encourage shy and timid students to participate in the school activities.

(6) Arrangement of special class :

It is found that all the children are not having the same calibre. Some students are fast, while, some are slow in learning. If children of both extremes sit in the same class they may not be benifited. Therefore, it is suggested that a special coaching class be arrange for the slow learners, so that they may be helped to cope with the everage chil-

dren. While provision for double promotion for talented and extra-ordinary intelligent student should be given.

This will help both the group and also relax them from the boredom of learning their lesson, which is too difficult or too easy, and will also act as a source of motivation for their studies.

(7) Home assignment:

The purpose of giving home assignment is to encourage the student in developing regular study habit. Therefore, home assignment should be given from the portion of the course already done in the class, so that the assignment given to the student does not pose a burden to the child. This is essential because most of the parent are illiterate and unable to guide their children at home. Hence, assignment often become a burden on the part of the students and they develop a fear psychosis to attend school. This may be because sufficient explanation are not done for the purpose.

If the purpose of giving home assignment is realised and sufficient guidelines are given in this regard learning on the part of the student becomes more interesting and hence, can minimised the rate of dropout to a great extend.

(8) Age homogeneity :

If the children sitting in the same class has a wide difference in age, it is suggested that suitable groupings are to be arranged. That is to have older children in a separate section, so as to avoid them from feeling awkwardness in the class of younger children.

#### IV. PROGRAMMES RELATED TO EDUCATIONAL MANAGEMENT :

The following suggestions are given in this regard.

##### (1) Appointment of qualified teachers :

Primary schools are the workshop in which the future generation is built. Therefore, primary classes must get the cream of the community. In other words, primary school teachers should be most qualified, and most efficient. Unless qualified teachers are appointed, they will not be able to know the psychological need of the child, and meet them. Also, they will not be able to arouse interest in the student and make learning a pleasure. Therefore, it is suggested that appointment of qualified teachers in primary schools should be considered top priority.

##### (2) Supervision/Inspection :

Regular and effective supervision of the primary school by the S.I.S.(Sub-Inspector of Schools) Authority should be given at regular intervals. They should supervise the effectiveness of the method of teaching, the Audio visual aids employed to make teaching, effective and interesting, the time table to carry out the instructional work distribution of work among members of the staff, distribution of the prescribe curriculum. Not only that, the co-curricular activities carried out in the schools, physical facilities, its environmental attendance register of the students and teachers and also the developmental aspects of the schools. Regular and effective supervision of all these activities will keep the teachers, the

community, as well as the students alert and aware of their duties. Not only that it will set right the anomalies and make the school efficient and effective in achieving its goal.

Therefore, it is suggested that the supervision and inspection of primary school should be carried out strictly, sincerely and effectively at regular intervals by the administrative authority.

(3) Provision for teaching aids :

The children will evince more interest and will be able to learn and understand the lesson quickly when teaching aids are frequently used. However it is found that in most of the primary schools, even the essentially required teaching aids are not adequately provided to schools.

Hence it is suggested that the Government should provide the primary schools with at least the most essential teaching aids. The teaching aids will be useful whenever the teacher wants to explain by giving examples from the unknown to known from the difficult to easy and from complex to simple things relevant to his subjects and thus make teaching learning effective.

(4) Provision of text-books :

The supply of proper text-books for schools is extremely important. Text-books should be written on standardised pattern. They should be translated and printed in all the dialects of the state. Books should be subsidised and made available to all the schools.

V. PROGRAMMES RELATED TO POOR AND UNATTRACTIVE HOLDING POWER.  
OF THE SCHOOL:

Following are the suggestions in this regard.

(1) Providing adequate facilities :

It is found that most of the primary schools in Nagaland are not equipt with the adequate physical facilities. The school building itself are rickety, unattractive and are rarely repaired. There is no proper partition of the rooms, further, inadequate equipments like desk, blackboard and sitting provisions add to their monotomy and discomfort. It is found that such condition of the school does not encourage the children feel wanting to be in school for which reason the rate of educational wastage is increasing.

It is therefore, felt that adequate physical facilities should be provided to the schools, such as proper school buildings spacious classrooms, comfortable furniture, distinct blackboard drinking water, and toilet facilities. So that these may attract the students in the schools.

(2) School Campus :

Most of the primary schools are found not suitably located. Moreover, the schools once constructed are left unattended as a result of which they are not found congenial and attractive for effective study. It is therefore, suggested that the school campus is properly attended to and the surroundings of the schools be neat, clean, tidy and beautiful. So that the children may come to school and feel wanting to be in the school for a longer period of time.

(3) Co-curricular activities :

The attracting power of the school also depend upon the useful co-curricular activities which are organised in the school. The children of primary schools are in the age group where play is the fondest thing in their life. Therefore, it is suggested that different kinds of games and sports facilities should be given in the schools, so that they are attracted to come to school to learn and play. Also other kinds of co-curricular activities relevant to the local situations can be organised.

(4) Mid-day meal :

As most of the parents live on hand to mouth, the provision of mid-day meal will also strengthen the holding power of the schools. Therefore it is suggested that mid-day meals be provided to the primary schools.

VI. PROGRAMMES RELATED TO ECONOMIC PROBLEMS :

The study on the causes of educational wastage pointed out that economic factor is the most important factor of educational wastage in the state. Unless the general economic condition of the masses is improved, the problem of educational wastage cannot be overcome. However, it is very difficult and almost quite impossible on our part to raise the general economy of our people. As a result this factor was not included in the opinionnaire. However, it is also found that, as the factor is too grave and cannot be neglected, the investigator has made the following few suggestions in this regard:-

- (1) Really needy students should be identified, and they should be provided not only with free education but also free school uniforms, text books, and writing materials.
- (2) Monthly stipend should be given to the disadvantaged group of children.
- (3) The state should also take the responsibility of giving special care in meeting the needs of the unwanted and neglected children of the society.
- (4) The students who comes from large families that is, having large number of children should be given generous aids so as to encourage them to continue their studies.

VI. C CONCLUSIONS OF THE STUDY.

The following are the conclusions derived from the findings of the study :-

1. The comparative study of promotion rate for the different districts and for whole Nagaland with respect to sex and grade is found more for male for all the grades except grade III. This shows that, female in Nagaland contribute more to educational wastage as compared to male.
2. The comparative study of repetition rate for the different districts and for whole Nagaland with respect to sex is found more for female as compared to male for all the grades except grade III. This further, shows that female contribute more to educational wastage in the form of repetition.
3. The comparative study of dropout rate for the different districts and for whole Nagaland with respect to sex is found more for male as compared to female for all the grades except grade I. Hence, male contribute more to educational wastage in the form of dropout.
4. The comparative study of Promotion rate for the different districts and for whole Nagaland with respect to school location is found more for urban school as compared to rural school for all the grades except grade III. This indicate that rural schools are contributing more to educational wastage as compared to urban schools.
5. The comparative study of repetition rate for the different districts and for whole Nagaland with respect to school location is found more for rural school as compared to urban school

for all the grades. This indicate that, rural school contribute more to educational wastage in the form of repetition.

6. The comparative study of dropout rate for the different districts and for whole Nagaland with respect to grade and school location is found more for urban school as compared to rural school except in grade I. This shows that, urban school contribute more to educational wastage in the form of dropout.

7. The promotion rate for total Nagaland in grade I is 73.27% grade II is 71.85%, grade III is 72.51% and grade IV is 85.26%.

