ADDIS ABABA UNIVERSITY
SCHOOL OF GRADUATE STUDIES

WASTAGE IN PRIMARY SCHOOLS OF BAHIR DAR AWRAJA

BY
ADANE TESSERA
JUNE,1993

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WASTAGE IN PRIMARY SCHOOLS OF BAHIR DAR AWRAJA

A Thesis Presented to
The School of Graduate Studies
Addis Ababa University

In Partial Fulfillment
of the Requirements for the degree
of Master of Arts in Educational
Administration

By
ADANE TESSERA
JUNE, 1993

ACKNOWLEDGEMENTS

I would, first of all, like to express my heart felt gratitude to my advisor Dr. Seyoum Teferra for his valuable help, comments, and suggestions he gave me in the preparation of the thesis.

I am also indebted to Ato Ayalew Shibeshi for his constructive suggestion and help be rendered to me in shaping this study. The discussions I had with him were enlightening and throught provoking. Sepecial thanks should go to Ato Zemene Norahun who facilitated the data collection process. Acknowledgement is also to my friends and relatives who assisted me in tabulating the data and proof reading the manuscript.

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ABSTRACT

The purpose of this study was to make an investigation into the magnitude, and location of wastage in primary schools of Bahir Dar Awraja. Attempts were also made to identify the major factors that contribute to wastage of high magnitude. Whether or not pupils' teachers' and school characteristic variables ~~are~~ are related with rate of wastage was one of the major purposes of this study.

Data regarding pupils enrollment repetition and dropouts were obtained from Awraja Educational office and from the 16 sample schools, that were selected randomly. The study included 102 teachers, 301 pupils and 16 school principals. Questionnaires and interview schedules were the instruments of data collection. The data gathered from documents, and through questionnaires and interview were analysed using percentages and other statistical techniques such as the chi-square, multiple and stepwise regression analysis. To determione the magnitude of wastage the Reconstructed Cohort method was used with certain modification. Using the 1985/86 first grade starting cohort, the output/input proportion was determined.

The findings have indicated that, of the total number of pupils who entered grade one 1985/86 academic year only about 55 percent reached grade two and about 22 percent completed their primary education at the end of the sixth year. It was found that wastage rate was higher in the first grade, among girls than among boys, in rural than in urban schools. Being a repeater or a promotee does not necessarily be the function of personal family background characteristics. The multiple and step-wise regression results have indicated that teacher, and school characteristic variables were found important to explain wastage rate. It was thus revealed that internal factors of wastage were more important than external factors. The findings, there-fore, suggest that improving these variables may make a considerable change in the quality and quantity of education children are provided with. Based on these findings and the conclusions drawn it was recommended that measures regarding the improvement of teacher training, the application of automatic promotion in the first three grades , separation of primary schools from junior secondary schools and the suspension of the practice of the shift system in primary schools be taken to minimize the prevailing magnitude of wastage.

CHAPTER ONE

1. INTRODUCTION

1.1. Background of the Study

As a form of investment made on people (O'Donoghue, (1971), education plays a pivotal role in human resource development. Investment in education is made with an intent of better returns in the future. This proposition is more supported by human capital theorists. To them, "an investment in education is an investment in the productivity of the population" (Fagerlind and Saha, 1983:45). As is true with other areas of investment, society expects a reasonably quantitative and qualitative returns from its educational system, "where people are the subject of the potential investment" (O'Donoghue, 1971:77).

Since the interaction between education, economic and social development has been broadly recognized (Tanguiane 1990), the educational system of any country is meant to serve its development objectives. However, the realization of the established objectives is largely dependent on an efficient and effective management system of resources. It is also important to note that education can enhance development if it is "relevant and appropriate" to the needs and demands of the community (Tekeste, 1990:86). The need to bring about planned and positive changes by probing into the

present practices and rectifying the observed weaknesses in the educational system is therefore, unquestionable.

Changes in the educational system of any country have to give due attention to the efficiency and effectiveness of primary education. The basic reason for this is that primary education provides a fundamental base for the total educational life of the individual person and the nation as well. Chantavanich, Chantavanich, and Fry, (1990:1) write:

> Primary education provides a fundamental base for all further schooling, training or self-education. It also provides the basis for developing the capacity to cope with rapidly evolving societies in an information age. Its universal availability and quality are central to the human resource capacity of any society.

Functional literacy, socialization and preparation of the child for future formal education are the major functions which primary education is meant to accomplish(Chantavanich, Chantavanich and Fry, 1990). The significance of primary education on the rate of literacy in the community has been clearly expressed as follows:

> One of the determining factors, if not the most important, which governs the situation of literacy and the literacy rate in the population is the development of formal education, and especially primary education. This development itself depends on the increase of the enrollment rate of children of the proper age and on the degree of effectiveness of that education, i.e. on the percentage of pupils who complete their studies successfully within the expected time limit, and on the quality of knowlege, skills and know-how taught them and which they have acquired (Tanguiane, 1990:53).

From this it follows that "the progression of pupils from admission" in the beginning year of their study "until their successful completion" of the cycle of education (for example, primary, or secondary) reflects the degree of efficiency in that level of education (UNESCO, 1983a:57). The efficiency of a particular level of education can be expressed by the input/output ratio, the reciprocal of which is known as "coefficient of efficiency" (Brimer and Pauli, 1971:47).

"In the ideal situation" all pupils admitted in the beginning grade of the educational level will reach the second grade the following academic year and continue until they complete that level of education (UNESCO, 1983a:57). To consider that holding or retaining all pupils that enter the cycle until the objective of that perticular level is realized as a national objective is reasonable. But in reality, "an alarming phenomenon in education", Wastage (drop-out and repetition) (UNICEF, UNESCO, 1987:25) obstructs this "ideal scheme" (UNESCO, 1983a: 57).

The problems of repetition and dropping out as two aspects of educational wastage reduce the efficiency of primary education. Repetion, in addition to raising the amount of time required to complete the educational cycle and demand for incurring additional money, also reduces the

intake capacity of the school. The other aspect of wastage, drop-out, on the other hand, reduces the number of successful graduates and makes the pupil-years used by drop-outs partially or totally wasted (UNESCO, 1984; Tanguiane, 1990).

While the performance of an educational system is measured by quality and quantity of results (UNESCO, 1983b) dropping-out and grade repetition result in the reduction of the "productivity of formal education" (Tanguiane, 1990:54). The gap between the ideal scheme and the observed phenomenon (actual output) in the primary education system particularly of the developing countries including Ethiopia has now been an area of great concern.The considerable amount of wastage in primary education in these countries, where the focus is achieving universal primary education (UNESCO, 1983b) has been an obstacle for the attainment of educational goals set for the cycle.

In light of the afformentioned points studies on the efficiency of educational systems, particularly of primary education are important for they may enable concerned authorities take remedial measures and minimize all sorts of inefficiency in the system. Any inefficiency in primary education indicates that certain amount of resources (that could be material, financial or human) has been inefficiently used or toally wasted.

As good quality and higher efficiency of primary education contributes to better literacy rates, quality and efficiency of education at higher levels, its weaknesses have an equally significant effect. The study and evaluation of the efficiency of primary education, thus, seems in order. In Ethiopia, where the primary school participation rate is low (MOE 1989), a lot has to be done yet to eliminate illiteracy and the efficiency of primary education is low (MOE, 1978 E.C.), a close investigation into the problems of wastage in primary education has an immense value. With this general frame work,the major aim of this study focuses on identifying the problems and magnitude of wastage in primary schools of Bahir Dar Awaraja where very low participation rate was reported (Anbasu and Junge, 1988).

1.2. Statement of the Problem

Wastage in education, as a reflection of the degree of inefficiency in the system (chantavanich,Chantavanich, and Fry, 1990) has been considered as "the oldest and best known problem which has lost none of its gravity" (Thomas, 1975:21). It also results in poor cost effectiveness (Farrant, 1980) and seriously hampers the effort towards achieving literacy (Tanguiane, 1990).

Wastage, "though it comes from the language of economists" , (Brimer and Pauli 1971:9; UNESCO, 1984:347) in the context of education describes a multiple of factors that make the realization of educational objectives difficult. More precisely, it is a combined effect of the phenomena of grade repetition and dropping-out in a particular cycle of education (Brimer and Pauli, 1971, UNESCO, 1983a, 1984, Simmons, 1980, and Tanguiane, 1990). Since wastage is a serious problem in the development of education, by reducing the size of enrollment and educational resources, it has attracted the attention of research organizations (for example, UNESCO, and The World Bank), individual researchers, educators and policy-makers (Tanguiane, 1990).

Various studies have been carried out on educational wastage and efficiency in primary and secondary education. Among these, UNESCO (1980, 1983a, b, 1984), Brimer and Pauli 1971), Chartavanich Chantavanich, and Fry, (1990); and Cameron (1965) are some to be mentioned. The findings of many of these studies, for example, UNESCO (1984, 1980), Simmons (1980) and Brimer and Pauli (1971) indicate that the problem is severe in many of the developing countries. Haribson and Mayers, cited in Adams and Bjork (1972) argue that the holding power of the schools in developing countries is very weak. Other writers such as Panitchpakdi (1974), Thomas (1975), Coombs (1985) and Phillips (1975) characterize

the educational system of the developing countries as inadequate. Seged et al (1991) have also pointed out that despite the dramatic expansion of primary schools and increased enrollment in many of the developing countries the number of pupils who sucessfully complete their education is still insufficient. Tanguiane (1990) has also made a similar remark on this issue.

Like other developing countries, primary schools in Ethiopia have shown a rapid expansion since 1974 and consequently, participation rate reached 34.3 percent in 1987 (Ayalew, 1989). With this rate of development, however, the percentage of pupils who reach the final grade of the primary education cycle is low. For example, from the 1968 first grade entering cohorts' to those who completed grade six in 1989, the percentage of pupils who successfully completed ranged 32-60 percent (MOE, 1989). Added to this, from those who entered grade one in 1987, only 54 percent of them reached grade two the following year (MOE, 1989:17).

These and other similar pieces of evidence indicate that there is some degree of inefficiency in the primary education system of this country, which calls for a close investigation of the magnitude of wastage. Of course, studies on drop-outs in Ethiopian primary schools (Tadesse, 1974), Bjeren (1960); Kobes (1975) and Problems of Participation and Performance in

Primary School (Anbasu and Junge, 1988) have been made. But neither of these studies has given due emphasis to the magnitude of wastage that occurs as a combined effect of repetition and dropping-out in primary schools. The basic problem that initiated this study is however, the very low participation rate (only 6%) of school age children in the Awraja, (Anbasu and Junge (1988:1) which is below the national average rate of participation.

The purpose of this study was, therefore, to examine the magnitude and problems of wastage in primary schools of Bahir Dar Awraja. The study emphasized on investigating the degree to which repetition and dropping-out contribute to the over-all wastage in primary schools. Besides this, the relationship between pupils' (personal and family backgraound) characteristics and the incidence of repetion and promotion was examined. The relationships between teachers characteristics, school characteristics and wastage rates, repetition, and dropout rates were also examined.

An attempt was also made to identify the major causes of wastage in terms of repetition and dropping-out and to show whether or not there is an identified pattern in wastage rates by sex and grade level. Examining wastage rate differences, in the form of repetition and dropout

rates,between urban and rural schools was also one of the focuses of the present study.

In summary, the study was aimed at answering the following basic questions.

1. What is the magnitude of wastage in primary schools of Bahir Dar Awraja?
2. In which grade of the primary level does the highest wstage rate-a) repetition b) drop-out, occur?
3. What are the major causes of wastage as perceived by teachers, principals and pupils? - i.e. what are the major causes of repetition and dropping-out?
4. Is there any relationship between pupils' personal and family background characteristic* and academic status (repetition/promotion)?
5. Do teachers characteristics predict the rate of wastage (rates of repetition and dropping-out)?
6. Do school characteristics predict the rates of repetition, drop-out and over-all wastage ?

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* (Detail description of pupils, teachers and school characteristics is given in the third chapter pp 81-83.

1.3. Delimitation of the Study

This study is delimited to the quantitative analysis of wastage rates due to repetition and drop-out in primary schools of Bahir Dar Awraja. The study does not consider the qualitative aspect nor does it focus on wastage in terms of financial expenditure.

Bahir Dar Awraja was selected as the setting for this study for (1) it is with very low participation rate "far below the national average" (Anbasu and Junge, 1988:1), and this could be due to high rate of pupils' drop-out and repetition (2) this Awraja has a combination of characteristics related to urban and rural environments which was believed to be helpful in comparing the magnitude of wastage in rural and urban schools. (3) Bahir Dar Awraja as one of the areas where almost all the population is Amharic speaking, delimiting this study in this Awraja was assumed to have a significant contribution in controlling wastage that could have resulted due to the problem related to the language of instruction. (4) Although it was based only on a one year data, the study carried out by Anbasu and Junge (1988) in the Awraja could serve as one important source.

The study is delimited only to primary schools because the researcher believes that the problems of educational wastage is more severe at the primary level than at higher levels. In addition,in a country where the problem of illiteracy is not yet over-come,such a study would be more important at primary level than at any other educational level.

1.4. Significance of the Problem

To bring about a quantitative and qualitative improvement in its educational system, a country has to make a continuous and thorough evaluation of its schools and the whole educational system. It is undeniable that evaluation by itself is nothing unless its results are used to set improvement strategies and actions. The study of educational wastage in primary schools in this respect is dealing with one of the serious problems of the educational system.

In a country where the growth rate in the number of school age children is high,the holding power of the school and the flow rate from one grade to the next is low,wastage in primary education is a serious issue for educators, researchers and policy-makers. In an educational system where the holding power of primary schools is low and the rate of wastage is high the degree of inefficiency in the

whole educational system will be conspicuous. Such an inefficiency may also bring the danger of relapsing to illiteracy, which is a hinderance to economic and social development. Minimizing wastage by raising the rate of grade promotion and reducing the rate of pupils' dropping-out of school indicates the maximum utilization of resources devoted to education, which of course, may facilitate economic and social development.

In Ethiopia, a country where resources, particularly, for education are much more scarce, and enrollment ratio is relatively low (MOE, 1989), wastage rate of high magnitude could not be tolerated. For this reason,a considerable effort has to be made to minimize the problem. This study is, therefore, significant for the following reasons:

1. Since the study of educational wastage has not been given much attention in our primary schools, this study will help for the compilation of information on the status and degree of wastage in primary education.
2. By pin pointing the magnitude and location of the problem,the study may draw the attention of educational planners and policy-makers consider the socio-economic variables in setting priorities and allocating educational resources.
3. It may provide suggestions to concerned authorities, teachers, principals, parents, and the community at

large,for the minimization and relative prevention of wastage in the future. It may also help educational authorities, teachers, and generally educational practitioners evaluate the efficiency and relevance of primary education in serving the national development objectives.