8. The repetition rate for total Nagaland in grade I is 16.59% for grade II 16.16%, for grade III 10.08% and for grade IV 14.74%.

9. The dropout rate for total Nagaland in grade I is 10.4%, for grade II, 11.99% and for grade III, 11.41%.

10. The comparative study of the educational wastage in terms of pupil years wasted due to dropout for the different districts and for whole Nagaland is more for female as compared to male. This shows that, female contribute more to educational wastage in the form of spending more pupil years due to dropout.

11. The educational wastage in terms of pupil years wasted due to repetition is more for female as compared to male. Hence, female contribute more to educational wastage in terms of pupil years wasted due to repetition.

12. The educational wastage due to both dropout and repetition for the different districts and for whole Nagaland is more for female as compared to male. Hence, female in Nagaland contrib-

ute more to educational wastage in terms of pupil years wasted due to both dropout and repetition.

13. The educational wastage in terms of pupil years wasted due to dropout for the different districts and for whole Nagaland with respect to school location is found more for urban school as compared to rural school. This indicate that urban school contribute more to educational wastage.

14. The educational wastage in terms of pupil years wasted due to repetition for the different districts and for whole Nagaland with respect to school location is found more for rural school as compared to urban school.

15. The educational wastage in terms of pupil years wasted due to overall (i.e, due to both dropout and repetition) for the different districts and for whole Nagaland is found more for rural school as compared to urban school. Hence, rural school contribute more to educational wastage in terms of pupil years wasted due to both dropout and repetition.

16. The educational wastage in terms of pupil years wasted due to dropout for whole Nagaland is 823 pupil years wasted.

17. The educational wastage in terms of pupil years wasted due to repetition for whole Nagaland is 481 pupil years wasted.

18. The educational wastage in terms of pupil years wasted due to overall (i.e, due to both dropout and repetition is 1304 pupil years wasted.

19. The percentage of pupil years spent in excess for the different districts and for whole Nagaland with respect to sex is more for female as compared to male. Hence, female contribute



28. The average number of pupil years spent by per succesful graduate with respect to sex for the different districts and for whole Nagaland is more for female as compared to male.
29. The average number of pupil years spent by per succesful graduate with respect to school location for the different districts and for total Nagaland is more for urban school as compared to rural school.
30. The average number of pupil years spent by per succesful graduate for total Nagaland is 6 years.
31. The retention rate for different districts and for whole Nagaland with respect to sex is found more for female in all the grade except grade II.
32. The retention rate for Nagaland with respect to school location is found more for urban school except in grade IV.
33. The retention rate for total Nagaland in grade II is 87.9% for grade III 75.3% and grade IV is 64.9%.
34. The study revealed that the holding power of primary school system in Nagaland decreases as they proceed to higher grades.
35. The comparative study of the causal factors of educational wastage reveals that the most responsible cause of educational wastage is economic factor which has a significance value of 59.89% followed by social factor 58.92%, poor and unattractive holding power of the school 54.85%, educational management 56.97% and the least being educational practice 45.36%.
36. The comparative study of the opinions for reducing educational wastage reveals that, the most important opinion for

reducing educational wastage is "Teacher Training" which has a significance value of 65.16% followed by opinions related to social factor 60.34% opinions related to educational practice, 56.38% educational management 48.25% and opinions related to "Poor and unattractive holding power of the school", 44.35%.

#### 6.D SUGGESTIONS FOR FURTHER RESEARCH STUDIES.

The following are the suggestions made by the investigator for further research work.

- (1) A study on the incidence of educational wastage in middle schools and High schools can be taken up.
- (2) A comparative study on the causes of educational wastage for the different districts in Nagaland.
- (3) An exploratory study into the factors effecting the efficiency of primary education system in the state.
- (4) A critical study into the factors effecting teachers efficiency in Primary schools.
- (5) An investigation into the causes of poor attendance in primary schools of Nagaland.
- (6) Comparative study of the incidence of educational wastage among tribal and non-tribal communities in Nagaland.
- (7) A comparative study on the causes of educational wastage of student belonging to affluent and economically backward families.
- (8) The present study is limited to Government Primary schools only. Hence, similar study can be taken up for private schools in Nagaland as well.
- (9) Comparative study on government and private primary school with regard to educational wastage can be taken up.
- (10) A study on the effect of the physical facilities in primary schools for retaining the students.

- (11) A critical study of the working conditions of primary schools of Nagaland.
- (12) Investigation into the extent of educational wastage and the efficiency of Middle schools and High schools can be taken up.
- (13) A critical study of the community participation for reducing educational wastage.
- (14) A study into the physical and academic facilities available in primary schools of Nagaland.

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APPENDIX - A

PUPIL'S ENROLMENT DATA FOR TWO CONSECUTIVE YEARS i.e, 1991 & 1992 AND REPEATERS OF 1992 FOR THE DIFFERENT DISTRICTS WITH RESPECT TO SEX AND SCHOOL LOCATION,

KOHIMA RURAL 1991

Names of sampled Rural GPS in Kohima district	Grade I			Grade II			Grade III			Grade IV		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
1. Zani	3	3	6	3	4	7	4	3	7	1	6	7
2. Sarbura	18	20	38	20	11	31	19	18	37	12	15	27
3. Khonoma	20	10	30	19	16	35	15	11	26	10	12	22
4. Seithekie	10	2	12	10	4	14	10	4	14	2	4	6
5. Pudam Pukhuri	12	7	19	11	15	26	19	10	29	11	13	24
6. Kacharigaon	8	9	17	7	9	16	17	4	21	9	13	24
7. Benreu	6	9	15	12	9	21	9	14	23	5	10	15
8. Punglwa	16	10	26	23	25	48	18	14	32	10	10	20
9. Dungki	2	5	7	3	7	10	6	4	10	8	2	10
10. Pfuchama	3	9	12	5	9	14	3	12	15	3	16	19
11. Viswema	7	7	14	9	6	15	3	6	9	4	14	18
12. Jakhama	6	8	14	10	9	19	10	9	19	6	7	13
13. Phesama	9	14	23	10	9	19	13	8	21	6	7	13
14. Tesophenyu	1	9	10	4	6	10	4	10	14	4	4	8
15. Kontsunyu	15	15	30	9	21	30	7	12	19	4	4	8
16. Tsemenyu	3	14	17	5	13	18	7	10	17	8	12	20
17. Kohima Village	10	11	21	8	10	18	10	18	28	11	11	22
18. Chedema	7	10	17	2	8	10	6	14	20	4	10	14
Total	156	172	328	170	191	361	180	181	361	118	170	288

KOHIMA RURAL 1992

Names of sampled Rural GPS in Kohima district	Grade I			Grade II			Grade III			Grade IV		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
1. Zani	8	4	12	4	5	9	2	6	8	4	2	6
2. Sarbura	17	13	30	15	12	27	10	7	17	10	8	18
3. Khonoma	20	10	30	15	13	28	12	8	20	17	12	29
4. Seithekie	11	3	14	4	-	4	4	-	4	4	2	6
5. Pudam Pukhuri	10	10	20	10	14	24	13	14	27	9	11	20
6. Kacharigaon	7	11	18	5	6	11	11	7	18	13	10	23
7. Benreu	7	8	15	9	11	20	12	6	18	5	15	20
8. Punglwa	11	7	18	16	11	27	19	11	30	11	10	21
9. Dungki	2	11	13	4	4	8	5	8	13	7	5	13
10. Pfuchama	5	6	11	5	9	14	3	11	14	7	10	17
11. Viswema	3	5	8	7	9	16	5	3	8	2	16	18
12. Jakhama	3	9	12	6	6	12	6	7	13	8	7	15
13. Phesama	11	10	21	8	10	18	9	17	26	4	5	9
14. Tesophenyu	4	14	18	5	7	12	5	9	14	4	6	10
15. Kontsunyu	3	7	10	5	10	15	2	10	12	7	6	12
16. Tsemenyu	3	15	18	6	9	15	7	10	17	15	13	28
17. Kohima Village	7	12	19	11	14	25	21	17	38	14	16	30
18. Chedema	6	15	21	3	17	20	4	15	19	1	6	7
Total	138	170	308	138	167	305	150	166	316	142	160	302

KOHIMA URBAN 1991

Names of sampled Urban GPS in Kohima district	Grade I			Grade II			Grade III			Grade IV		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
1. Dimapur	32	18	50	30	19	49	20	24	44	22	20	42
2. Burma Camp Dimapur	15	4	19	2	3	5	2	5	7	4	4	8
3. Purana Bazar Dimapur	49	45	94	30	27	57	29	37	66	40	30	70
4. Chandmari Kma	12	8	20	14	6	20	11	8	19	10	5	15
5. PWD Colony Kma	36	19	55	36	26	62	63	30	93	17	19	36
6. Kohima Town	25	20	45	50	35	85	44	22	66	43	32	75
7. Zubza	14	16	30	7	6	13	11	15	26	5	9	14
8. Aradhura Kma	14	16	30	6	4	10	10	8	18	6	6	12
9. Daklane Kma	2	2	4	2	5	7	7	6	13	5	2	7
10. Naga Bazar Kma	7	7	14	6	6	12	14	4	18	3	3	6
11. Choto Bosti Kma	6	4	10	7	7	14	10	8	18	9	2	11
12. Kezo	45	25	70	32	35	67	39	35	74	45	26	71
13. Peren	5	7	12	9	13	22	5	12	17	11	3	14
14. Jalukie	26	28	54	23	25	48	21	30	51	20	24	44
15. Nsong	19	12	31	21	14	35	15	4	23	18	22	40
16. Heningkunglwa	20	4	24	12	13	25	15	18	33	6	9	15
17. Bayavh Kma	23	19	42	12	8	20	9	11	20	10	16	26
18. Notun Bosti Dmp	14	4	18	1	3	4	1	3	4	2	3	5
Total	364	258	622	300	255	555	327	282	609	278	233	511

KOHIMA URBAN 1992

IV

Names of sampled Urban GPS in Kohima district	Grade I			Grade II			Grade III			Grade IV		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
1. Dimapur	20	10	30	10	15	25	25	20	45	20	10	30
2. Burma Camp Dmp	3	10	13	5	4	9	-	5	5	2	6	8
3. Purana Bazar Dimapur	44	28	72	36	26	62	36	32	68	30	29	59
4. Chandmari Kma.	23	7	30	10	10	20	13	11	24	10	5	15
5. PWD Colony Kma.	32	27	59	36	13	49	31	21	52	34	23	57
6. Kohima Town	26	19	45	36	16	52	43	20	63	17	19	36
7. Zubza	12	9	21	12	9	21	4	9	13	5	8	13
8. Aradhura Kma.	11	16	27	9	7	16	8	7	15	7	6	13
9. Daklane Kma.	9	6	15	10	3	13	5	7	12	5	9	14
10. Naga Bazar Kma.	8	7	15	9	7	16	9	4	13	12	3	15
11. Choto Bosti Kma	5	6	11	10	5	15	11	9	20	6	4	10
12. Kezo	28	27	55	23	28	51	44	28	72	28	36	64
13. Peren	8	6	14	9	9	18	4	11	15	5	9	14
14. Jalukie	30	26	56	28	31	59	20	16	36	23	27	50
15. Nsong	17	16	33	19	8	27	14	13	27	15	14	29
16. Heningkunglwa	8	5	13	7	12	19	11	7	18	8	7	15
17. Bayavh Kma.	14	10	24	7	14	21	8	10	18	5	7	12
18. Notun Bosti Dmp	2	4	6	2	2	4	2	2	4	2	2	4
Total	300	239	539	278	219	497	288	232	520	234	224	458

85

KOHIMA RURAL REPEATERS 1992

Names of sampled Rural GPS in Kohima district	Grade I			Grade II			Grade III			Grade IV		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
1. Zani	3	-	3	1	1	2	-	1	1	1	1	2
2. Sarbura	2	4	6	4	2	6	2	1	3	1	2	3
3. Khonoma	5	2	7	7	3	10	-	1	1	3	2	5
4. Seithekie	-	-	-	-	-	-	-	-	-	-	-	-
5. Pudam Pukhuri	2	3	5	3	4	7	3	4	7	1	1	2
6. Kacharigaon	2	4	6	1	2	3	5	-	5	3	3	6
7. Benreu	-	2	2	3	3	6	3	3	6	2	1	3
8. Punglwa	-	1	1	-	-	-	2	1	3	2	1	3
9. Dungki	1	3	4	2	1	3	3	3	6	1	-	1
10. Pfuchama	-	1	1	1	2	3	2	2	4	4	7	11
11. Viswema	1	1	2	2	2	4	-	1	1	1	6	7
12. Jakhama	-	-	-	-	1	1	3	4	7	4	4	8
13. Phesama	3	5	8	2	4	6	3	5	8	2	1	3
14. Tesophenyu	-	5	5	-	2	2	1	3	4	1	3	4
15. Kontsunyu	-	2	2	1	4	5	3	4	7	1	1	2
16. Tsemenyu	1	2	3	-	-	-	1	2	3	-	-	-
17. Kohima Village	4	4	8	4	3	7	6	9	15	3	4	7
18. Chedema	3	7	10	-	4	4	1	4	5	1	-	1
Total	27	42	69	31	40	71	38	48	86	31	37	68

VI

KOHIMA URBAN REPEATERS 1992

Names of sampled Urban GPS in Kohi- ma district	Grade I			Grade II			Grade III			Grade IV		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
1. Dimapur	1	-	1	1	2	3	3	2	5	-	-	-
2. Burma Camp Dmp.	1	2	3	-	-	-	-	-	-	1	2	3
3. Purana Bazar Dimapur	10	7	17	6	5	11	12	7	19	4	8	18
4. Chandmari Kma.	3	-	3	1	1	2	3	2	5	2	-	2
5. PWD Colony Kma.	2	3	5	3	-	3	1	2	3	2	2	4
6. Kohima Town	1	2	3	2	1	3	4	2	6	-	-	-
7. Zubza	1	2	3	2	-	2	1	2	3	-	1	1
8. Aradhura Kma.	3	2	5	1	1	2	2	2	4	1	1	2
9. Daklane Kma.	-	-	-	-	-	-	-	1	1	2	1	3
10. Naga Bazar Kma	1	3	4	2	3	5	2	2	4	-	-	-
11. Choto Bosti Kma	-	1	1	4	2	6	2	1	3	7	3	10
12. Kezo	4	12	16	3	5	8	12	8	20	1	1	2
13. Peren	2	2	4	1	3	4	1	1	2	-	-	-
14. Jalukie	-	-	-	-	-	-	-	-	-	1	1	2
15. Nsong	5	1	6	-	-	-	-	-	-	2	2	4
16. Heningkunglwa	2	2	4	3	6	9	6	6	12	-	-	-
17. Bayavti Kma.	5	2	7	2	-	2	1	-	1	-	-	-
18. Notun Bosti Dmp	-	2	2	-	-	-	-	-	-	-	-	-
Total	40	43	83	31	29	60	50	38	88	23	22	45