4. The study may also contribute literature on the study of educational wastage in Ethiopian primary schools and can serve as source of information for further and comprehensive nation wide study.

1.5. Limitations of the Study

Educational wastage could be adequately analysed using pupil-years invested as input and pupil-years required to produce an elementary school graduate as output. However, due to the absence of such data, in this study wastage was analysed by considering the number of pupils initially enrolled in the first grade in the 1985/86 Cohort as input and the number of graduates at the end of the sixth year as outputs. If such data were available results could show a different picture by indicating what has happened to the first grade entrants of the Cohort considered. However, the results would still be important in showing the amount of wastage and pupils' flow at each grade and the total proportion of graduates to initial entrants of the primary education cycle.

The major causes for dropping-out of school could be identified well if the drop-outs themselves were interviewed. This was, however, beyond the reach of this writer. In identifying the causes for dropping-out, the results were based on teachers' and pupils' opinions. This limitation could have affected the degree of reliability of the responses that could be different if drop-outs themselves were respondents.

1.6. Definition of Key Terms

Important terms and phrases used in this study are defined on the basis of the context and relevance to the objective of the study .

Academic Status - a pupil's academic position indicating either he is a promotee or a repeater for the grade he is enrolled.

Automatic Promotion - a "synonym" for social promotion (Dejnozka, 1983: 38). It refers to that pupils' advancement from one grade to the next is decided on the basis of the group (cohort) characteristics,(for example, age).

A Cohort - a set of individual pupils distinguished by their common school grade in the initial year of the education cycle. (UNESCO, 1982:8).

Coefficient of efficiency - the inverted form of input/output ratio reflecting the degree of efficiency of an educational or a school system.

Efficiency - "refers to the relationship between inputs into the (educational) system and outputs from that system" (UNESCO, 1982:59).

Effectiveness - "a measure of the disparity between expectation and performance, or the extent to which an output accords with a stated goal" (Dejnozka, 1983:58).

Drop-outs - pupils who for one or another reason leave school before completing the grade or the educational cycle for which they are enrolled (UNESCO, 1984:347; Anbasu and Junge, 1988:ii).

Failures - pupils who could not meet shcool requirements to promote from one grade to the next, and who may repeat the same grade next year. (UNESCO, 1982:50).

Input - the number of pupils initially enrolled in a given grade at a given level of education.

out-put - the number of pupils who successfuly complete a given educational cycle (in this case, primary education).

Input/out-put ratio - "an indicator of efficiency with which a school produces a given number of graduates" (UNESCO, 1982: 59). "If the educational system is completely efficient, the input/out-put ratio will be one" (UNESCO, 1984:364).

Merit promotion - promotion policy in which pupils' progress from one grade to the next is determined on the basis of ones performance.

Repetition - retaining pupils' in a grade previously attended for a year or more due to (in most cases) his/her "unsatisfactory academic performance" (Dejnozka, 1983:111).

Promation Policy - Official guideline in an educational system used by schools to determine pupils' advancement from one grade to the next.

Preschool Education - "organized learning experiences for children who have yet to enroll in grade one" "(Dejnozka, 1983:126).

Educational Wastage - refers to pupils' dropping-out of school before completion of the cycle of education or grade repetition (MOE, 1978 E.C.) and/or the "combined effects" of both (UNESCO, 1984:347).

1.7. Organization of the study

This paper is organized in five chapters. The first chapter deals with the background of the study, statement of the problem,scope of the study, significance of the problem, limitations of the study and definition of key terms used in this study. The second chapter presents the review of the related literature. The third chapter deals with the methodology and procedures employed to collect and analyse the data.

The fourth chapter deals with the presentation, analysis of the data and interpretation of the findings. Summary of the findings, conclusions and recommendations are presented in the fifth chapter.

CHAPTER - TWO

REVIEW OF THE RELATED LITERATURE

2.1. Educational Wastage: An Over View

As it does in other sectors, society invests in education with an intent of obtaining satisfactory returns. The resources invested have to properly be managed and utilized in order to promote efficiency in education. Failure to use the available resources efficiently to achieving educational objectives indicates wastage.

Wastage in education describes the failure to achieve the intended results or goals that have been primarily set (UNESCO, 1980). It includes the various obstacles that make the realization of educational objectives difficult (UNESCO, 1984). Wastage is also viewed as an "indicator" (Chantavanich, Chantavancich and Fry, 1990:16); Tanguiane, 1990:54) and "important dimension" (Simmons, 1980:45) of internal efficiency of an educational system. The phenomenon of educational wastage becomes more grave when considerable discrepancy occurs between the intended and actual outputs or when countries fail to achieve what they planned to (Brimer and Pauli, 1971). Farrant (1980) has also succinctly put that wastage comprises all factors that bring about poor cost effectiveness.

The term wastage which "originally belongs to and comes from the language of economists" (UNESCO, 1980:13; Brimer and Pauli, 1971:9) seems to show the resemblance between education and industry. However the term is applied to education for the latter "from the point of view of a nation's resources and expenditure" is one of "the world's largest business" (Brimer and Pauli, 1971:9).

Wastage in education reduces the effectiveness of the system (Tanguiane, 1990) and as the rate increases, it becomes a symptom of serious defects in the internal operation of the system (UNESCO, 1984). Precisely, "Wastage and efficiency are negative and positive dimensions of the same phenomenon" (Chantavanich, Chantavanich and Fry, 1990:16). This clearly indicates that when the degree of educational wastage is high, the efficiency of the system becomes low and vise-versa. The index of educational wastage is one when the system is 'abolutely' efficient. Nevertheless, an educational system cannot be completely efficient for there are always failures and school drop-outs (UNESCO, 1984). The effort to make an educational system efficient and effective therefore limits itself to the extent of minimizing the degree of wastage rather than eliminating it.

For educational planners and statisticians the term wastage refers to the combined result of grade repetition and dropping-out of school before completing the educational program for which one is enrolled (UNESCO, 1984). However, wastage in education goes beyond quantitative efficiency and affects its quality. Although these two aspects of wastage seem to reflect the quantitative feature, they are in no way separated to the quality of education. Understanding these, therefore, helps us to clearly visualize the quality and quantity of education we are offering to our children and the extent to which we are achieving the educational objectives. For this reason, it is believed that "Postulating a close link between academic failure and the quality of education enables us to determine where education systems are not doing what they were intended to do" (Laderriere, 1984:379).

Thus, "...the repetition of a grade within the course, and dropping-out before its completion are both considered to involve wastage" (UNESCO, 1984:347). These two dimensions of wastage are, therefore, the centers around which the major theme of this review and the whole work revolves.

2.1.1. Wastage in Education and Forms of Its Existence

Educational wastage exists in a number of forms. There are five major forms through which educational wastage finds its existence.

1. In the failure of a system to provide Universal Education
2. In the failure to recruit children to the system
3. In failure to hold children within the system
4. In failure of the system to set appropriate objectives
5. In inefficiency in the achievement of objectives. (Brimer and Pauli 1971:9).

All forms of the existence of wastage listed above are not, however, mutually exclusive; rather they are related to one another. The existence of wastage in one of its forms, if a timely measure is not taken to reduce it, will ultimately allow a room for another form of wastage that may ultimatlely lead the entire educational system to crisis.

Inefficiency in the achievement of educational objectives that may be caused by various factors including the incidents of repetition and dropping-out or their combined effect, particularly at the primary level, may

obstruct the effort of universalizing primary education. In Halpern's words, "The quest to universalize primary education has been hampered by an increasing drop-out and repetition rates or low performance levels" (Halpern, 1986:193).

Universalization of primary or secondary education also immensely requires the holding power of the educational system in making students stay longer in schools. Obviously, a system incapable of holding pupils within it can not keep the relative balance between the demand and supply of education. For this reason, the system will be in a problem of recruiting and admitting new school age children. For an educational system characterized by such an intricacy of events, setting appropriate objectives is not easy. Although setting objectives seems much more easier than achieving them, undeniably, what has not been planned properly and appropriately can not meet the needs of society; thus the real objectives can not be achieved. Hence, wastage that occurs as a result of failure to set appropriate educational objectives basically indicates the inability of planners to closely see national (societal) and individual needs. Nevertheless, it does not follow that appropriately set objectives do prevent educational wastage.

Thus, in whatever form it may exist, educational wastage has been a major problem in many parts of the world, particularly in the developing countries (Brimer and Pauli, 1971; Simmons, 1980; Chantavanich, Chantavanich and Fry 1990). The magnitude of the problem may, however, vary from country to country and from one region to another. The difference in the magnitude or seriousness of the problem of wastage may be the result of the differences in social and economic development that exist between countries and regions. Besides, the grade promotion policies practiced in different countries of the world may, among other things, explain the difference in the magnitude of the problem (UNESCO, 1984; 1980; Simmons, 1980; Brimer and Pauli, 1971).

2.1.2. Wastage in Education and Its Magnitude

In education or in industrial sectors, the existence of wastage of one kind or another seems to be unavoidable. With regard to this, Tadesse (1974:30) argues that wastage (in his case dropout)is an "in destructibly something". Similarly, Chanta Vanich,Chantavanich and fry (1990) have also indicated that wastage of a certain magnitude is inescapable. All the effort is therefore, to minimize the gravity of the problem.

In the study of wastage the examination of its magnitude, the existing evidence about its severity and status in the developing countries are points of great concern. In principle, a progressive educational system should, if not avoid, minimize the magnitude of wastage (MOE, 1978a, E.C.) and expected to be less expensive (Kobes, 1975) by properly utilizing its scarce resources for educational development. But many studies (UNESCO, 1984, Simmons, 1980; Thomas, 1975; Brimer and Pauli, 1971; and Adams and Bjork, 1969)have revealed that educational wastage is a pressing problem in the developing countries. Besides low rate of school participation, the number of pupils who complete primary education is decreasing. According to Tilak (1982) more than one-third of primary school age children in developing countries, are not enrolled in school. Of those who enroll in the first grade, only about fourty percent of them complete above the third grade. It was also reported that from the 1970 starting cohort, about fifty-five percent of the pupils dropped-out in grades one to five (Carceles as cited in Tilak,1982:111).

It has also been documented that among the pupils who entered first grade in 1959/60, 1961/62, and1965/66, only 6.4, 9.7 and 15 percent of them respectively reached the last grade of the primary cycle (Simmons, 1980:48). Despite the observed improvement through time,it is quite evident that

the magnitude of wastage remained high in developing countries. The 1985/86 data of 86 developing countries also revealed that from pupils entering the first grade,about 18 and 29 percent did not go as far as the second and fourth grades respectively (Tanguiane, 1990:54).

The fore-going discussion shows that, in addition to low rate of primary school participation, high rate of wastage has been a prevalent problem in many of the developing countries including Ethiopia (Tadesse, 1974; Kobes, 1975). Studies have shown that the problem is more serious in educationally less developed countries than in the developed ones (Brimer and Pauli, 1971). These pieces of evidnece suggest that the problem of educational wastage is still more grave in the developing countries. The underlying reasons for this have been identified by Simmons (1980). These include:

1) Supply of fewer school places which, as Hallak (1990) puts it, is accompanied by high rates of drop-out, repetion, and high competition for admission.

2) Poor life situations that obliges most children to work to earn their living do not motivate them to have more years of schooling.

3) Lack of parental encouragement due to economic or cultural reasons or the interaction of both; for example, children from poor and uneducated families encounter such a

problem.

4) The increasing cost of education has become high for the poor to afford and this would prevent children from entering or force them to leave school at their early age (pp. 48-49).

However, what has to be noted is that these are not the only reasons for high rate of wastage in developing countries. The causes of wastage are varied and complex enough. What has been tried here is to show why the phenomenon of wastage is more serious in the developing than in developed countries.

2.1.3. Wastage in Primary Education and Its Impact on Development

The study of educational efficiency or its quality has to give more emphasis to primary education for the latter is the foundation for other levels of education. Development, economic or social, if it benefits something from education, the base lies at the primary level. The contribution of education to development has been documented by many writers and reaserchers, Chantavanich, Chantavanich and Fry (1990), Harbison and Mayer as cited in Ayalew (1989), Fagerlind and Saha (1983); Haddad et al (1990); Colclough (1980) and Blitz (1965) are some to mention. While education in general is

considered as the "corner stone" (Haddad et al, 1990)of development, primary education is where the foundation lies (The World Bank, 1990).

If education is to contribute to development, the central purposes of primary education-creating a literate population and laying the ground for higher level of education (The World Bank, 1990:3) have to be meet. But the educational systems in many of the developing countries fail to meet the objectives set in the curriculum and are unable to teach pupils the basic skills. Consequently, "These primary education systems have jeoparadized national efforts to build a human capital base for development" (The World Bank, 1990:3). From this point of view, the economic reason for investing in this level of edeucation is quite clear (Colcough, 1980). Research findings also indicate that economic growth in a number of countries is due to large investment in education (Haddad et al 1990). This also leads to the assumtpion that more years of schooling increases productivity and, there by, the out put. It has been estimated thast four years of schooling, other factors being constant, increases the products of agriculture by about eight percent (Colcough, 1980) Haddad, et al 1990). In addition to such a direct and positive effect on farm productivity, a similar positive effect of primary education has been observed on human fertility. Research findings

suggest that women with more than four years of schooling have fewer and with better mortality rate children.

Primary education, as educators believe, is one important means of raising the rate of literacy. Literacy as a human right is also considered to be a factor in facilitating economic and social development (Wolf, 1984). It is,therefore, possible to say that progress towards achieving development goals requires an effective and efficient system of primary education. Failure to give due regard to primary education contributes to problems that hinder to meet development objectives, for development requires educated and skilled manpower. Development in all its dimensions is practically lame in a society where a considerable proportion of the producing population is illiterate.

Thus, reducing wastage in primary education by and large, is a basic measure of raising the efficiency of the entire educational system. The effort to minimize wastage has to consider the relevance and quality of education. In any case, an educational system characterized by inefficiency, regardless of the causes, is a hindrance to development. It must, however, be noted that education though important, is not an independent factor determining development. (Tekeste 1990). In addition to this, the impact of development on

education is so immense in determining its quality. Hence, both have a reciprocal effect to each other.

2.2. Grade Repetition as a Dimension of Wastage

2.2.1. Nature and Definition of Repetition

In defining the concept repetition writers use different approaches. Some define it in terms of the time spent and others indirectly through the term repeater. With such a difference in approch, however, all agree on the thematic aspect of the concept.