MOKOKCHUNG RURAL 1991

Names of sampled Rural GPS in Moko-kchung district	Grade I			Grade II			Grade III			Grade IV		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
1. Longsa	20	5	25	12	18	30	8	10	18	7	5	12
2. Kumlong	6	7	13	11	9	20	7	8	15	10	12	22
3. Alichen	7	7	14	5	7	12	5	5	10	7	7	14
4. Kubza	6	7	13	5	4	9	9	11	20	15	12	27
5. Mongta	10	5	15	6	4	10	5	4	9	7	4	11
6. Longmendon	14	19	33	12	10	22	11	17	28	9	6	15
7. Kangtseng	15	13	28	14	17	31	16	18	34	16	20	36
8. Khunsa Old	5	7	12	9	6	15	3	7	10	5	5	10
9. Ahaki	6	9	15	9	8	17	3	3	6	5	4	9
Total	89	79	168	83	83	166	67	83	150	81	75	156

MOKOKCHUNG RURAL 1992

Names of sampled Rural GPS in Moko-kchung district	Grade I			Grade II			Grade III			Grade IV		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
1. Longsa	9	11	20	16	7	23	10	7	17	7	8	15
2. Kumlong	6	8	14	8	7	15	10	10	20	8	7	15
3. Alichen	9	5	14	7	5	12	7	8	15	6	5	11
4. Kubza	9	4	13	7	6	13	6	10	16	10	11	21
5. Mongta	11	6	17	7	6	13	4	9	13	5	5	10
6. Longmendon	12	10	22	12	14	26	13	13	26	7	11	18
7. Kangtseng	12	13	25	13	10	23	9	14	23	13	15	28
8. Khunsa Old	-	7	7	5	6	11	5	8	13	4	6	10
9. Ahaki	7	5	12	8	8	16	9	6	15	4	7	11
Total	75	69	144	83	69	152	73	85	158	64	75	139

MOKOKCHUNG URBAN 1991

Names of sampled Urban GPS in Moko-kchung district	Grade I			Grade II			Grade III			Grade IV		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
1. Mongolemba	2	3	5	9	8	17	5	10	15	12	10	22
2. Changtonya	15	13	28	13	16	29	17	11	28	21	20	41
3. Sabangya	7	8	15	9	7	16	8	6	14	8	9	17
4. Tull	5	6	11	11	14	25	10	14	24	12	16	28
5. Chuchuyimlang	10	10	20	12	13	25	15	20	35	13	22	35
6. H.S. Colony	16	14	30	15	10	25	10	12	22	13	15	28
7. Kobulong	7	12	19	6	8	14	9	6	15	6	6	12
8. Chuntia	8	5	13	8	8	16	8	8	16	5	6	11
9. A & B Sector	4	7	11	3	6	9	3	5	8	3	7	10
Total	74	78	152	86	90	178	85	92	177	93	111	204

MOKOKCHUNG URBAN 1992

Names of sampled Urban GPS in Moko-kchung district	Grade I			Grade II			Grade III			Grade IV		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
1. Mongolemba	13	6	19	4	4	8	10	11	21	8	8	16
2. Changtonya	15	14	29	17	14	31	15	16	31	19	11	30
3. Sabangya	4	10	14	7	6	13	9	6	15	7	7	14
4. Tull	9	6	15	8	4	12	9	9	18	10	11	21
5. Chuchuyimlang	14	8	22	5	15	20	12	14	26	16	15	31
6. H.S. Colony	20	15	35	11	15	26	12	11	23	13	12	25
7. Kobulong	6	6	12	10	6	16	7	6	13	-	4	4
8. Chuntia	5	7	12	5	4	9	8	12	20	10	15	25
9. A & B Sector	2	3	5	1	5	6	4	6	10	2	5	7
Total	78	75	153	68	73	141	86	75	161	85	88	173

MOKOKCHUNG RURAL REPEATER 1992

Name of sampled Rural GPS in Mokokchung district	Grade I			Grade II			Grade III			Grade IV		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
1. Longsa	-	-	-	4	3	7	2	2	4	1	-	1
2. Kumlong	1	2	3	3	2	5	2	4	6	3	3	6
3. Alichen	2	3	5	3	2	5	2	3	5	2	-	2
4. Kubza	3	1	4	1	-	1	2	2	4	4	2	6
5. Mongta	2	1	3	3	1	4	1	2	3	1	2	3
6. Longmendon	-	2	2	-	1	1	1	1	2	1	2	3
7. Kangtseng	2	1	3	1	2	3	1	2	3	2	3	5
8. Khunsa Old	-	2	2	2	1	3	-	3	3	-	-	-
9. Ahaki	-	-	-	-	-	-	2	-	2	-	4	4
<b>Total</b>	<b>10</b>	<b>12</b>	<b>22</b>	<b>17</b>	<b>12</b>	<b>29</b>	<b>13</b>	<b>19</b>	<b>32</b>	<b>14</b>	<b>16</b>	<b>30</b>

MOKOKCHUNG URBAN REPEATER 1992

Names of sampled Urban GPS in Mokokchung district	Grade I			Grade II			Grade III			Grade IV		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
1. Mongolembe	2	1	3	4	-	4	3	3	6	4	3	7
2. Changtonya	1	2	3	-	2	2	1	1	2	1	3	4
3. Sabangya	2	-	2	2	1	3	-	-	-	1	4	5
4. Tuli	1	-	1	-	2	2	4	2	6	4	-	4
5. Chuchuyimlang	-	1	1	1	4	5	2	2	4	-	3	3
6. H.S. Colony	1	-	1	2	1	3	-	2	2	3	-	3
7. Kobulong	2	-	2	1	1	2	3	1	4	-	2	2
8. Chuntia	1	2	3	1	-	1	1	3	4	2	2	4
9. A & B Sector	-	4	4	-	-	-	-	-	-	1	-	1
<b>Total</b>	<b>10</b>	<b>10</b>	<b>20</b>	<b>11</b>	<b>11</b>	<b>22</b>	<b>14</b>	<b>14</b>	<b>28</b>	<b>16</b>	<b>17</b>	<b>33</b>

TUENSANG RURAL 1991

Names of sampled Rural GPS in Tuensang district	Grade I			Grade II			Grade III			Grade IV		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
1. Ahamator	11	13	24	11	7	18	8	10	18	5	7	12
2. Rosetheri	13	11	24	14	12	26	10	8	18	7	9	16
3. Tsaseur	8	8	16	7	6	13	5	9	14	6	4	10
4. Yakur	12	18	30	2	8	10	16	7	23	11	12	23
5. Noklak	14	19	33	15	24	39	14	17	31	8	12	20
6. Holongba	20	16	36	18	12	30	16	17	33	12	16	28
7. Alesophur	21	16	37	17	18	35	17	11	28	16	14	30
8. Khudai	25	15	40	19	21	40	16	22	38	18	20	38
9. Wonsuwong	9	14	23	16	10	26	6	8	14	8	8	16
10. Rurur	6	8	14	5	14	19	8	8	16	7	9	16
Total	139	138	277	124	132	256	116	117	233	98	111	209

TUENSANG RURAL 1992 (ENROLMENT)

Names of sampled Rural GPS in Tuensang district	Grade I			Grade II			Grade III			Grade IV		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
1. Ahamator	11	9	20	7	9	16	16	7	23	7	5	12
2. Rogetheri	11	13	24	15	5	20	8	6	14	8	8	16
3. Tsaseur	11	5	16	9	4	13	12	5	17	7	3	10
4. Yakur	16	20	36	9	18	27	12	6	18	16	12	28
5. Noklak	17	19	36	15	20	35	14	19	33	9	10	19
6. Holongba	21	18	39	17	15	32	16	9	27	12	19	31
7. Alesophur	23	18	41	19	15	34	19	15	34	16	22	38
8. Khudai	16	18	34	16	20	36	15	15	30	19	18	37
9. Wonsuwong	7	10	17	7	9	16	5	7	12	6	5	11
10. Rurur	4	4	8	3	4	7	5	5	10	6	6	12
Total	137	134	171	117	119	236	122	94	218	106	108	214

TUENSANG URBAN 1991 (ENROLMENT)

Names of sampled Urban GPS in Tuen- sang district	Grade I			Grade II			Grade III			Grade IV		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
1. Chare	10	11	21	8	8	16	21	8	29	6	12	18
2. Chessor	16	16	32	17	23	40	21	17	38	21	32	53
3. Noklak	20	14	34	22	10	32	16	15	31	12	10	22
4. Kiphire	20	38	58	25	24	49	18	25	43	15	14	29
5. Longleng	10	18	28	15	14	29	16	17	33	19	16	35
6. Tobu	4	6	10	9	6	15	11	4	15	10	8	18
7. Tuensang	12	18	30	9	15	24	8	10	18	14	12	26
8. D.C. Garrage	18	22	30	12	23	35	15	29	44	23	26	49
9. Kiphire Station B	12	18	30	15	18	33	18	11	29	10	15	25
10. Post Office Sector Tuensang	12	5	17	7	9	16	10	12	22	5	9	14
Total	134	166	300	139	150	289	154	148	302	135	154	289

TUENSANG URBAN 1992 (ENROLMENT)

Names of sampled Urban GPS in Tuen- sang district	Grade I			Grade II			Grade III			Grade IV		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
1. Chare	4	7	11	3	9	12	7	9	16	12	6	18
2. Chessor	12	17	29	13	18	31	18	22	40	22	14	36
3. Noklak	22	20	42	18	10	28	11	6	17	9	10	19
4. Kiphire	20	38	58	25	24	49	13	25	38	15	14	29
5. Longleng	9	21	30	10	11	21	11	12	23	8	12	20
6. Tobu	7	5	12	6	4	10	6	4	10	6	2	8
7. Tuensang	10	14	24	10	13	23	8	11	19	14	18	32
8. D.C. Garrage	16	17	33	26	29	55	20	35	55	25	30	55
9. Kiphire Station B	12	13	25	10	6	16	8	10	18	5	7	12
10. Post Office Sector Tuensang	10	7	17	8	7	15	8	8	16	7	8	15
Total	122	159	281	129	131	260	110	142	252	123	121	244

TUENSANG RURAL 1992 REPEATERS

Names of sampled Rural GPS in Tuen- sang district	Grade I			Grade II			Grade III			Grade IV		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
1. Ahamator	1	2	3	2	1	3	2	-	2	-	-	-
2. Rosetheri	1	-	1	-	1	1	-	-	-	-	-	-
3. Tsaseur	1	-	1	-	-	-	2	-	2	-	-	-
4. Yakur	-	-	-	3	-	3	-	-	-	3	5	8
5. Noklak	6	7	13	2	3	5	5	7	12	2	2	4
6. Holongba	1	2	3	2	-	2	3	-	3	3	1	4
7. Alesophur	-	2	2	1	2	3	1	2	3	-	3	3
8. Khudai	-	-	-	-	-	-	-	-	-	-	-	-
9. Wonsuwong	-	-	-	2	1	3	-	-	-	1	-	1
10. Rurur	-	1	1	2	2	4	2	-	2	-	1	1
Total	10	14	24	14	10	24	15	9	24	9	12	21

TUENSANG URBAN 1992 REPEATERS

Names of sampled Urban GPS in Tuen- sang district	Grade I			Grade II			Grade III			Grade IV		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
1. Chare	1	-	1	-	-	-	2	2	4	-	-	-
2. Chessor	4	10	14	4	8	12	8	4	12	4	5	9
3. Noklak	2	6	8	2	-	2	-	-	-	-	-	-
4. Kiphire	3	1	4	5	7	12	2	3	5	2	-	2
5. Longleng	2	3	5	-	2	2	1	1	2	-	1	1
6. Tobu	1	2	3	2	-	2	1	1	2	-	1	1
7. Tuensang	2	1	3	-	3	3	-	2	2	-	2	2
8. D.C. Garrage	5	2	7	7	7	14	3	5	8	5	2	7
9. Kiphire Station B	-	2	2	-	-	-	-	-	-	-	-	-
10. Post Office Sector Tuensang	1	1	2	1	1	2	1	1	2	1	1	2
Total	21	28	49	22	28	50	18	19	37	12	12	24

ZUNHEBOTO RURAL 1991

Names of sampled Rural GPS in Zunheboto district	Grade I			Grade II			Grade III			Grade IV		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
1. Lizu A	14	10	24	16	11	27	10	12	22	8	10	18
2. Baimo	10	14	24	7	4	11	7	5	12	4	7	11
3. Naghuto	4	7	11	5	6	11	4	3	7	3	5	8
4. Aotsakili	6	3	9	5	4	9	3	2	5	6	8	14
5. Sutemi	4	6	10	5	4	9	3	6	9	5	7	12
6. Shotemi	18	14	32	14	11	25	13	21	34	14	16	30
7. Asulato	20	13	33	20	14	34	6	8	14	17	20	37
Total	78	67	143	72	54	126	46	57	103	57	73	130

ZUNHEBOTO RURAL 1992

Names of sampled Rural GPS in Zunheboto district	Grade I			Grade II			Grade III			Grade IV		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
1. Lizu A	18	12	30	15	11	26	10	10	20	8	12	20
2. Baimo	7	9	16	9	6	15	6	5	11	6	3	9
3. Naghuto	5	4	9	5	7	12	4	4	8	4	3	7
4. Aotsakili	5	6	11	5	4	9	4	3	7	4	2	6
5. Sutemi	6	4	10	4	4	8	4	5	9	4	6	10
6. Shotemi	20	23	43	15	11	26	10	10	20	10	17	27
7. Asulato	17	13	30	17	13	30	18	10	28	7	9	16
Total	78	71	149	70	56	126	56	47	103	43	52	95