Accordingly, "repetition is meant a year spent by a pupil in the same grade and doing the same work as in the prvious year " (Brimer and Pauli, 1971:18). A repeater in this respect, is a pupil who is detained in the same grade due to his failure to satisfy grade requirements (UNESCO, 1984; 1980). The definitions presented above, show that repetition involves wastage of certain amount of resources. On top of this, the incidence of repetition has an adverse effect on pupils' motives and interest towards learning (Brimer and Pauli, 1971).

In explaining the nature of grade repetition, Brimer and Pauli note,

> One way of institutionalizing objectives is to construct a series of treshold levels of achievement for each grade which must be satisfied before passing the next grade. Failure to satisfy the grade treshold level leads to repeating the grade or dropping-out of school (1971:12).

Repetition is therefore considered as wastage for the consequences and problems it brings to the educational system and particularly to the school. Among the various reasons why grade repetition is considered as wastage, the major ones include the following:

1. Repetition reduces the intake capacity of a particular grade or school. Since school places are occupied by repeaters, other will not be admitted (UNESCO, 1984; 1980); and repetition has been an obstacle for others "coming in" (Phillips, 1974:142). With this, the accessibility of the school for large number of children,who have never got the chance to enroll and "democratization" of educational opportunities will be demolished (Bray, Clarke and Stephen, 1986).

2. Repetition also results in over crowding classes, which in addition to increasing the cost of education (UNESCO, 1984), results in a declining quality of education as in the case of Ethiopia (Tekeste, 1990). The link between grade repetition and the quality of education indicates the

failure of an educational system in achieving its objectives.

3. Grade repetition is considered as wastage, for it most of the time is followed by pupils dropping-out (UNESCO, 1984; Brimer and Pauli, 1971). In this case the problem becomes more serious because almost all what has been invested is wasted. The relationship between repetition and dropping-out has been a common phenomenon in most of the developing countries. Although with a lesser degree the problem also exists in developed countries (Natriello, McDill and Pallas, 1985; Kobes, 1975).

Added to these, repetition since it causes pupils spend additional year in the same grade, there arises the need for additional resources (Chantavanich, Chantavanich and Fry, 1990). The problem of wastage would be serious, in this case, in countries where resources are limited.This seems the problem of most of the developing countries including ours.

Contrary to the existing literature and research findings that assert repetition as wastage, there are other writers who argue that this conclusion lacks appropriate evidence. Although Schwille et al (1991) have not denied that repetition is costly,adequate and consistent evidence is lacking to conclude repetition as wastage, particularly in the developing countries. They comment on the UNESCO's 1984

definition, as indicated by UNESCO (1984) records that the definition has limitation for it does not give account of the advantage a repeater may have.

Regarding the merits and demerits of repetition, many writers present different views. Labree (1984) Research Information Service, RIS (1982),Dobbs and Neville (1967) have reviewed the views of the proponents of grade repetition and automatic promotion.

The extent to which repetition should be regarded as wastage according to Schwille et al (1991) has been a debatable issue. There seems no agreement reached among educators and researchers on the two alternative promotion policies (Labree, 1984). While grade repetition is the combined effect of individual, institutional and factors related to the national promotion plocy, the latter is the source of desagreement between the two groups (Schwille et al (1991). Although the conflict between the two views has been the source of controversy since the first graded school, (Labree, 1984) which of the two alternatives is better, remains unanswered (RIS, 1982).

Propornents of social promotion are more concerned with educational effeciency, whereas, the proponents of grade repetition with educational standards. Their point of

departure lies on what should be the primary basis of promotion,the individual or the Cohort (Labree, 1984). As reviewed by Labree, social promotion is criticized for encouraging the decline of standards, as symbol of lack of commitment to pupils achievement, lowering achievement expectations, for having an element of academic dishonesty and disregarding individual differences in ability.

Schwille et al (1991) comment that researchers have allowed "misleading generalizations" which have no sufficient evidence. According to Schwille et al generalizations were made based on researches carried out in developed countries. They lastly remark that reduction of grade repetition in developing countries can not be meaningful without the support of other changes that are relevant to the educational system.

Despite the existence of such controversies repetition has been and is regarded as wastage in terms of the consequences it has (as discussed above). The points raised regarding its advantages should not however be underestimated. The fore-going discussion suggests that setting promotion standards and policy needs a close investigation and experimentation in the entire educational system with the corresponding economic, and social environment.

2.2.2. Rates of Repetition in Primary Education in Developing Countries

Since repetition is "largely system determined" UNESCO, 1980:20), it is basically dependent up on the objectives and practices of the educational system of each country. Because of this rates of repetition vary from one country to the other depending on the promotion policy practiced by these countries.

It has been recognized that primary education in the developing countries is "mostly scourged" Thomas, (1975:21) by the phenomenon of grade repetition wheras this is not a problem for highly developed countries. It has also been recorded that the percentage of repeaters among primary school pupils was high in developing countries around the eightees (UNESCO, 1983a). The Evidence from twenty developing countries revealed that the percentages of repeaters in seventeen of them ranged between ten to thirty-eight percent among which the majority had about higher than twenty percent (UNESCO, 1983a).

In developing countries where educational resources are scarce repeaters, as Tanguiane (1990) puts it, have created difficulties in the educational system. As a consequence of

high rate of repetition many children in developing countries are deprived of the oppotunity of enrollment due to small school places (Tanguiane, 1990; Bray, Clarke, and Stephen, 1986; UNESCO, 1984; 1980; Brimer and Pauli, 1971). This in general suggests that, leavning the differences that exists in repetition rates among them, educational systems of most of the developing countries are characterized by high repetition rates which results in high wastage rates. The practice of automatic promotion and strict grade promotion policies also result in a wide range of differences in repetition rates among countries. Repetion rate is high in countries where strict grade promotion policy is employed and low where automatic promotion is practiced. In developed countries like the United Kingdom, Canada and the United States of America, in most cases promotion is based on age (Brimer and Pauli, 1971), which Labree (1984:88),calls "social promotion" and repetition occurs due to pupil's long period of absence from class. In this case the rate of failure (repetition) is low (For example, in 23 countries of Europe and USSR, around the eightees the median percentage of repeaters was only 2 percent, whereas in 42 countries of Africa the median percentage of repeaters was sixteen, which is considerably high (UNESCO, 1984).

As a developing nation, Ethiopia could not escape the problems of wastage that emanate from high rate of

repetition. The 1974 E.C. data from government schools in Ethiopia showed that the total repetition rate from grade 1-6 was 13.6 percent (MOE, 1978a, E.C.) which is lower only by 3 percent from the median percentage of repeaters for Africa indicated above. It has also been stated that "in spite of the effort made to minimize the number of repeaters, the problem of repetition in Ethiopia is still persistent especially in the first three grades of primary education" (MOE, 1982 E.C; 49-50).

2.2.3. Pattern and Rates of Repetition by Grade and Sex in Primary Education

Studies at different times and places have come up with varying results regarding repetition patterns by grade level and sex. A brief review of these is, therefore, imperative.

2.2.3.1. Patterns of Repetition Rates by Grade

In Latin american and European countries between 1970 and 1980 repetition rates were higher in the first grade of primary education and lower towards the final grade (UNESCO, 1984). But the same study showed the opposite tendency for Africa Asia and Oceania. Showing that early years of chooling has been characterized by high incidence of failure and repetition, IDRC (1983) reported that a great many

children failed in the first grade of the primary education cycle. High repetition in the first grade could be explained by an increasing size of enrollment (UNESCO, 1980) and lack of experience of children before they begin formal primary schooling (Riley, 1986). These problems are prevalent especially in the developing countries.

On the other hand, in some countries and regions highest rate of repetition have been observed in the final grade of primary education (UNESCO, 1980). It has also been recorded that grade repetition is characterized by a gradual increase until the penultimate grade and a sharp increase in the final grade (UNESCO, 1984). Such pattern of repetition is evident in the developing countries. A recent educational statistics for Ethiopia could be a typical example for this particular pattern of repetition. The Ethiopian case has shown that repitition rate was high in the first grade and showed a decreasing tendency until grade five and then sharply increased in the final grade (UNESCO, 1990). A similar evidence also revealed that repetition rates were higher in the first and final grades in Ethiopian primary schools (MOE, 1988). The percentage of repeaters in the first grade was 18.7 whereas it was 10.3 percent in the final grade of the primary education cycle (MOE, 1988).

Although research findings reviewed revealed that primary education in developing countries, especially in many African countries is caharcterized by higher repetition rate in the final grade (UNESCO, 1984), observations in Ethiopia seem to go in conformity with the general consent that repetion is higher in the first grade. Such a rate of repetition at early years of schooling is a serious problem for it may cause pupils' dropping-out before they master basic skills of reading writing and arithemetic. This problem in turn contributes to high rate of illiteracy. Such a vicious circle continues to aggravate the problem of educational wastage.

2.2.3.2. Repetition Rates by Sex

Writers such as Bray, Clarke and Stephen (1986), and Brimer and Pauli (1971) contend that the tendency to repeat classes is higher among girls than among boys. Contrary to this,other research findings showed that the level of repetition was higher among boys than among girls (UNESCO, 1984). Similar findings were recorded in sixty-six of the ninety countries studied around 1980. The study made between 1970 and 1980 (UNESCO, 1984) has also revealed lower repetition rates among girls than among boys in all countries studied in Latin America, the Caribbean and Europe (UNESCO, 1984).

But the same study has shown that the percentage of repeaters in the majority of African countries was higher among girls than among boys. This confirms the contention of Bray, Clarke, and Stephen (1986). The percentage of repeaters in Ethiopia is also found higher among girls than among boys (MOE, 1988; UNESCO, 1990).

2.3. The Drop-out Problem as Wastage

Drop-out is an incidence of pupil's school leaving before completing an educational cycle he/she is enrolled. It is considered as wastage for the pupil who drop-out has failed to achieve the educational objectives of that particular grade or level of education (UNESCO, 1984). "Dropping-out", to Rumberger," is a residual status indicating some one who has not graduated from or is not currently enrolled in a full time state approved education program" (1987:105). Brimer and Pauli define a drop-out "as a pupil who leaves school before the end of the final year of the educational stage in which he is enrolled." (1971:15). While considering a drop-out as one who discontinue his education and his progress in school is interrupted, Strother (1986:325) labels drop-outs as "losers."

From the definitions given above, it has been evident that the drop-out problem as a form of educational wastage is an issue of great concern for educators, researchers and policy-makers. As a dimension of wastage, high drop-out rate indicates the decreasing state of pupils survival in schools. Put differently, the drop-out problem reflects the failure of the educational system to retain pupils in schools for a relatively long period.

2.3.1. Magnitude of the Drop-out Problem in Primary Education of the Developing Countries

Many studies have shown that, among other things, education systems in the developing countries, are characterized by high drop-out rates and poor pupils' performance (Carnoy, 1982). The problem is enourmously widespread in the primary school of many developing countries while it seems insiginficant in the developed nations. Similar research findings also reveal that school drop-out is a serious and prevalent problem especially in low income countries (The World Bank, 1990; IDrC, 1983) where education is less developed and resources are scarce (Bray, Clarke and Stephen, 1986).

The study of survival and drop-out rates in primary education of 88 developing countries around 1980, revealed

that the average percentage of the cohort reaching grade four was only 69 percent (UNESCO, 1984). This is a clear evidence for that survival rates are lower in the developing countries. More concretely, as indicated above, approximately one-third of the pupils entering the first grade would drop-out before completing the fifth grade.

Indicating the gravity of the drop-out problem, Thomas (1975) asserts that many children of the developing countries have been facing the problem of school leaving before completing primary education. This is being aggravated in places where there is intense competition for admission (Hallak, 1990), which in real terms is the characteristics of educational systems of many developing countries. Simmons (1980); UNESCO (1983a); and Coommbs (1985) have all recorded high rate of drop-out and absenteeism in primary schools of the developing countries. The proplem of high absenteeism would contribute to more and higher rates of drop-out.

The phenomenon of dropping-out is a severe problem for the individual and the society. The individual will remain with low academic skill and with little or no opportunity to obtain further education. The society, in addition to the foregone national income will face the consequence of the problem in social, economic and cultural spheres (Rumberger, 1987). Thus dropping-out can be considered as a potential

wastage of financial and human resources (Kobes, 1975; Elliot, Voss and Wendling ,1966). The fact that it is difficult to estimate the economic cost of education wasted due to early drop-out (Nattiello,MCDill and Pallas, 1985) problem creates public alarm (Passow, 1977) and interest for those who are responsible for the financial and organizational accommodation (Binaminov and Glaman, 1982).

Like in other developing countries, dropping-out has been a major problem in primary education system of Ethiopia. various research findings show that the problem has been persistent in our educational system since its inception (Haile, 1976) and is more severe in rural schools. Showing the gravity of the drop-out problem in rural Ethiopia, Tadesse (1974) brought to our knowlege that in 1970's about 80-90 percentof pupils drop-out before completing the second grade.

Recent studies on Ethiopian education (MOE, 1978 E.C.) and Anbasu and Junge (1988), at national and local levels respectively, have shown that the problem is still unresolved. Ambasu and Junge have reported that about 35 percent of the pupils who entered the first grade dropped-out before completing the first year (1988). The 1987 national educational data also shows that 29 percent of the pupils who entered the first grade dropped out before completing the

first year (MOE, 1988). This seems to be an adequate evidence to conclude that dropping-out is a significant problem which requires great attention particularly in a country, like ours,where Universal Primary education (UPE) is not yet achieved.

2.3.2. Drop-out rates by Grade and Sex

2.3.2.1. Drop-out Rates by grade

Various studies show that drop-out rates are higher in the first grades of primary education, especially in the developing countries. For example, Brimer and Pauli reported that in thirty-six of the fourty-six countries of Africa, Asia and Latin America the highest drop-out rates were observed in the first grade (1971). The Chilean case also reveals that drop-out rates were higher in the first two grades (Blitz, 1965). According to his report 30 percent of children who entered in the first grade left the school within the first two years (1965:306).With regard to this, simmons (1980) argues that in most countries, the wastage rate is bunched in the beginning grades of primary education.

Bjeren (1969), Haile (1976), (MOE,1978a E.C.) and Anbasu and Junge (1988) have all recorded that the highest drop-out rate in Ethiopian primary schools occurs in the first grade. In 1987 the rates of drop-out were 29 percent and 7.6 percent in grades one and six respectively.

2.3.2.2. Drop-out rates by sex

Sex difference in drop-out rates is another area which has attracted the attention of researchers and policy makers. Basically, females' participation in primary education of the developing countries is lower than their male counterparts. This lower rate of participation can, partly, be explained by higher rates of drop-out among girls. Haddad et al (1990) and Hyde (1989) have also associated low educational attainment of females with the drop-out problem which is common among girls of the developing countries. Similarly girls tend to be disadvantaged than boys, rural children than urban children. According to Brimer and Pauli's (1971) report dropping-out was higher among boys in the urban schools and higher among girls in the rural schools. On the other hand, some studies have shown that no clear difference in the rate of drop-out was observed by sex (UNESCO, 1980; Bjeren, 1969).