ZUNHEBOTO URBAN 1991

Name of sampled Urban GPS in Zunheboto district	Grade I			Grade II			Grade III			Grade IV		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
1. Atoizu	11	10	21	6	7	13	6	5	11	6	5	11
2. Zunheboto	7	11	18	4	6	10	6	5	11	12	6	18
3. Aizuto	12	10	22	9	11	20	9	8	17	11	7	18
4. Aghunato	2	4	6	3	3	6	2	5	7	3	3	6
5. Zunheboto N.Pt.	21	20	41	22	23	45	21	18	39	21	18	39
6. Suruhoto	31	28	59	20	23	43	22	20	42	26	19	45
7. Pughuboto	16	13	29	16	16	32	17	14	31	18	16	34
Total	100	96	196	80	89	169	83	75	158	97	74	171

ZUNHEBOTO URBAN 1992

Names of sampled Urban GPS in Zunheboto district	Grade I			Grade II			Grade III			Grade IV		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
1. Atoizu	6	8	14	6	8	14	7	5	12	7	3	10
2. Zunheboto	7	8	15	8	8	16	6	9	15	7	5	12
3. Aizuto	7	11	18	10	9	19	7	8	15	8	7	15
4. Aghunato	5	3	8	5	3	8	2	2	4	3	4	7
5. Zunheboto N.Pt.	22	13	35	20	14	34	15	13	28	17	10	27
6. Suruhoto	29	26	55	28	24	52	25	24	49	14	13	27
7. Pughuboto	15	17	32	16	18	34	18	17	35	15	25	40
Total	91	86	177	93	84	177	80	78	158	71	67	138

ZUNHEBOTO RURAL REPEATER 1992

Names of sampled Rural GPS in Zunheboto district	Grade I			Grade II			Grade III			Grade IV		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
1. Lizu A	3	1	4	4	2	6	2	2	4	1	1	2
2. Baimo	2	3	5	1	-	1	2	2	4	-	-	-
3. Naghuto	-	1	1	1	2	3	-	-	-	-	1	1
4. Aotsakili	1	-	1	1	1	2	-	-	-	1	-	1
5. Sutemi	-	1	1	1	-	1	-	1	1	1	1	2
6. Shotemi	5	6	11	3	3	6	4	3	7	1	3	4
7. Asulato	2	3	5	-	4	4	2	2	4	2	4	6
Total	13	15	28	11	12	23	10	10	20	6	10	16

ZUNHEBOTO URBAN REPEATER 1992

Names of sampled Urban GPS in Zunheboto district	Grade I			Grade II			Grade III			Grade IV		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
1. Atoizu	1	1	2	1	2	3	1	-	1	1	-	1
2. Zunheboto	1	2	3	-	2	2	1	1	2	2	1	3
3. Aizuto	1	2	3	2	1	3	-	2	2	2	-	2
4. Aghunato	-	-	-	-	-	-	-	-	-	1	-	1
5. Zunheboto N.Pt.	1	2	3	-	1	1	2	3	5	2	4	6
6. Suruhoto	4	3	7	1	4	5	1	4	5	-	1	1
7. Pughuboto	-	3	3	-	-	-	4	1	5	1	2	3
Total	8	13	21	4	10	14	9	11	20	9	8	17

MON RURAL 1991 (ENROLMENT).

Names of sampled Rural GPS in Mon district	Grade I			Grade II			Grade III			Grade IV		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
1. Chinglang	14	5	19	14	10	24	13	10	23	12	5	17
2. Langmien	18	19	37	18	14	32	12	19	31	5	8	13
3. Totokchunyi	10	9	19	8	10	18	10	11	21	10	2	12
4. Shangsha	26	36	62	25	23	48	25	22	47	14	2	16
5. Wakching	20	12	32	12	5	17	9	10	19	12	9	21
6. Leangha	10	14	24	9	17	26	16	14	30	6	13	19
Total	98	95	193	86	79	165	85	86	171	59	39	98

MON RURAL 1992 (ENROLMENT)

Names of sampled Rural GPS in Mon district	Grade I			Grade II			Grade III			Grade IV		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
1. Chinglang	13	5	18	13	5	18	14	10	24	13	16	29
2. Langmien	20	16	36	15	13	28	15	14	29	11	13	24
3. Totokchunyi	9	4	13	10	8	18	13	9	22	10	10	20
4. Shangsha	29	28	57	25	25	50	15	21	36	14	19	33
5. Wakching	16	22	38	16	20	36	7	5	12	9	8	17
6. Leangha	11	23	34	13	11	24	14	13	27	12	13	25
Total	98	98	196	92	82	174	78	72	150	69	79	148

MON URBAN 1991 (ENROLMENT)

Names of sampled Urban GPS in Mon district	Grade I			Grade II			Grade III			Grade IV		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
1. Wakching	26	22	48	19	24	43	23	22	45	11	10	21
2. Naginimora	7	7	14	8	10	18	9	10	19	15	4	19
3. Tizit	27	20	47	19	20	39	16	33	49	15	18	33
4. Sonari	22	16	38	17	20	37	15	17	32	12	10	22
5. Aboi	7	12	19	5	6	11	7	9	16	8	4	12
6. Mon	17	19	36	18	20	38	15	15	30	14	12	26
Total	106	96	202	86	100	186	85	106	191	75	58	133

MON URBAN 1992 (ENROLMENT)

Names of sampled Urban GPS in Mon district	Grade I			Grade II			Grade III			Grade IV		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
1. Wakching	19	23	42	19	20	39	17	19	36	13	10	23
2. Naginimora	9	11	20	2	8	10	8	10	18	10	14	24
3. Tizit	22	17	39	20	19	39	16	17	33	11	25	36
4. Sonari	21	18	39	27	14	41	18	10	28	13	12	25
5. Aboi	8	11	19	5	6	11	6	9	15	8	4	12
6. Mon	11	16	27	19	15	34	13	17	30	14	14	28
Total	90	96	186	92	82	174	78	82	160	69	79	148

MON RURAL 1992 REPEATERS

Names of sampled Rural GPS in Mon district	Grade I			Grade II			Grade III			Grade IV		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
1. Cringlang	2	1	3	1	2	3	2	2	4	2	2	4
2. Langmien	5	3	8	4	5	9	6	3	9	-	1	1
3. Totokchunyi	3	1	4	2	2	4	-	3	3	4	2	6
4. Srangsha	7	7	14	3	4	7	5	3	8	2	1	3
5. Wakching	6	7	13	5	3	8	1	-	1	-	1	1
6. Leangha	6	13	19	5	6	11	6	3	9	3	2	5
Total	29	22	51	20	22	42	20	14	34	11	9	20

MON URBAN 1992 REPEATERS

Names of samples Urban GPS in Mon district	Grade I			Grade II			Grade III			Grade IV		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
1. Wakching	7	3	10	5	5	10	7	3	10	4	2	6
2. Nazinimora	5	4	9	-	2	2	4	3	7	1	4	5
3. Tizit	3	1	4	2	1	3	2	4	6	-	-	-
4. Sonari	1	7	8	11	-	11	6	2	8	-	-	-
5. Aboi	-	1	1	-	-	-	-	-	-	-	-	-
6. Mon	3	1	4	1	2	3	-	3	3	-	3	3
Total	19	17	36	19	9	28	19	15	34	5	9	14

WOKHA RURAL 1991 (ENROLMENT)

Names of sampled Rural GPS in Wokha district	Grade I			Grade II			Grade III			Grade IV		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
1. Pongidong	3	10	13	3	10	13	3	14	17	4	14	18
2. Humtso	4	7	11	6	9	15	7	13	20	6	8	14
3. Lakhuti	9	11	20	10	10	20	7	10	17	6	7	13
4. Changsu	10	13	23	9	10	19	9	10	19	8	8	16
5. Eliemy	11	8	19	7	14	21	7	15	22	8	12	20
Total	37	49	86	35	53	88	33	62	96	32	49	81

WOKHA RURAL 1992 (ENROLMENT)

Names of sampled Rural GPS in Wokha district	Grade I			Grade II			Grade III			Grade IV		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
1. Pongidong	5	7	12	2	11	13	3	7	10	5	10	15
2. Humtso	6	10	16	4	7	11	7	6	13	5	5	10
3. Lakhuti	5	7	12	5	11	16	8	5	13	9	9	18
4. Changsu	11	9	20	4	13	17	8	10	18	10	12	22
5. Eliemy	7	11	18	7	8	15	6	12	18	8	9	17
Total	34	44	78	22	50	72	32	40	72	37	45	82

WOKHA URBAN 1991 (ENROLMENT)

Names of sampled Urban GPS in Wokha district	Grade I			Grade II			Grade III			Grade IV		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
1. Wokha A	8	18	26	10	20	30	12	24	36	9	23	32
2. Baghty	6	11	17	8	7	15	8	7	15	7	4	11
3. Sanis	6	5	11	5	8	13	7	8	15	6	6	12
4. Wokha B	6	7	13	5	8	13	7	7	14	8	6	14
5. Bhandari	5	6	11	7	10	17	8	6	14	7	6	13
Total	31	47	78	35	53	88	42	52	94	37	45	82

WOKHA URBAN 1992 (ENROLMENT)

Names of sampled Urban GPS in Wokha district	Grade I			Grade II			Grade III			Grade IV		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
1. Wokha A	7	15	22	13	15	28	6	16	22	9	20	29
2. Baghty	3	10	13	5	9	14	7	6	13	3	8	11
3. Sanis	5	8	13	8	6	14	6	7	13	5	6	11
4. Wokha B	7	7	14	6	7	13	6	9	15	5	6	11
5. Bhandari	8	6	14	5	8	13	7	4	11	6	9	15
Total	30	46	76	32	40	72	32	42	74	28	49	77

WOKHA RURAL 1992 REPEATERS

Names of sampled Rural GPS in Wokha district	Grade I			Grade II			Grade III			Grade IV		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
1. Pongidong	1	1	2	1	2	3	1	-	1	1	3	4
2. Humtso	2	3	5	1	3	4	4	1	5	2	1	3
3. Lakhuti	3	2	5	4	1	5	4	1	5	2	2	4
4. Changsu	1	2	3	2	3	5	2	1	3	2	-	2
5. Eliemy	2	4	6	3	1	4	-	3	3	1	2	3
Total	9	12	21	11	10	21	11	6	17	8	8	16

WOKHA URBAN 1992 REPEATERS

Names of sampled Urban GPS in Wokha district	Grade I			Grade II			Grade III			Grade IV		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
1. Wokha A	2	3	5	1	3	4	1	1	2	3	3	6
2. Baghty	2	4	6	-	2	2	1	1	2	-	2	2
3. Sanis	1	1	2	1	1	2	2	-	2	1	-	1
4. Wokha B	1	1	2	-	3	3	-	3	3	1	1	2
5. Bhandari	-	2	2	2	2	4	1	3	4	2	2	4
Total	6	11	17	4	11	15	5	8	13	7	8	15

PHEK RURAL 1991 (ENROLMENT)

Names of sampled Rural GPS in Phek district	Grade I			Grade II			Grade III			Grade IV		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
1. Kizari	6	6	12	25	13	38	25	10	35	18	6	24
2. Lozophehu	19	7	26	7	6	13	5	6	11	7	3	10
3. Sakraba	14	17	31	15	16	31	15	14	29	12	11	23
4. Ketsapo	16	12	28	8	10	18	15	7	22	8	6	14
5. Thipuzou	15	15	30	20	10	30	15	12	27	10	13	23
Total	70	57	127	75	55	130	75	49	124	55	39	94

PHEK RURAL 1992 (ENROLMENT)

Names of sampled Rural GPS in Phek district	Grade I			Grade II			Grade III			Grade IV		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
1. Kizari	28	15	43	22	15	37	17	10	27	17	12	29
2. Lozophehu	6	4	10	7	5	12	11	7	18	4	3	7
3. Sakraba	8	14	22	10	20	30	13	13	26	10	12	22
4. Ketsapo	10	6	16	8	7	15	10	7	17	10	5	15
5. Thipuzou	18	18	36	20	8	28	19	9	28	14	7	21
Total	70	57	127	67	55	122	70	46	116	55	39	94

PHEK URBAN 1991 (ENROLMENT)

Names of sampled Urban GPS in Phek district	Grade I			Grade II			Grade III			Grade IV		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
1. Chizami	9	11	20	6	6	12	6	16	22	4	11	15
2. Chozouba	23	12	35	20	7	27	17	18	35	18	6	24
3. Meluri	20	20	40	14	17	31	16	14	30	17	16	33
4. Phek	14	15	19	16	12	28	13	16	29	12	15	27
5. Pfutsero	18	11	29	15	15	30	9	18	27	15	8	23
Total	84	69	153	71	57	128	61	82	143	66	56	122

PHEK URBAN 1992 (ENROLMENT)

Names of sampled Urban GPS in Phek district	Grade I			Grade II			Grade III			Grade IV		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
1. Chizami	6	11	17	7	9	16	4	9	13	5	9	14
2. Chozouba	26	6	32	26	10	36	10	10	20	15	13	28
3. Meluri	19	18	37	14	17	31	16	17	33	18	16	34
4. Phek	17	14	31	12	13	25	14	11	25	12	16	28
5. Pfutsero	7	9	16	20	15	35	6	7	13	10	16	26
Total	75	58	133	79	64	143	50	54	104	60	70	130

PHEK RURAL 1992 REPEATERS

Names of sampled Rural GPS in Phek district	Grade I			Grade II			Grade III			Grade IV		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
1. Kizari	3	-	3	-	2	2	2	-	2	-	2	2
2. Lozophehu	1	-	1	2	1	3	1	2	3	-	-	-
3. Sakraba	1	1	2	1	3	4	1	-	1	2	2	4
4. Ketsapo	2	2	4	2	1	3	2	1	3	1	-	1
5. Thipuzou	2	-	2	1	-	1	3	2	5	1	-	1
Total	9	3	12	6	7	13	9	5	14	4	4	8

PHEK URBAN 1992 REPEATERS

Names of sampled Urban GPS in Phek district	Grade I			Grade II			Grade III			Grade IV		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
1. Chizami	2	9	11	4	1	5	1	6	7	4	4	8
2. Chozouba	-	-	-	2	-	2	3	-	3	1	-	1
3. Meluri	4	5	9	2	3	5	4	3	7	4	3	7
4. Phek	-	2	2	7	2	9	2	2	4	2	1	3
5. Pfutsero	3	2	5	4	2	6	-	1	1	6	2	8
Total	9	18	27	19	8	27	10	12	22	17	10	27





TEACHER'S INVENTORY ON PUPIL'S EDUCATIONAL WASTAGE.

Name of the Supervisor

Dr. P.K.Gupta,  
Reader, Department of Education,  
NEHU,

Name of the Investigator

Mrs. Rukhono Khate  
Research Scholar.