An earlier study in Ethiopia (Kyapaghian, 1960) recorded higher drop-out rate among girls while a study carried out recently (MOE, 1978 E.C.) shows quite the opposite. Although there seem to be incosistency in the results presented above, the time factor has to be considered. But more recently, Anbasu and Junge (1988) and the report from the Ministry of Education (MOE, 1988) recorded that the drop-out rates are

higher among females than among males. This seems to be consistent with previous results discussed above. The percentage of drop-out by sex and grade in 1987 in Ethiopia is summerized in the table below.

Table 1: Drop-out Rates by Grade and sex in Ethiopia; 1987

Sex	G	R	A	D	E	S
	1	2	3	4	5	6
M	.2849	.0084	.0469	.0579	.0475	.0655
F	.3007	.0685	.0772	.779	.0474	.0888
T	.2912	.0323	.0588	.0657	.0474	.0755

Source: MOE (1988) Basic Education statistics, Addis Ababa: MOE., p. 23

As shown in the table above, in all grades the rate of females' drop-out is higher than males. For both males and females the highest drop-out rate is observed in the first grade. No specific pattern of drop-out rate has been observed from grade two to five. The data also shows that drop-out rates are higher in the first and last grades than in other grades. This may show that wastage rate is higher in the first and last grades of the primary education cycle.

2.3.3. Trends in Educational Wastage: Drop-out and Repetition Trends in Primary Education

Between 1970 and 1980 there appeared a decreasing tendency in the percentage of repeaters, while the absolute number of repeaters increased by about 1.7 million (UNESCO, 1984). This increase could be explained due to an increased pupils' enrollment. In Ethiopia the 1987 pupils' flow rate shows that both repetition and drop-out rates were high in the first grade and showed a decreasing tendency as the grade level increases. However, a considerable increase has been observed in the last grade of the primary cycle. This trend was the same for both sexes. But repetition and drop-out rates have been observed higher among girls than among boys (MOE, 1988).

It, therefore, suggests that wastage rates were highest in the first grade for both sexes. It was also observed that the highest percentage of wastage (i.e., 30% for girls and 28% for boys, see table 1) was accounted by the drop-out rate in the first grade. It, thus appears that wastage rate that occurs in the first grade needs considerable attention. Wastage rates that occur due to repetition in the last grade also needs the attention of all concerned. In Ethiopia, it was reported that wastage rate has shown an increasing tendency from year to year in primary schools, particularly

in the first grade (MOE, 1978a, E.C.). In other parts of the developing countries, in spite of the observed trend of improvement, it has been said that, wastage rate remains high for a considerable number of countries (UNESCO, 1984).

2.4. Factors Influencing Wastage in Primary education

In the preceding sections an attempt has been made to review the characteristics and magnitude of educational wastage in developing countries. This section deals with the major factors related to wastage.

Many researchers have tried to identify the major causes of wastage in education. The causes of wastage vary between regions. According to Cameron (1965), the sources of the variation may be based broadly on economic, social, geographical and health factors. In some societies the traditional culture has been the cause for wastage in their educational systems (Adams and Bjork, 1969). Modern educational and cultural trends have always been in conflict with old and traditional culture. A long list of the causes of wastage identified by Tanguiane (1990) have been summarized into factors related to the "inadequacy of the educational system, socio-cultural and economic character" (Tanguiane 1990:57). With a similar contention, Laderriere

(1984) includes factors related to individual learners as causes of wastage together with social and school related factors.

Brimer and Pauli (1971) thoroughly discussed the various causes of wastage having all summarized under "internal" and "external" factors. All factors directly related to the educational system or the school are categorized under internal factors (i.e., curriculum, teacher preparation, examination policies etc.). External factors include all those factors which have no direct relationship with the educational system. These factors are out of the educational or school system. Simmons (1980) has similarly noted the role of internal and external factors in educational wastage. Since wastage may be the result of the interaction of both internal and external factors, a separate discussion on them is simply a matter of convinence. Brimer and Pauli (1971) note that a separation of an educational system from the entire social and economic environment is hardly possible. However, it has to be borne in mind that identifying individual factors related to educational inefficiency would help in the effort to alleviate the problem. The causes of educational wastage identified in Ethiopian schools include, inappropriate curriculum, inappropriate examinations, economic problems, home-school distance,shortage of time alloted to education (MOE, 1978a, E.C.). All of these,

however, can be categorized into economic, institutional, social and individual problems.

Hence, pupils' success or failure in school is the function of a multiple of individual factors and/or their combined effect. School progress (repetition/promotion) is therefore, the interaction of pupils' characteristics, school characteristics and national educational policy (Schwille, et al 1991). Reviewing research findings related to the factors that influence pupils' success or failure is therefore, helpful to examine the extent to which these factors contribute to the over-all rate of wastage.

2.4.1. Pupils' Characteristics and Wastage (Repetition).

Although they are not the causes of wastage in education, individual characteristics such as sex and age are considered to be among the factors that influence pupil's progress in school.

2.4.1.1. Age and Pupils' Academic Status

Since maturity is considered as an essential element that contribute to learning, an individual's age may matter in his school performance. There is a general assumption that older children are more advantaged than under-age children for elementary education (Heyneman, 1980). Younger children tend to be failures and end up as repeaters (MOE, 1978a,E.C., 1968) due to their low level of maturity. Admitting under-age pupils (below seven) had been considered as one of the causes for highest number of repeaters in the first three grades in Ethiopia (MOE, 1968). This could partly be explained by inappropriate examinations to the age level of primary school children (MOE 1978a, E.C).

While Llyod (1978) reports the existence of positive relationship between secondary school graduation and younger age, the Ugandan case has shown inconsistent results by age (Heyneman, 1980). This, however, is not surprising for age and school performance, most of the time, do not have linear relationship. Achievement and age have curvilinear relatioinship. What is important here is that the level of maturity that primary school children should reach before they commence formal schooling.

2.4.1.2. Sex and Academic Performance

An individual's sex has been found as one of the major factors associated with academic performace and a powerful predictor of achievement difference (Heyneman, 1980). He remarked that higher performace among boys could not be explained by chance. The difference must have some deep rooted reasons from the society. It, thus, seems that the difference in academic performance between males and females is more of social than biological (Brimer and Pauli, 1971, Heyneman, 1980). The value attached to the education of boys and girls by parents and the society at large is the source of the difference. Substantiating this, Scott and clark state, "The school as a macrocosm of society reflects the fact the society values males over females" (1986:523), and this reaches the classroom. As a result of the attached value to female education, teachers give little or no attention for female pupils (Shakshaft, 1986).

The difference in school progress between males and females even when they come from similar home environment may get its explanation from the cultural milieu (Ogundale, 1973). Besides, lower class girls suffer from both being females and members of lower class (Cooksey, 1981) and this largely affects their school performance (success or

failure). Such high probability of failure contributes to higher rates of repetition among females than among males.

2.4.1.3. Preschool Education (Experience).

Much has been written about the role of preschool education and that it has got a widespread recognition (Olatunji, 1990). The pre-school period is crucial in the child's future development. Substantiating this, Mach (1984) appreciates the role played by research and experience to show that the preschool period as a crucial stage in shaping the child.

As an early intervention, preschool education is designed to prevent failure and early drop-out (Bralic, 1983), and to reduce educational wastage (Halpern, 1986). A number of studies carried out in different countries have documented the contribution of preschool education in reducing and preventing failure latter in primary education (Riley, 1986; Filp et al, 1983; Pozner, 1983; Mach, 1984; Myers, 1983).

The immense value of preschool education has been noted by Kagiticibasi (1983). He states,

> The allocation of efforts and scarce resources in early education in a country where Universal primary school education has not yet been achieved needs to be justified. In such a context preschool

> education is considered a necessity and not a luxury (1983:111).

Preschool education, in this regard, is viewed as a promising investment made in human resource to reduce the phenomenon of wastage (Myers, 1983) or by improving school survival rate and redressing performance variation caused by economic differences (Halpern, 1986). It also affects the entrance age into primary school. Children who attended kindergarten would be ready for primary education earlier than those who did not (Pozner, 1983).

Research findings have shown that children who attended preschool education (Kindergarten) were more successful than those who did not (Mach, 1984). He further notes that the efforts made in kindergartens are being reflected in primary schools. On the other hand, Olatunji (1990) has found no difference in performance between preschoolers and non-preschoolers of Nigerian children.

2.4.1.4. Pupils' Attitude towards School Learning

Attitude is an emotional attachment towards something or phenomenon. "Behavioral difference" among people though not in all cases, "spring from attitudinal differences" (Brimer and Pauli, 1971:92). It thus appears that attitude towards

school learning, to a greater extent, affects ones' performance.

The achievement of educational objectives partly requires pupils' positive attitude towards learning (Tekeste, 1990). Reffering to ERGESE findings he remarks that pupils' attitude is an important factor in their potential to receive education. As positive attitude towards learning facilitates pupils' progress in school, a negative attitude is a hinderance to pupils' successful progress in school work. The value one attaches to school learning influences his/her effort which, other things being equal, may determine his/her success or failure (Rosi, 1961). A positive attitude towards school work, Rosi argues, helps pupils attain higher achievement scores and, thus, meet school requirements for grade promotion. More precisely, achievement differences among pupils may, partly, be explained by "affective states as attitudes, motivations, self-perceptions, intentions and expectations" (Fasil et al, 1975:54).

From the fore-going discussion, it can be deduced that an interest and positive attitude towards school learning will likely reduce failure. The reduction of failure reduces the rate of repetition and over-all wastage rate.

A factor which is equally imprtant to attitude is ones motivation for achievement or expectation for future achievement. "... the will to achieve as an early age establishment,... has its roots in family circumstances" (Musgrove, 1970:196). There is a general agreement that a child with higher achievement motivation will likely be competitive and adaptive to the situation he finds himself (Brimer and Pauli, 1971). Early failure in school would make children to be failure oriented. These children tend to loose their interest towards learning and do not expect themselves to be successful. Failure oriented individuals do not only tend to fail in examinations, but also tend to decide to discontinue their education (Musgrove, 1970). Information whether promotees or repeaters are more success oriented seems scanty. Despite the shortage of adequate information, it has been found that low interest towards learning would be accompanied by failure which, in turn, affects pupil's orientation towards success or failure (Brimer and Pauli, 1971).

2.4.1.5. Family Soci-economic Background

Family socio-economic background has been known as an important factor affecting pupil's school progress. Various studies have shown that there is a strong positive relationship between family socio-economic status and pupils'

progress or academic status (Stevenson and Parker, 1987; Rosi, 1961; Fuller, 1987; UNISCO-UNICEF, 1987; Simmons and Alexander, 1980).

Fuller further contends that "Advantages rooted in social class and related parenting practices may be more or less influential within the third world" (1987: 257). Similarly, Simmons and Alexander (1980) and Fassil et al (1975) have noted the effect of family background on pupils' school performace. According to Fassil et al (1975) about 10 to 25 percent of the variation in achievement scores among pupils is the function of family socio-economic differences, that can be measured by education, economic and occupational level attained. Substantiating this, Niles (1981) argues that materially and culturally previleged children would likely be academically better than the less previleged ones. Similarly, Cooksey (1981) has documented the association between repetition rates and family, socio-economic status. Evidence from Latin America and the Caribbean also showed that the majority of repeaters and/or drop-outs belong to families of lower socio-economic background (UNESCO-UNICEF, 1987).

On the other hand, after having reviewed various research findings Heyneman (1980) concluded that the effect of socio-economic status on school performance is more strong

in industrialized societies. The relationship between faimly background and academic achievement in less industrialized countries is not strong (Heyneman, 1980). The existence of the relationship is not, however, questionable.

2.4.1.5.1. Parents Educational Level

As a socio-economic variable, the educational level of parents is assumed to have a significant contribution to pupil's success or failure in school. The level of parental education, as viewed by Stevenson and Parker (1987), is an important predictor of pupil's performance than other variables related to family background.

The basic assumption related to the educational level of parents is that well educated parents involve more in school affairs and encourage their children better than the less educated parents (Brimer and Pauli, 1971). With better participation of parents in their children's education, and school affairs, it is believed that both pupils' performance would be better and school efficiency would be higher. As a result of this, wastage due to repetition and early school leaving can be minimized. This has been supported by research findings at various levels, among which the findings of Dale and Griffith (1970); Stevenson and Parker (1987); and Ogunlade (1973) are some to be mentioned.

Parents who are illiterate do not actively participate in school affairs nor do they understand school objectives. Thus, there will be little or no support provided for the child. If the family support is very low the child will likely fail or drop-out of school. In addition to this, a literate environment facilitates pupils' progress in school. Ogunlade (1973) agues that coming from educated parents alone can do little unless children are brought up in a literate environment. He tells us that illiterate environments have negative effect on pupils' progress in school.

2.4.1.5.2. Occupation of Parents

There is an assumption that better education results in better status occupation. However, in our case this may require a closer investigation. Many writers believe that occupational status of parents causes differences in academic performance among children. Children from parents with different occupational status differ in their performance (Cooksey, 1981; Niles, 1981; and craft, 1970). With regard to this, Niles (1981) contends that children from parents with high status occupation due to the natural and cultural previlege they receive are academically better than the non-previleged ones. Others like Llyod (1978); Chopra (1967) and Colcough (1980); and Adams and Bjork (1969) have all reported that children from farming and other blue collar

background families had lower passing and survival rates than children from trading, professionals and white collar families. Similarly, Tadesse (1974), in our case, has found that many of the drop-out were from farming families.

2.4.1.5.3. Economic Status and family Support

Various research findings have shown the relationship between family economic status and pupils' progress in school. Brimer and Pauli (1971) Coombs (1985) (to mention a few) have come up with findings of this sort. Economic problems, according to Coombs (1985), have a negative effect on pupil's progress and as Dale and Griffith (1970) have clearly identified that children from low-income families tend to fail and drop-out of school earlier than their counterparts. With regard to this, Tanguiane (1990) has indentified poverty as one of the major factor of wastage (drop-out and repetition).

Family economic status is, to a large extent, related to the ability of parents to support their children's education. Family support both material and attitudinal is one of the most important factors affecting pupil's progress in school (Scott and Welberg, 1970). Economically better off parents are able to provide their children with the necessary learning facilities and attach higher value to the education

of their children. The value given to education is mostly related to the "class-culture" of the family (Elliot, Voss and Wendling, 1966). Parental encouragement, that facilitates scuccessful promotion, is measured by the priorities given to the children (i.e. facilities such as good study place, books etc.).