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Name of the teacher : \_\_\_\_\_

His/ Her educational qualification \_\_\_\_\_

Name and address of the school : \_\_\_\_\_

Village/Town/Block : \_\_\_\_\_

Rural / Urban : \_\_\_\_\_

Date : \_\_\_\_\_

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INSTRUCTIONS

In the present inventory, some items are given which points out the causes of pupil's educational wastage (dropout and failure ) in primary schools in Nagaland. You are requested kindly to tick mark in the column which you feel most appropriate against each of the item.

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PART I: CAUSES RELATED TO ECONOMIC FACTORS.

C A U S E S	Not at all	To some extent	To a great extent.
1. Inability of the parents to meet the expenditure on the education of their children.			
2. Parents want their children to supplement the family income through seeking jobs.			
3. Parents need the help of their children in the family and in their occupation.			

PART II: CAUSES RELATED TO EDUCATIONAL PRACTICE.

C A U S E S	Not at all	To some extent	To a great extent.
1. Irregularity in school attendance.			
2. Pupil's inability to understand the subject.			
3. Lack of interest and enthusiasm on the part of the student.			
4. Lack of individual attention by teachers because of overcrowded classes.			
5. Heavy workload for children in the school.			
6. Difficulty in following the teachers language and pronunciation			
7. Fear from school			
8. Lack of suitable curriculum as per the pupil's needs.			

C A U S E S	Not at all	To some extent	To a great extent
9. Ineffective teaching methods.			
10. Wrong system of examination			
11. Incompetency of teachers in teaching the content.			
12. Poor academic achievement			

PART III: CAUSES RELATED TO EDUCATIONAL MANAGEMENT.

C A U S E S	Not at all	To some extent	To a great extent
1. Admitting the students through out the year.			
2. Lack of adequate teaching aids			
3. Lack of teachers instructional handbook.			
4. Lack of educational facilities for further studies.			
5. Rigidity in school timing			
6. Lack of qualified teachers			
7. Absence of variety of teaching due to single teacher in schools.			
8. Ineffective methods of supervision and inspection in schools.			
9. Age heterogenity of pupils in the class.			
10. Lack of school at walkable distance			
11. Lack of orientation and refresher courses for teachers.			
12. Lack of facilities for undergoing inservice teacher training courses			

PART IV: CAUSES RELATED TO POOR AND UNATTRACTIVE AND HOLDING POWER OF THE SCHOOL.

C A U S E S	Not at all	To some extent	To a great extent
1. Lack of physical facilities like comfortable furnitures, distinct blackboard, drinking water, toilet facilities			
2. Lack of monetary assistance like stipends.			
3. Lack of incentives like free text books, uniforms etc.			
4. Lack of recreational activities			
5. Lack of enough cocurricular activities			
6. Lack of games and sports facilities			
7. Absence of mid- day meal			
8. Non attractive school environment			

PART V: CAUSES RELATED TO SOCIAL FACTORS.

C A U S E S	Not at all	To some extent	To a great extent
1. Very little or no relationship between school and community.			
2. Bad company of the child			
3. No seperate school for girls			
4. Lack of awareness among parents in particular and the community in general about the importance of education			
5. The child inability to adjust with friends and teachers.			
6. Inability of parents to help their children's education because of their illiteracy.			

APPENDIX - D.

OPINIONAIRE FOR SEEKING SUGGESTIONS TO REDUCE EDUCATIONAL WASTAGE .

(For teachers/ teacher educators/ Headmasters/ Inspectors ).

Name of the Supervisor

Dr. P.K. Gupta,  
Reader, Department of Education,  
NEHU, Mizoram Campus, Aizawl.

Name of the Investigator

Mrs. Rukhono Khate.  
Research Scholar.

\_\_\_\_\_  
Name of the Teacher/Headmaster/Teacher educator/ Inspector : \_\_\_\_\_

\_\_\_\_\_  
His/ Her Educational qualification : \_\_\_\_\_

Name of the institution in which he/she is working \_\_\_\_\_

\_\_\_\_\_  
Village /town/Block : \_\_\_\_\_

Rural/ Urban : \_\_\_\_\_

Date \_\_\_\_\_

INSTRUCTIONS

In the opinionaire, some items are given seeking your suggestions to reduce educational wastage in primary schools in Nagaland. You are requested kindly to tick mark in the most appropriate column against each of the items

\_\_\_\_\_

PART 'I' OPINIONS RELATED TO EDUCATIONAL PRACTICE.

O P I N I O N S	To some extent	To a great extent	Very much
1. Persuading the parents and guardians to send their children regularly to school.			
2. Requesting the teachers to devote more time with the students on different subjects.			
3. Making the subject more interesting and motivating by using effective teaching methods.			
4. Giving special classes to slow learners			
5. Giving individual attention to students by reducing the class size.			
6. Requesting the teachers to be slow and clear in their speech.			
7. Creating fearless and congenial atmosphere in the school.			
8. Adopting suitable curriculum as per the needs and interest of the children.			
9. Adopting suitable teaching methods.			
10. Training the teachers for content teaching.			
11. Introducing the system of internal assesment.			

PART 'II' OPINIONS RELATED TO EDUCATIONAL MANAGEMENT.

O P I N I O N S	To some extent	To a great extent	Very much
1. Adopting uniform system of admission in the school.			
2. Providing teaching Aids to schools.			
3. Providing teachers handbook for teachers.			
4. Providing facilities for further studies of the teachers.			
5. Having flexible school hours of work to suit the children who has to assist their parents at home.			
6. Appointing qualified teachers			
7. Providing effective supervision and inspection of schools.			
8. Providing variety of teaching in the school by appointing the required number of teachers in the schools.			
9. Making suitable grouping of children, to have older children in a seperate			
10. Providing school at walkable distance.			
11. Making provision for double promotion for talented/ extraordinary intelligent students.			
12. Appointing lady teachers in primary schools.			

PART 'III' OPINIONS RELATED TO INCREASING THE ATTRACTIVE AND HOLDING POWER OF THE SCHOOLS.

O P I N I O N S	To some extent	To a great extent	Very much
1. Providing environment congenial for effective study such as, spacious class room, comfortable furnitures, distinct blackboard, drinking water and toilet facilities.			
2. Providing incentives like free textbooks and uniforms.			
3. Providing monetary assistance like stipends			
4. Providing mid- day meals			
5. Providing the opportunities of enough cocurricular activities.			
6. Providing enough recreational activities			

PART 'IV' OPINIONS RELATED TO TEACHER TRAINING PROGRAM

O P I N I O N S	To some extent	To a great extent	Very much
1. Providing regular refresher and orientation courses for the teachers.			
2. Providing facilities for undergoing Junior Teacher Training courses for untrained teachers.			
3. Giving demonstration classes for teachers using more effective techniques of teaching by experts.			

PART 'V' OPINIONS RELATED TO SOCIAL FACTORS.

O P I N I O N S	To some extent	To a great extent	Very much
1. Organising parent teachers meet for better understanding among them and their needs.			
2. Helping the child to avoid bad company			
3. Educating the parents about the importance of education, so that, they develop positive attitude towards education.			
4. Helping the child through parent and teachers in his adjustment problems.			
5. Introducing adult education programmes for parents so that in turn, they can help their children in study.			
6. Helping the child to develop proper study habit at home.			
7. Educating the parents on how to help their children in their study like, providing space, for their study, fixing the study materials available and so on.			