However, primary school children need to get help beyond material support. Parental counselling as an element of early intervention, particularly at early years of schooling minimizes the risk of failure (Riley, 1986). Dale and Griffith, (1970) suggest that parental encouragement has to be constant, even at the time when the child is a failure.

2.4.1.6. Family Structure

Whether a pupil lives with both of his parents, or only with one of them or none has a considerable effect on his progress in school. It has been assumed that more intact homes facilitate children's progress in school (Lloyd, 1978). Children with alive and married parents perform better than those from separated and divorced families. Confirming to this view, Brown (1980) asserts that children from single-parent families encounter problems than those from intact ones. Children from single or with no natural (biological) parents in both primary and seconday schools, according to

Brown (1980) are more likely to exhibit tardiness, trauncy and disciplinary problems. He recorded that among the pupils who exhibited trauncy, about 56 percent were from single-parent families.

The available literature and empirical research findings discussed above, clearly show the impact of family structure on pupils' progress in school. Favourable and encouraging family condidtions is thus a contributing factor for the pupils' progress in school while the opposite contributes to failure and early school leaving.

2.4.1.7. Family Size

Family size has been an important variable affecting success or failure in school. Even when the socio-economic status of the family is held constant, family size has a recognizable effect on pupil's success or failure (Floud et al as cited in Dale and Griffith, 1970). What makes the effect of this factor significant is related to the material share each individual can have in the family. The larger the size of the family, the smaller the share of each individual which could have an adverse effect on academic progress.

It was also reported that irrespective of the educational background of the families, children from small

size families had above average performance (Cooksey, 1981). Based on his finding Cooksey suggested that avoiding extended family responsibility may help a lot to improve the performance of children. This, however, seems impractical in societies like ours. Large size families fail to support school children materially and morally.

As family size affects the education of children parents education has a significant effect on family size Fassil et al (1975) reported that countries with better educated population had a family size of 3-4 persons. Greenland as cited in Dale and Griffith (1970) reported that large size family causes a declining trend of academic performance particularly in a middle and working class families. It is therfore evident that family size and education have a reciprocal effect to each other.

2.4.2. Teachers' Characteristics and wastage

Among the various factors that contribute to high wastage rates in primary education, the characteristics of teachers has been recognized as important. Teachers' characteristics has been considered central in the study of wastage. According to Biniaminov and Glasman (1982), teachers' characteristic have a direct effect on school output and teachers, themselves are considered as school

inputs (Glasman and Biniaminov, 1981). Humphreys (1975) also contends that along with other interacting factors, quality in teaching is a function of teachers characteristics. Other writers like Adams and Bjork (1969); Mass Lustunberg and Creil (1982) also agree that teachers characteristics, their commitment, qualification, experience, and attitude have a considerable effect on school efficiency.

2.4.2.1. Teacher's Age

Personal characteristics of the teacher such as age and attitude seem to have some influence on pupils' progress in school. Although studies on this area are generally scanty, there are some that show positive relationship between teachers age and pupils' progress in school (Heyneman, 1980). As cited in Heyneman (1980). Fuller and Chantavanich (1977) and klees, (1974) have found no or statiscally non-significant relationship between teacher's age and pupils' achievement.

Chantavanich, Chantavanich and Fry(1990) have also come up with a finding that teachers' age and pupils' performance have no direct correlation. But their finding indicates that older teachers tend to be less active, which most probably has an indirect relationship with puils' progress. However, it seems difficult to conclude that whether the young or old teacher may help to promote school efficiency.

2.4.2.2. Teacher Qualification and Experience

In most education literature related to quality and effciency of schools, teachers' qualification has a central place. With regard to this, Biniaminov and Glasman (1982) and Humphreys (1975) argue that the quality of the teacher determines the quality of teaching and educational results.

Many studies show that teachers' qualification and wastage have a significant relationship (Williams, 1965). He recorded that the lower the qualification of the teacher, the higher the rates of wastage. Coombs (1985) also argues that high wastage rates in the developing countries is partly the function of teachers' qualification. Although there is an official credential, most teachers "qualified" and unqualified, according to Coombs have no enough quality for teaching. Coombs further notes that:

> ...a great many teachers, both qualified and unqualified were forced to teach with one arm tied behind them, like a farmer without a hoe or plow. This aften meant that everyone was going through the notion of schooling, but with little being learned (1985:123).

The quality and efficiency of education erodes with low educational and training of teachers (Fuller, 1987). Similarly, Biniaminov and Glasman (1982) consider teachers' educational and training level as a potent force of school's holding power.

On the other hand, there are other researchers who have indicated that the qualification of teachers has little or no positive relationship with pupils' performance (Simmons and Alexander, 1980; Chantavanich, Chantavanich and Fry, 1990). According to these writers teachers' enthusiasm and sense of responsibility and potential is more important than their qualification. It is therfore quite evident that there is inconsistency of results on this issue thus, Rosi (1961) argues that such results are 'equivocal.'

2.4.2.3. Teachers Experince

Teachers experience is expected to have a positive relationship with school efficiency. Schools with better qualified and experienced teachers are expected to have strong holding power and make pupils stay longer in schools. Reviewing many research findings Heyneman (1980) has come up with the conclusion that teachers' experience and pupils' progress have positive relationship. This is also evident in the case of Thailand (Chantavannich, Chantavanich and Fry, 1990). Better qualified and experienced teachers may provide better guidance service, and as a result pupils may perform better. This may lower the rates of repetition and drop-out. The evidence of our country has also shown that the assignment of inadequately trained and less experienced

teachers has been the cause for high rate of wastage and this is a prevalent problem in rural schools (MOE, 1978a, E.C.).

However, it should be noted that many years of teaching experience does not necessarily make one a good teacher. Therefore, the need for updating teachers through in-service programs remains inevitable.

2.4.2.4. Teachers' Attitude Towards their Profession

Educators and researchers agree that teachers low interest or negative attitude towards their profession has been one of the variables that contribute to high rates of wastage (Brimer and Pauli, 1971; Tekeste, 1990; Tadesse, 1974). Brimer and Pauli, in a more global context and Tekeste in the Ethiopian context have evidenced that teachers' attitude towards their profession affects the efficiency of the school.

In most developing countries, it has been reported by chantavanich, Chantavanich and fry (1990) Tekeste (1990), MOE (1978a, E.C.) and Tadesse (1974) that teachers do not join the teaching profession from their iterest, which undeniably has a negative influence on school efficiency. Lack of

commitment of a large number of teachers as noted by Tekeste would result in low quality of education. In addition, it was once the cause for high teachers attrition rate (Tadesse, 1974) and Tekeste (1990) referring to ERGESE authors concur that secondary school teachers like to leave teaching if they get other alternatives. Such an internal drain of teachers may contribute to wastage of resources invested in education (Farrant, 1980).

With regard to this, researchers consistently remind that the teaching profession and teachers' status are steadily declining Aklilu (1967), (Coombs, 1985); and suggest there is the need for closer investigation by concerned authorities. Simmons and Alexander (1980) also recommend that teachers' motivation towards their profession is a key issue on which policy issue has to focus. Raising teachers attitude towards their profession is an important factor that may result in the improvement of education.

2.4.2.5. Teachers' Expectation and Evaluation of Pupils' Performance

The attitude and expectation of teachers towards their pupils is also an another important factor that may have a strong influence on pupils performence and survival. Teachers' expectation of their pupils' progress indirectly

affects their evaluation. Thus, teachers' attitude towards their pupils' academic ability, and future progress is as important as their attitude towards their profession. Because of this, Chantavanich, Chantavanich and Fry (1990) suggest that teacher education has to be selective, and be limited to those genuinely interested in pursuing the career. It was similarly recommended for our case that "careful selection of those who want to join the profession would help for improvement" MOE, 1978b, E.C.:23).

The way teachers perceive the school, the profession and their pupils affects the efforts they exert in improving the quality and efficiency of education. However, teachers' expectation towards their pupils have to be realistic. The more teachers' expectation is realistic, the better the pupils' effort and the better their performance. This may, in turn, contribute to higher survival rate of pupils in the school.

2.4.3. School Characteristics and Wastage

2.4.3.1. Principals' Qualification and Experience

The problem of school management is one of the various factors that cause higher rate of wastage in education. Farrant (1980) considers this as a crucial problem in school efficiency. Although it seems difficult to explicitly point

out what type of principals can reduce wastage through proper management, it is expected that better qualified, trained and experienced ones can do better than others. However, there is no agreement among practitioners and researchers as to the level of qualification a primary school principal should have (Jarvis, 1969).

The school principal like other administrators needs to have qualification and adequate trainning that would help him develop the three skills identified by Katz as "technical," "human" and "conceptional" (Katz, 1969: 25). Although there are various personality desposition in leadership quality, training is important for the principal. In Thailand, for example, schools run by better trained, and well experienced principals were found more efficient than schools run by principals with lower experience and training (Chatavenich, Chantavanich and Fry 1990). The assignment of untrained and inexperienced educational leaders has also been identified as one major factor that contributes to wastage in Ethiopian schools (MOE, 1978b, E.C.). It is therefore, plausible that principals quality is positively related to high level of school efficiency. Well qualified, trained and experienced principals would be able to utilize school resources properly and efficiently.

2.4.3.2. School Location

It is assumed that urban children are more advantageous educationally than rural school children (Mass and Creil, 1982). Similarly Coombs (1985) contends that urban children have more access and better progress in school. Such a difference between urban and rural children is especially prevalent in the developing countries. Besides this, research findings and the experience of many countries show that wastage in primary education is higher in rural than in urban schools (Lyons and Pritchard, 1976; UNESCO, 1984; UNESCO-UNICEF, 1987; MOE, 1978a, E.C.; Tadesse, 1974).

Of the many factors that contribute for the rural-urban disparity in the rates of wastage, family support, poor school attendance, literacy level of parents are some to be noted. Other rural-urban inequalities, says Thomas (1975), may contribute to the difference in school efficiency. Thus, rural schools seem to be disadvantaged due to the differences that prevail in the socio-economic development between rural and urban areas. All disparities that exist between rural and urban areas may likely be reflected in schools. Hence,wastage, in most cases, is higher in rural than in urban schools.

2.4.3.3. Materials and School Facilities

In addition to the quality and experience of teachers material inputs (text books, teaching aids and school library and its adequate service) may significantly affect pupils' performance and progress (Fuller, 1987). It is also a widely agreed assumption that schools with better facilities, and meterials that facilitate the instructional process are possibly more efficient than others with out (Humphreys, 1970). However, schools may not be efficient only because they have all facilities, they can rather be efficient if they utilize their facilities properly.

Researchers like Humphreys (1970) and Urwick and Junaidu (1991) contend that shortage of appropriate school facilities contribute to pupils' failure and dropping-out. As reported by Urwick and Junaidu, Nigerian pupils were found functionally illiterate by the time they complete primary school due to a serious shortage of physical facilities, lack of text-books followed by poor teaching. They concluded that physical facilities make differences in school 'efficiency.' Riley (1986) also concurs that school resources do make differences.

Thus, together with other factors, the scarcity of school facilities that are particularly related to

instructional activities contributes to high wastage rates in terms of both repetition and dropping-out.

2.4.3.4. School and Class Size

There seems no agreement among researchers on which school size is more efficient. Rosi (1971), for example, brings to our attention that large and small size schools are not more efficient than the middle ones. On the other hand, Chantavanich, Chantavanich and Fry (1990) report that larger schools in Thiland were more efficient than their counterparts. According to Rosi (1971) school size difference simply reflects community differences.

Another, probably, more important than school size is class-size. Tanguiane (1990) has identified large class-size as one of the causes for wastage. Substantiating this Tekeste (1990) argues that overcrowded classes are one of the major causes for the decline of educational quality in Ethiopia.

The effect of class size on pupils' performance and progress in school is significant particularly in the first three grade where pupils need to have more help (Riley, 1986). In terms of pupil-teacher ratio, the class size in Ethiopia was 65:1 in 1975 (Mass and Criel, 1982) and this

ratio had declined to 49:1 in 1988 (MOE, 1988). However, this does not show the real picture. For real estimation of class size, the number of class-rooms available in the school is important. Undeniably, the number of pupils and teachers in the school, and the number of pupils a teacher can effectively teach (Tekeste, 1990) are important elements that need consideration while discussing the problem of class-size and pupil-teacher ratio.

2.4.3.5. Level of Absenteeism

Regardless of the reason absenteeism affects the efficiency of any organization (Pigors and Mayors, 1981), particularly schools that have to cover the syllabus designed for a particular period of time. In school where teachers are most of the time absent, the course for particular grades cannot be covered. This may result in the failure of many puils. Similarly in schools where many pupils are absent the number of repeaters and drop-outs is likely to be higher. This has been evident in the Ethiopian schools (MOE, 1978a, E.C.). The findings indicated that absenteeism resulted in wastage of considerable amount of time alloted to education. Chantavanich, Chantevanich and Fry (1990) have also reported that schools with lower rate of absenteeism were more efficient than those with higher absenteeism.

2.4.3.6. School - Community Interaction

The efficiency of an educational system is unimaginable without an interaction to other systems around it. The relationship between the school and the community can be considered as one of the measures of school efficiency (Chantavanich, Chantavanich and Fry, 1990). They found that schools with a greater degree of assistance from the community were more efficient than their counterparts.

The effort to minimize wastage (repetition and drop-out) as many researchers believe, requires partnership among pupils, teachers and the community at large. Substantiating this, March (1984) suggests that the work of the teacher always requires the support of the community. Other researchers like Edmonds (1979), Scott and Welberg, (1979), also contend that the effort to make schools, particularly primary schools, efficient needs the joint venture of all in-school and out-of school communities. They suggest pupils conselling should not be left only for teachers and school personnel. Community participation does not only raise pupils' performance but also increases the survival capacity of each individual pupil.

2.4.4. Causes of Dropping-out of school: A Summary

Although not explicitly put, the causes for dropping-out of school have been discussed under the causes of wastage. Except some individual characteristics that connot by themselves be causes such as age and sex, many of the factors discussed in the previous section are included as the causes of school dropouts. However a brief summary of those causes seems imperative here.

As has been tried to show, various studies have identified a wide range of factors that may be responsible to the incidence of dropping out (Rumberger, 1987). Among the many researchers and writers who have identified the major causes of dropping-out, Rumberger (1987); Steinberg, Blinde and Chan (1984); Tanguiane (1990); stoops, Rafferty and Johnson (1981); Natriello, McDill and Pallas (1985); Levy (1971); Kobes (1975); and Tadesse (1974); are some to mention. More or less, despite their difference in the details, the causes they identified are similar. However, the degree of influence one factor has may differ from place to place.

Rumberger (1987) categorizes the variety of factors into family related, school related, economic and individual factors. Tanguiane (1990) noting that a multiple of factors

are responsible to dropping-out, categorizes them into factors related to the educational system, socio-cultural nature of the society and economic and financial problems.

In a more detailed fashion, Tanquiane identifies the causes of wastage in terms of both repetition and dropping-out as listed blow:

a) Irrelevance of the curriculum
b) Scarcity of educational materials
c) Overcrowded classes
d) Inadequately trained or totally untrained teachers
e) Distance between school and residential area
f) Incompatibility of school calendar with living and working cycle of the population
g) Family poverty which forces parents to make use of their children's labour (Tanquiane, 1990:57).

Stoops, Rafferty and Johnson (1981) have also a similar view on the causes for pupils' dropping-out of school.

On the other hand with more of less similar way of classification, with an inclusion of one factor, Natriello, McDill and Pallas summarized the causes of pupils' dropping out under three major categories . These are:

1. Student family conditions
2. Poor academic performance

3. Economic issues (Natriello, McDill and Pallas, 1985:11).

Natriello, McDill and Pallas, argue that observations and various studies suggest that pupils from single parent families and pupils with poor academic performance are more liable to leave school earlier than those with good academic performance. Elliot, Voss and Wendling (1966) similarly argue that academically poor pupil dropout, for he perceives himself unfit and considers dropping-out as a last resort to escape from his/her forsustration. It was also found that high academic failure corresponds to high drop-out rates in urban areas of Ethiopia (Tadesse, 1974). As has been discussed elsewhere in this section of the literature, Natriello, McDill and Pallas (1985) also consider economic factor as a cause for pupil's early school leaving. Children from economically disadvantaged familes leave school early than those from the well to do families. High level of drop-outs from primary schools in developing countries can be explained mainly by socio-economic factors (Levy, 1971).

Besides these, Greene as cited in Tadesse (1974) argues that school drop-out causes can be viewed differently by people who are academically, clinically and sociologically oriented. However, all deemed to be included under categories related to the school, social, conomic and family related

problems. Biniaminov and Glasman (1982) with a similar contention consider problems of adjustment in the school and environmental factors as causes of early school leaving. Substantiating this, IDRC (1983) asserts that unsuitable school atmosphere and overcrowded classes which may result little or no attention from teahcers have been causes for dropping-out of school. Precisely, Coombs (1985) concurs that unfavourable school climate and poor educationnal provision are the major reasons for pupils' dropping out of school.

In summary, many studies made abroad, for instance Biniaminov and Glasman (1982), Rumberger (1987) and in Ethiopia, for instance by Kypaghian (1960); Tadesse (1974); Kobes (1975); MOE (1978a,b, E.C.) and Anbasu and Junge (1988) reveal that there are a number of factors that cause pupils' dropping out of school but all fall under the categories discussed above.

Thus, Levy (1971) emphasizing on the role of socio-economic status as a factor contributing to drop-out problem suggest that understanding these factors is quite important. Levin (1987) on the other hand, argues that improving standards and minimizing the drop-out problem is possible only when pupils' learning needs are met. Thus understanding the socio-economic factors is one of the important steps in the effort to minimize wastage.

CHAPTER THREE

THE RESEARCH DESIGN

For the purpose of this study, a discriptive method was employed on the assumption that it could help to reveal the current state of educational wastage in primary schools. The relevance of this method to such a purpose has been noted by Seyoum and Ayalew (1989). To achieve the objective of this study relevant and related literature and previous research findigs wer reviewed.

Data regarding pupils' enrollment, repetion and dropping-out were gathered from Bahir Dar Awraja Educational Office and school documents. Primary school pupils, teachers and principals also served as sources of data for the present study.

3.1. Sampling Techniques and the Sample Population

Of a total of 106 primary schools in the Awraja, only about ninety were properly functioning about 90% of them were "opened" according to the information obtained from Bahir dar awraja Educational Office. Among the Schools properly functioning during the time of data collection, (i.e., 1991/92 academic year) 16 schools were selected as samples.

Inorder to ensure fair representation of schools with different characteristics in the sample, the stratified sampling technique was employed. In the sampling process, schools were stratified according to whether they were rural or urban. In addition to this, sample schools were classified interms of their size and their location or distribution within the Awraja involved. There are four districts (weredas) in Bahir Dar awraja. The number of schools from each wereda (district) to be included in the sample was determined following the quota sampling technique. Once this task was accomplished schools that have preserved their documents were identified, particular sample schools were selected on the basis of random sampling procedures.

A total of 320 repeaters and promotees in the 1989/90 and or 1990/91 academic year were randomly selected from grades 3,4, 5 and 6 of the sample schools. Pupils from the first and second grades were excluded from the sample on the consideration that they were too young to furnish the required information.For the same reason, the number of grade three pupils was deliberately made smaller in the sample than in the other grades considered in this study.

Promotees were included in the sample with a view to making comparisons between promotees and repeaters interms of their personal, environmental and family back-ground. The

inclusion of the two groups was though to show whether or not there is an association between pupil's characteristics and academic status (as a promotee or a repeater).

The study also included 107 primary school teachers . Thus, 30% of the total number of teachers from each sample school werer andomly selected. Principals of all the sample schools (one from each) were taken as samples. Besides, the 1985/86 academic year first grade starting cohort was chosen, and the rates of repetition and drop-out were computed for each grade as well as for the total pupils' cohorts at the end of the sixth year.

3.2. Variables Included in the study

In this study, three major independent variables were included. Below is a description of the variables and sub-variables considered in the study.

1. Pupil factors characteristics comprise variables related to;
   a) Pupo;s personal characteristics such as, Age,Sex, Dewelling, pre-school experience,Drop-out Experience, Level of Punctuality, absenteeism, Attitude towards Learning, Future Success Expectation and Distance from home to school.

b) Pupils' Family Background: includes variables like parental education, Occupation, Economic Support, and Encouragement. With these, family size and family structure were included.

2. Teacher Characteristic: Consists of variables related to teacher's personal, educational and Professional characteristics.These are:

- Teachers' Age (TAA)
- Educational Level (TEL)
- Teachers Level of Training (LT)
- Teachers Expectation and Evaluation of their pupils (TEEP)
- Teachers attitude towards the Profession (TA)

3. School Characteristic includes the following sub-variables:

- X_1 - School Location (0 = urban; 1 = rural)
- X_2 - Principal's Qualification
- X_3 - Principal's experience
- X_4 - Number of pupils in the school
- X_5 - Pupil - Teacher Ratio (1991/92)
- X_6 - Number of Teachers in the School (19991/92)
- X_7 - Number of Classrooms
- X8 - Availability of school facilities
- X_9 - School - Community relationship

- X_{10}- Teaching Group Cohesiveness
- X_{11}- Teachers' Absenteeism
- X_{12}- Teaching Load in a Semester
- X_{13}- Pupils' Absenteeism

Dependent variables included in this study were:

1. Academic Status (Promotion =2/ Repetition =1)
2. Repetition Rate RR/y_1).
3. Rate of Drop-outs (RD or y_2).
4. Rate of Wastage (RW or y_3).

3.3. Instruments and Procedures of Data Collection

In the process of data collection, two basic procedures were used.

1. Data regarding enrollment, repetition, and drop-outs were collected from documents availables in the awraja Education Office and particular scmple Schools through direct acess to the records.

2. Three knids of questionnaires were prepared originally in English which were later translated into Amharic to be filled out by primary school pupils, teachers and principals.

The Questionnaire prepared for pupils (pupils Questionnairs) administered in the form of interview schedule was intended to elicit information about pupils' personal environmental and family back-ground characteristics and the reasons they ascribe to pupils' grade repetition and early school leaving. Two lists of items, (One regarding the causes for repetion and the other, concerning reasons for dropping-out) were presented, and pupils were requested to mark a minimum of five items which they think have more contribution to failure and dropping-out. This instruction was given to pupils as the questionnaire try-out had proved that assigning rank orders to the items in accordance to their degree of seriousness was difficult for them.

Questionnaires prepared for teachers and principals were designed to obtain data regarding teachers personal, educational and professional characteristics and school charcteristics respectively. Both teachers and principals groups were also provided with two lists of reasons for pupils' drop-out and repetition in primary school. Teachers and principals were asked to rank items according to their degree ofcontribution to the problems of grade repetion and dropping-out of school. Respondents were also told to rank the reasons for dropping-out as they affect boys and girls separately.

Although some, questionnaires prepared for teachers and principals consisted of open-ended items, the number of such items was deliberately minimized in pupils' questionnaire on the assumption that they could not provide adequate information. Pupils questionnaire was administered in the form of interview. Each item with its alternatives was read by teachers and research assistants and the responses were marked by pupil-respondents themselves. This procedure was used to minimize the time that could take if pupils were given the task of reading all items. The use of this procedure has also helped to control mistakes that could have been done due to the problem of comprehension. Besides, by making himself available in the school the writer has made all necessary efforts to avoid mistakes and minimize possible mis-understandings.

From the academic year considered in the study the 1989/90 academic year grades 1-5 enrollment, number of failures (repeaters of the 1990/91) and number of drop-outs) data were selected to determine the criterion variables. This academic year was selected for the following three reasons: (1) the 1990/91 data alone were not adequate to show the real and complete picture of wastage due to the application of free and/or loose promotion policy. (2) it is the second recent year (with recent data) next to the year

1990/91. (3) Grades 1-5 were selected as the data for grade six were incomplete in some schools.

3.4. Methods of data Analysis

In orderto determine the magnitude of wastage, the repetition rate,droup-out rate, and over all wastage rate were determined using the rates commonly used in the analysis of educational wastage (UNESCO,1984:348).

Repetition rate for grade i =
Number of pupils repeating the grade during school year t+1
number of pupils in grade i during school year t

Drop-out rate for grade i =
number of pupils dropped-out in grade i during school year t
number of pupils in grade i during school year t

The rate of wastage in grade or grades was calculated simply by adding the number of drop-outs and repeaters and then dividing the sum by the total number of pupils in that particular grade or grades.

In order to estimate the extent of wastage due to repettion and drop-out, the Reconstructed Cohort Method was used with some modification. With data on repetition, promotion and drop-out rates, this method is used to show "the progression of a cohort through a cycle of education..." (UNESCO, 1982:51). The 1985/86 first grade entering cohort was taken as an input and was analysed in terms of the progression of the cohort up to the time of completion of the

primary education cycle, at the end of 1990/91 academic year. While the cohort method considers the input as pupil years invested, in this study in-put was restricted to the number of pupils initially enrolled in the first grade and out put refers to the number of pupils who successfully graduated after six years of schooling.

To show the extent of inefficiency through the proportion of the input and the output (graduates) the number of new enterants or earlier detainees were controlled, and the proportion of the graduates in comparison with the initial enrollment was determined. This propoprtion whows the internal efficiency of the schools studied as a whole.

The degree of relationships between academic status (being a promottee or a repeater) and pupils' characteristics was established using the chi-square of independence. The signifacance of the relationship was measured by .05 alpha probability level. The joint contribution of teacher-characteristic variables and school-characteristc variables to the rates of repetition, drop-out and over-all wastage, were analysed using multiple regression of the additive model of the form,

$$y = a+b_1 x_1 + b_2 x_2 +\ldots + b_n x_n.$$

The step-wise regression analysis was also used to identify the independent contribution of each independent variable.

The step-wise regression was also employed to sort out the significant predictor variables. The F-test of significance of the independent and joint contribution of the variables included in the model was determined at the final step using .05 an alpha level of posssebility.

Pupils' responses regarding the causes for repetion and dropping-out were analysed simultaneously with teachers rankings of those factors. To see the degree of agreement in teachers judgements of the effect of the factors on boys and girls and by rural and urban school settings, the rank-order correlation was used. However, due to the occurrance of many tied ranks, the average ranks were computed and the corrected form of rank correlation coefficients (Hays, 1981) were calculated. The significance of the correlation coefficients was determined by N-2 degree of freedom at .01 alpha level of probability. The next chapter deals with the presentation and analysis of the data using the methods and procedures discussed above.

CHAPTER FOUR

PRESENTATION AND ANALYSIS OF THE DATA

This part of the thesis deals with the presentation and analysis of the data gathered from documents in Bahir Dar Awraja Educational Office, Pupils rosters of the sample school and through questionnaires for pupils, teachers and principals. Of the totalnumber of questionnaires distributed for pupils 301 (94 percent) and 102 (95 percent) from teachers and 16 (100 percent) of the principals were returned and usable. The analysis was made based on the responses obtained from these groups of respondents in relation to the data collected from the documets.

4.1. The Magnitude of Wastage: Repetition and Drop-out. Rates or Repetition in Primary School

Table 2 presents the rates of pupils repetition in terms of percentage of enrolment in 1985/86 - 1990/91 academic years. The data reveal that repetition rates in primary schools in which the study was carried out were higher in the first and last grades of the education cycle. Strictly speaking, the rates of repetition were higher in the first grade and sharply decreased from grades two to the penultimate grade and increased in the last grade. This observation is

Table 2: Pupils Repetition Rates (in %) 1985/86-1990/91, Grade 1-6

	1985/86		1986/87		1987/88		1988/89		1989/90		1990/91	
	M	F	M	F	M	F	M	F	M	F	M	F
1	32.7	34.4	24.0	29.5	22.2	21.4	19.8	22.3	14.9	21.8	2.4	0.63
2	9.9	11.9	9.3	9.9	3.09	4.5	6.4	8.6	5.6	4.2	0.15	-
3	3.9	4.3	4.2	4.7	1.98	4.9	1.83	3.6	2.3	2.3	-	0.08
4	3.5	7.8	1.3	2.08	2.96	4.3	2.0	3.07	1.6	2.13	0.18	-
5	1.96	5.4	1.2	2.06	1.33	1.7	1.2	1.55	1.3	2.18	0.019	0.09
6	11.2	27.2	13.3	28.7	15.3	23.0	8.41	21.73	17.6	27.2	15.6	21.70

Source: Calculated from Bahir Dar Awaraja School Enrollment Statistics and pupils Rosters

true in all academic years (1985/86-1989/90). The case in 1990/91* was different. In 1990/91 academic year repetition rate was very low in all the grades except in grade six, where a relatively high repetition rate was observed.

It has also been found that the percentage of repetation except in some cases (as shown in the table) was higher among girls than among boys in all the grades except in grade one, in 1987/88 and 1990/91, where an identified pattern by sex was not observed. It still remained true that in 1990/91 the rate of repetition in grade six was higher among girls.

*In 1990/91 free promotion was given to all pupils and the first semester result was used as the basis for promotion for grade six students.

The rate of repetition has also shown a declining tendency from year to year and from grade to grade. The percentages of repetition that were 32.7 for boys and 34.4 for girls in 1985/86 in the first grade decreased to 14.9 for boys and 21.8 for girls in 1989/90 academic year. With this observation, however, an oppposite tendency has also been observed in the last grade. The rates of repetition in the last grade of primary education cycle have shown an increasing trend from what was observed in 1985/86.
Although this generally applies to both sexes, the phenomenon appears significant among girls than among boys. The percentage of male repeaters in grade six in 1985/86 academic year was 11.2 while it was 27.2 for girls. In all the cases, however, considering the 1990/91 academic year as a special case the rates of repetition appears to be higher among girls than among boys.

The findings of the present study confirm what was documented by MOE (1988) and UNESCO (1990); that is repetition rate in Ethiopia and the majority of African countries (UNESCO, 1984) was higher among girls than among boys. The findings of this study are also in conformity with the argument of Bray, Clarke and Stephen (1986) that girls tend to repeat classes more than boys do. The possible explanation for this could be related to the problems attached to the value of females' education by the society.

The underlying reasons for high percentage of repeaters in the first grade of primary education could also be explained by, (1) the low level of maturity of first grade children who may not have the readiness for the task of school-learning and thus fail to meet school requirements. (2) with this, the appropriatness of examinations prepared by teachers is questionable and contributes significantly to the phenomenon of failure (repetition) in the first grade. It was also indicated that most teachers (primary and secondary) in Ethiopia were not able to prepare examinations appropriate to the age and grade level of students (MOE, 1978a, E.C.). Similarly, grade six examination was identified as one of the causes for high rate of grade repetition (MOE, 1978 E.C.). Another possible reason for high repetition in the first grade could be the higher size of enrollment at this level.

Table 3: Repetition, Drop-out and Over all Wastage Rates (in %) of 1989/90 (grade 1-5)

	Grade and Sex														
	1			2			3			4			5		
Sex	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
Rates of Repetion	14.90	21.8	18.4	5.6	4.20	4.9	2.3	2.3	2.3	1.6	2.13	1.86	1.5	2.2	1.8
Rates of Drop-out	12.09	10.7	11.4	8.06	6.99	7.5	6.8	5.8	6.3	6.1	6.1	6.1	3.3	5.6	4.4
Rates of Wastage	27.2	32.5	29.8	13.6	11.2	12.4	9.15	8.1	8.6	7.7	8.2	7.96	4.7	7.8	6.2

Source: Calculated from Enrollment Statistics, Bahir Dar Awraja Educational Office and pupils' Roster 1982 E.C.

A Closer Look into Wastage Rates

As shown in Table 3, the rates of repetition and drop-out and the combined result of both, wastage rate, are presented in terms of percentages. Similar to what has been observed in Table 2, the percentage of repeaters was higher among girls than among boys in 1989/90 academic year. Except in grade two (where the percentage of repetition is higher among boys) and grade three, where the rates of repetition were the same for both sexes, higher repetition rate was observed among girls in all other grades. For example, the rate of repetition in grade one was 14.9 percent for boys and 21.8 percent for girls.

On the other hand, the drop-out rate in 1989/90 academic year appears higher among boys than among girls in grades 1-3 and the same in grade four. Thus the findings indicate that girls' survival rate in 1989/90 was better than that of boys in primary education. It has also been evident that the highest rate of drop-out occurred in the first two grades. As we go up the grade levels, the drop-out rates tend to decrease for both sexes. With this regard, both aspects of wastage seem to have similar patterns by grade.

In general, when the rate of over-all wastage is calculated from the combination of the two aspects

(repetition and dropping-out) as percentage of the over-all enrollment for each grade, the highest wastage rate still occurred in the first grade. As indicated in Table 3, the over-all wastage rate in grade one is about 29.8 percent. This shows that from those enrolled in the first grade in 1989/90 only about 70 percent of them were able to reach the second grade in 1990/91. Apparently, however, the rate of wastage has shown a decreasing tendency from grade to grade. The over-all rates of wastage observed in grades one to five in 1989/90 academic year were 29.8., 12.4, 8.6, 7.96 and 6.2 respectively. These findings, thus agree to Simmon's (1980) finding that showed that higher wastage rate in most developing countries occur in the beginning grades of primary education. Such a considerable rate of wastage at the beginning of the educational cycle may worsen the gravity of the problem in the educational system of the country.

Table 4. Pupils' Repetition and Dropout Rates: 1985/86 -1990/91 Entering Cohorts, Both Sexes and all sample schools.

R.R / DR	1985/86	1986/87	1987/88	1988/89	1989/90	1990/91	
1985/86	33.5	9.04	9.2	7.04	9.6	11.4	5.4	1
			6.99	4.8	4.6	7.5	4.0	2
1986/87	26.9	8.93						
				4.94	3.4	6.3	2.99	3
1987/88	21.8	3.8	3.4					
					5.7	6.1	3.22	4
1988/89	21.09	7.5	2.7	2.5				
						4.4	4.2	5
1989/90	18.4	4.9	2.3	1.9	1.8			
							3.33	6
1990/91	0.71	.08	.08	.09	0.14		19.4	
	1	2	3	4	5		6	

. RR-Repetition Rates
. DR- Droupout Rates

Pupils' Repetition and Drop-out rates by Grade and Year: Both Sexes

Table 4 shows pupils' repetition and drop-out rates by year and grade level. The percentages were computed from the total enrollment in each corresponding grades. The table also presents the rates of wastage that occurred due to repetition and dropping-out in subsequent grades against the beginning year of the cohort.

As shown in Table 4, the percentage of repeaters was higher in the fist grade where the pupils cohort begin primary education. As we go down the diagonal following the cohort entering grade one in 1985/86, the highest repetition rate occurred in grade one and sharply decreased in grade two to five, then greatly increased in grade six, where the 1985/86 first grade entering cohort of pupils complete the cycle. An almost similar pattern has been observed in the rates of repetition in all years considered (see Tale 4).

The rate of repetition in 1990/91 academic year was higher in grade six than in other lower grades. The data in Table 4 and Appendix 2 reveal that the percentage and absolute number of repeaters has shown a declining tendency from year to year. The total number of repeater in all the sample schools in 1985/86 was 1247 in the first grade but

decreased to 956, 813,811,668 and 22 during five consecutive years. This seems to support the result reported by UNESCO (1984) about the general trend of improvement. However, the rates of wastage still remain considerably high.

On the other side of the table, (above the diagonal) the rates of drop-out are presented. Like what was observed on the left side of the table (below the diagonal), dropout rates were higher in the first grade in all academic years considered in this study. The findigs of the present study are in agreement with what was reported by MOE (1988). Other similar findings were also reported by UNESCO (1984) and Brimer and Pauli (1971) whose findigs showed that early school leaving has been a characteristic of most primary education systems of the developing countries, for which Ethiopia is not an exception.

Although there seems an absence of a specific pattern in the rates of dropout, the 1989/90 data (see Table 3) revealed a declining tendency beginning from the first grade up to the fifth grade. However, the observed differences from one grade to the next were not large. It thus appears that the present finding is inadequate to make a conculusive remark regarding the pattern of dropout rates. Neverthless, it is evident that a general declining tendency of the dropout rates has been observed. Such a tendency if it continues,

would result a desired change in the problem of school survival. The present finding reveals a trend of improvement in the survival rate when compared to what was reported by previous researchers (Anbasu and Junge, 1988). According to their finding, more than one-third of those enrolled in the first grade dropped-out before completing the first grade. The data also showed that the rates of dropout observed were significantly lower than the national average reported in Ethiopia (MOE, 1988), which was 29 percent.

Wastage Rates in Urban and Rural Schools

Urban-rural differences in wastage rates have been reported by many researchers (Coombs, 1985) Brmir and Pauli (1971) and others. In their studies they found that urban schools had lower wastage rate than rural schools. In light of this, wastage in terms of rates of repetition and drop-out by school setting is presented in Table 5.

Table 5: Repetition Rate in Urban and Rural Schools; 1985/86-1990/91

Grade	Ac. Year 1985/86			1986/87		1987/88		1988/89		1989/90		1990/91	
	Sex	Ur.	Rur.	Ur.	Rur.	Ur.	Rur.	Ur.	Rur.	Ur.	Rur.	Ur.	Rur.
1	M	34.3	26.9	26.3	16.2	24.6	14.0	20.9	15.9	16.3	9.8	.95	-
	F	38.3	20.1	32.2	19.1	22.8	15.8	23.06	19.7	22.5	18.5	.75	-
6	M	13.3	-	15.5	1.7	16.1	11.8	12.9	6.3	19.9	7.09	17.3	6.7
	F	30.0	-	31.8	4.3	24.2	14.3	22.09	18.8	30.2	11.9	23.2	12.9
1 - 6	M	14.0	9.3	11.7	6.2	9.8	9.3	9.7	6.8	8.2	5.07	2.9	8.6
	F	19.5	8.97	16.8	8.1	11.9	11.9	12.7	11.3	11.4	8.8	3.8	1.98

Source: Calculated from Bahir Dar Awraja Schools documents and Enrollment and Repeaters Statistics, 1985/86-1990/91

The data in Table 5 also show the differences in the first, and last grades. Accordingly it has been found that in both grades considered here repetition rate is higher in urban schools. Although there seem to exist some inconsistency, higher percentage of urban school girls failed than their rural counterparts. Compared by school location and sex, high percentage of repetition occurs in urban schools and among girls. In both cases (rural/urban),

however, repetition rate is higer among girls than among boys. This finding is in line with the argument of Bray, Clarke, and Stephen (1986). The data in Table 5, in addition to the comparison between the first and the last grades, presents the over-all percentages of repetition from grade one to six. the results show that repetition rate is higher in urban schools.

The wide variation in the absolute number of repeaters between urban and rural schools may be explained, beyond other factors, by the variation in the size of enrollment. In all cases (grades) the size of enrollment is higher in urban than in rural schools, which may be the reflection of community differences. However, with regard to the rates of repetition, the finding of the present study is opposite (in a different direction) to the existing theoretical explanations and previous findings (Coombs, 1985; Mass and Criel, 1982), who reported that urban schools are advantaged than rural schools and face lower problem of wastage.

In both rural and urban area schools, in all cases considered (Table 5) a general trend of decline in the rate of repetition has been observed. What is more consistent, however, is that pupils repetition rate is always higher in the first grade of the primary education cyle, in both rural and urban settings. The observed difference in grades one

and six in 1990/91 could be explained by the application of more loose promotion policy particularly for the first grade. The urban-rural difference observed in grade six could be due to the difference in the previous performance of pupils and/or the difference in interpretation of promotion policy by local authorities. This may probably imply that even with the application of free or loose promotion policy, the difference between urban and rural schools has been evident.

Drop-out Rates in Rural and Urban Schools

Dropping-out as a serious educational problem of the developing countries, including ours, is particularly crucial in primary schools.

Table 6 presents the rates (percentages) of primary school drop-outs computed from the total enrollment of each grade subdivided by pupils' sex. The results reveal that although it lacks a clear pattern, dropout rates were higher in grade one, from 1985/86 to 1990/91 academic years in urban schools. Besides, there appeared no significant difference between boys and girls, in rates of dropout. Similar finding was also reported by UNESCO (1980).

Table 6: Number and Percentages of Urban School Drop-outs by Grade and Sex (1985/86-1990/91)

Grade/ Sex	1		2		3		4		5		6	
	M	F	M	F	M	F	M	F	M	F	M	F
1985/86 Y	89 (6.1)	96 (6.5)										
1986/87 E	64 (4.8)	107 (2.3)	49 (6.5)	44 (5.6)								
1987/88 A	66 (4.8)	84 (5.5)	17 (1.7)	27 (2.7)	18 (2.4	29 (3.8)						
1988/89 R	102 (6.7)	107 (7.3)	35 (3.5)	38 (3.6)	20 (2.3)	29 (2.9)	34 (4.6)	32 (4.6)				
1989/90 S	139 (9.7)	131 (8.7)	68 (5.9)	71 (6.1)	49 (5.3)	51 (5.2)	49 (2.3)	51 (5.5)	24 (3.0)	36 (4.8)		
1990/91	69 (5.6)	67 (5.1)	39 (3.6)	36 (3.5)	20 (2.0)	26 (2.5)	26 (3.0)	24 (2.0)	27 (3.1)	17 (2.0)	21 (2. 3)	20 (2.1)

. Numbers in Parenthesis are percentages.

Eventhough the differences in the rates of dropout between the sexes were not significant, a relatively higher percentages of drop-outs have been observed among grils than among boys in urban schools.

Despite some inconsistencies observed, there seems to exist some sort of improvement in the rates of drop-out as one examines from the first to the last grades of the cycle considered in this study. In urban schools, as shown in the Table, above the highest wastage rate interms of school leaving was observed at the beginning of primary education and the lowest at the end.

Table 7: Number and Percentage of Rural School Drop-outs by Grade and Sex (1985/86-1990/91)

Grade	1		2		3		4		5		6	
Sex	M	F	M	F	M	F	M	F	M	F	M	F
1985-86	63 (16.1)	61 (19.7)										
1986-87	61 (15.9)	87 (22.8)	32 (15.2)	17 (9.7)								
1987-88	54 (13.3)	59 (14.8)	39 (19.1)	30 (13.6)	24 (11.7)	14 (8.6)						
1988-89	81 (18.7)	82 (18.8)	22 (9.4)	18 (1.2)	12 (5.5.)	16 (10.3)	11 (6.9)	18 (11.8)				
1989-90	78 (21.1)	65 (18.8)	43 (18.7)	24 (12.1)	31 (13.1)	15 (9.8)	20 (9.8)	15 (10.2)	7 (4.9)	10 (7.8)		
1990-91	16 (6.1)	16 (5.8)	12 (5.4)	14 (7. 7)	19 (11.2)	7 (4.0)	13 (6.8)	6 (4.4)	29 (16.9)	17 (8.5)	18 (12.0)	14 (8.6)

.Number in parentheses are percentages

Drop-out Rates in Rural Schools

The percentage of repeaters in rural schools was found higher in the first grade in all academic years except 1990/91. As shown in Table 7 the dropout rates in rural schools were relatively higher among girls than among boys, particularly in the first grade.

Similar to what has been observed in Table 6, about urban schools, the dropout rate decreases as the grade level increases, following the flow of the 1985/86 first grade entering cohort. This implies that rural school children dropout of school at early years of schooling. As shown in Table 7 high percentages of primary school pupils dropped-out

before they completed grade four. Similar findings were reported by many researchers (Bjeren, 1965; Haile, 1976, MOE, 1978a,E.C; Anbbasu and Junge, 1988) carried out in Ethiopia. The National educational statistics (MOE, 1988) also showed that a considerably high drain occurs in the first grade.

Urban-rural comparison of the rates of dropout also reveals that higher percentages of drop-outs occurs in rural than in urban area schools. It is a clear observation that the absolute number of drop-outs is higher in urban schools than in rural schols but the highest percentages (rates of) dropout still occur in rural schools. This could be explained by large size of pupils' enrollment in urban schools. In addition to this, rural school children may be required to be involved in demostic work. The long distance from home to school, cultural constraints such as early marriage, could be some of the possible reasons that could contribute to the observed higher rate of dropouts in rural schools. Besides the economic geographical and socio-cultural constraints mentioned above, the level of literacy of parents has a strong effect on early school leaving, particularly in rural schools. From this it follows that the holding power of the school may to a greater extent, be influenced by an external factor- the level of literacy in the community.

A comparison of the absolute number of dropouts between rural and urban schools in the first and last two grades for the 1990/91 academic year was made. The data revealed (Table 7) that in rural schools the highest number of pupils dropped out in the last two grades, whereas in urban schools, the higher number of pupils dropped out in the first two grades. The Chi-square result ($X2_{(1)}$ = 27.6, $p<.05$) indicates a significent difference in the number of pupils who dropped out in the first and last two grades in rural and urban schools.

Primary School Drop-outs by Age and Grade Level

Table 8: Age Distribution of Primary School Drop-outs by Grade and Sex 1985/86 - 1990/91

Age	Grade 1		2		3		4		6			
	M	F	M	F	M	F	M	F	M	F	M	F
5	-	1										
6	14	32										
7	321	385	24	23	2	1						
8	252	260	86	93	12	14	-	1				
9	111	115	58	62	30	41	22	17				
10	96	126	91	75	66	60	50	46	13	15		
11	30	28	22	24	34	23	35	39	18	21	5	3
12	32	18	37	19	27	18	26	23	14	12	8	9
13	10	4	10	9	9	9	11	10	15	9	7	6
14	7	-	12	6	8	3	1	5	4	3	4	2
15	4	1	4	-	5	4	1	1	4	1	-	2
16	2	1	5	-	6	4	4	-	7	2	2	1

One of the most important aspects of the problem of wastage is related to pupils' age. The ultimate consequence of school leaving may be worse for those who drop-out at their early years of schooling. Those who leave school after they have matured may be more advantaged than those who drop-out at their early age.

Table 8 shows the age distribution of primary school drop-outs by grade level. As shown in the table the highest number of dropouts is bunched in the first grade and between the ages of seven and ten. The median age for all drop-outs, in this case, is nine years. It is therefore apparent that the majority of dropouts were at or below the median age. This incidence is true to both sexes. Of the total number of dropouts (3355) about 1977 (58.9%) were at and/or below the median age. Similar results were reported by previous researchers such as Bjeren (1969), Haile (1976), Thomas (1969) Simmons (1980), Blitz (1965) and Anbasu and Junge (1988) indicating the dropout problem is severe at early years of schooling. The reports made by Haile, Bjeren and Anbasu and Junge have particularly shown the gravity of the problem in our case. Since the possibility of re-entry is a very rare chance to many of our children, particularly from rural areas, this considerable number of drop-outs would raise the size of the illiterate population.

The phenomenon of school leaving at early ages of schooling is considered severe for pupils at this level dropout before mastering the basic skills of literacy (reading, writing and arithemetic). Since the possibility of reducing illiteracy can partly be realized through primary education, the problem of schools' holding power needs particular attention.

Another pressing problem which has been revealed in Table 8, is the proportion of girls from the total number of pupils who dropped-out at the first grade. From a total of 1850 first grade school-leavers, 971(52.5%) were girls. This,once again, draws our attention to the problem of female participation and survival rates in primary education. This finding confirms what has been argued by Haddad et.al (1990) and Hyde (1989) that the incidence of early school leaving affects girls more than boys.

Table 9: Under-Age and Over-Age First-grade Drop-outs by Sex

Age	Sex		
	Male	Female	Total
6 years and below	14	33	47
13 years and above	23	6	29
Total	37	39	76

As shown in Table 9 above, there were pupils who entered and soon left school before they were matured for schooling

(school-learning). A comparison of under age (less than seven years of age) and over-age (13 and above) from the first grade was made and the results are presented in Table 9.

The Chi-square of association was computed to see whether or not the incidence of dropping-out is related to the age level of pupils. The chi-square result ($X2_{(1)} = 17.5$, $p<.01$) is significant. The result of the chi-square reveals that more over age boys dropped-out of school than under age boys and over-age girls. On the other hand, more female dropouts were under the age of seven. The number of female drop-outs over the age of thirteen was very small. In general, from 1985/86 to 1990/91 grade one enrollment, more under-age pupils left school than those with ages over primary school level.

From the psychological and pedagogical point of view, immature children are more prone to frustration in new environments such as the school. Children who are not well matured for schooling face complexities which they have never faced previously at home. This may worsen the problem of school drop-out in primary education. This finding suggests that the need for parental and school teachers guidance at this level is of paramount importance. Experience of school drop-out at early years beyond its social disadvantage, is

potentially dangerous to the child's future self-adjustment in the present demanding world.

Over- all Wastage Rate of the 1985/86 starting Cohort.

After having made a separate look into the phenomenon of grade repetition and dropping-out of school, a general investigation of wastage rates seems in order. Wastage rate as a combined effect of both repetition and early-school leaving has been a problem of great concern to many of the developing countries including ours.

The present study looked into the magnitude of wastage that prevail in primary schools by using the input-output model. The wastage rates that were computed as percentage of grade one enrollment in the sixteen schoools included in this study, were very high in the first grade in all academic years considered. The flow rate of pupils from the 1985/86 first grade entering cohort showed that only 55% of those entered in grade one could reach grade two in 1986/87 academic year.

Table 10: Enrollment from grades 2 -6 as percentage enrollment of grade one entering cohort

Starting Year	G	R	A	D	E	S	
	1	2	3	4	5	6	7
1985-86	100						
1986-87	100	55					
1987-88	100	68	51				
1988-89	100	65	62	47			
1989-90	100	71	62	62	49		
1990-91	100	69	63	57	58	59	45
1991-92	100	80	61	58	53	67	

As shown in Table 10 the rate of wastage from grade two to the last grade appeared to decrease. Pupils who previously failed and repeated were considered as new entrants of each grade. This might have deceived the real picture of wastage rates that could have been observed when controlled. When earlier detainees and new entrants of each grade were controlled, the picture in the rates of wastage is different from what is observed in table 10.

When wastage rate was calculated as a percentage of the 1985/86 first grade enrollment, only 55 percent reached grade two, and only about 45 percent of the total enrollment completed primary education at the end of the sixth year. This in other words means, that from the particular cohort considered (1985/86-1990/91) there was a fifty-five (55%) percent wastage, as a combined effect of repetition and dropping-out. The findings of this study reveal that in the

sixteen schools in which this study was carried out the index of coefficient of efficiency was 0. 45.

$$\text{Coefficient of Efficiency} = \frac{\text{Actual out put}}{\text{Input}}$$

The over-all wastage rate was also calculated using the cohort method by disregarding new entrants and early detainees at each grade. The percentage of pupils from the 1985/86 grade one entering cohort only about 21.7% graduated from primary schools at the end of the sixth year (see Appendix 3). This shows that 88.3% of the pupils who entered grade one in 1985/86 have either repeated grades or dropped out of school. This, of course, is a waste of great magnitude that needs special attention from concerned authorities.

The Relative Contribution of /Repetion and Dropping- out to the over-all wastage Rate

Repetition and dropping-out of school have their respective contributions to the over-all wastage rate. The present data (Appendix 2) allow us to determine the relative contribution each of these aspects to the total observed rate of wastage in schools under study.

When computations are made following the flow rate of the 1985/86 starting cohort, grade repetition had higher contribution to the over-all wastage rate. Repetition as an internal drain in primary education, has been evidenced else where in this study. From the 1985/86 starting cohort that

completed grade six in 1990/91 the total number of repeaters and drop-outs in all grades was 2823 and the total number of repeaters was 1998 (Appendix 3). The relative contribution of repetition and dropping-out to the over-all wastage is shown by,

$$\text{Relative Contribution of Repetition in \%} = \frac{\text{Total No. of Repeaters}}{\text{No. Repeaters+No. Dropouts}} \times 100$$

$$= \frac{1998}{2823} \times 100$$

$$= 70.8\%$$

As shown from the result of the computation, repetition contributes the highest proportion to the over-all wastage. Similarly, computation made from the 1986/87 first grade entering cohort has also indicated that 60.8% of the total wastage was accounted for by grade repetition.

The fact that repetition remains to be a major cause for such a magnitude of wastage rate in the sample schools, could be the result of various factors. Inappropriate curriculum, text books, the quality of teachers, inappropriate evaluation system (MOE, 1978a, E.C.), and above all, the promotion policy (UNESCO, 1980) are some of the major factors that could contribute to higher repetition rate.

It was stated officially by the Ministry of Education (1980 E.C.) that an effort made to reduce the number of repeaters in the first three grades was not made practical.

Although there is still the need to establish a new promotion policy in our case, it did not appear yet. The 1991/92 school enrollment data in the sample schools show that pupils' school participation has declined from what it was in 1985/86. The total number of pupils in 1985/86 in all grades was about 14153 but reduced to 13291 in 1991/92 academic year. This is a decline in the primary school participation by about 6.1% from what it was in 1985/86.

This, besides to what has been observed about repetition and dropout rates, is a waste of great magnitude. The writer of this paper is an eye witness that some rural schools visited had very small size of enrollment. With the existing high magnitude of wastage and a declining tendency of participation, altogether, if the present status persists, it would be a considerable loss to the educational system. High magnitude of wastage in education as the findings of this study revealed, and low level of participation are inextricably linked to the development of other (economic and social) sectors. It is, thus, evident that minimizing wastage in education will have an effect on the efficiency of other sectors.

In summary, the observed high magnitude of wastage and the declining tendency of school-participation rate would multiply the number of illiterate population, which, of course, would obstruct the development of this nation.

4.2. Pupils characteristics and Academic Status

In this section of the analysis, the association between pupils characteristics (personal, family background and environnmental) and their academic status has been presented.

Table 11: Pupils Personal Characteristics and Academic Status (N=301)

Pupils characteristics	Promottees	Repeaters	Total	Chi-square (X^2)
1. Sex				
Male	83(51.2)	61(43.9)	144(47.8)	
Female	79(48.8)	78(56.1)	1577(52.2)	1.62
2. Residence				
Urban	94(58.0)	92(66.2)	186(61.8)	2.11
Rural	68(42.0)	47(33.8)	115(38.2)	
3. Preschool Experience:				
Kindergaten	60(37)	64(46)	124(41.2)	3.39
Church, Quar	40(24.7)	28(20.1)	68(22.6)	
Attended None	62(38.3)	47(33.8)	109(36.2)	
4. Dropout Experience				
Yes	38(23.5)	19(13.7)	57(18.9)	4.67*
No	124(76.5)	120(86.3)	244(81.1)	

*Significant at p<.05

Sex and Academic Status

In the table above, the association between pupils sex and academic status is shown. The data revealed that 56.1 percent of the total number of repeaters were females, whereas 43.9 percent of the repeaters were males. On the other hand, of the total number of promotees, 83 (51.2%) were males and 79 (48.8%) were females. From the data it is clear that the percentage of repeaters is higher among girls than

among boys. However the chi-square result ($X^2_{(1)}$ = 1.62, p>.05) is not significant.

Although there appeared some inconsistency in previous findings reported at different times, (for example, UNESCO's 1984) report showed different results in different countries) the general trend tend to support that repetition is higher among females than among males, or promotion rate is higher among boys than among girls (UNESCO, 1990; Anbasu and Junge, 1988). When percentages are taken as measures of comparison, the findings of the present study confirm previous findings indicated.

Pupils Residence and Academic Status

Since urban areas are assumed to have better economic and social services including education, urban pupils are exepected to show better progress in school than those who reside in rural villages. As shown in Table 11 higher percentage of repeaters live in urban areas, i.e. 66.2 percent of the repeaters live in urban areas while 33.8% were rural village children. Of the total number of rural area children, 40.9 percent were repeaters and 59.1 percent were promotees. These findings show that repetition rate is higher among those pupils who live in towns, which was about 49.5 percent. The percentage of repeaters among pupils who dwell in towns is 8.6 percent greater than those who reside in rural villages.

This picture seems to show that there is association between pupil's dwelling and his academic status (promotee/repeater). However, the chi-square ($X^2_{(1)} = 2.11$, $p>.05$) result reveals that there is no significant difference in the number of repeaters and promotees by the their dwelling. The results of the present study are not consistent with the arguments of Haddad et al (1990). The world Bank (1990) and Simmons (1980) regarding the difference in repetition and promotion rates between rural and urban pupils.

The basic assumptions presented by researchers mentioned above, regarding the differences in academic status by dwelling is associated to the provision of better educational services in urban areas. But the absence of the significant difference in the proportion of repeaters and promotees by dwelling could not be very much surprising in our case. The classification of rural-urban differentiation is made simply by the number of population living in the area than by the availability of survices.

Preschools Experience and academic Status

As shown in Table 11, of the total number of pupils included in the study 109 (36.2%)had no any preschool education, whereas 124 (41.2%) of them had attended

kindergarten education and the remaining 68 (22.6% had church, Quranic and literacy school experiences.

A comparison between promotees and repeaters by their preschool experience, reveals that the number of pupils with kindergarten experience did not promote more than those with out this experience. Further more,56.8 percent of pupils who attended no any type of preschool education were promotees. This is completely different from what was expected.

The chi-square result ($X^2_{(2)} = 3.39$, $p>.05$) shows that there is no statistically significant difference between repeaters and promotees by preschool experience. This implies that to be a repeater or a promotee is not a function of preschool experience. This finding does not confirm the existing theoretical assumptions and explanations by Mach (1983) ;Halpern (1986) bralic (1983); and Riley(1986) and others.

Although the contribution of preschool education in reducing wastage in primary education is undeniable, the finding of the present study could be explained by the inadequacy of preschool education in our country. A similar finding in Nigeria (Olatunji, 1990)has shown that school success or failure does not necessarily depend on preschool education. In his study Olatunji found that there was no

significant difference in primary school performance between preschoolers and non-preschoolers.

A number of possible explanations can be given for the results of the present study. Firstly, the fact that church and Quranic schools emphasize on religious education and use dominantly learning by rote memory, they hardly prepared children for primary education. Secondly, low level of kindergarten teachers' professional trainning, their commitment to fully help the child, their competence in guidance practices, and above all, their experience with the behavior of children might have a great bearing upon children's development and readiness for primary education. Thirdly, lack of materials and facilities appropriate to the developmental level of children might have made the effect of kindergarten education an impotent force of differentiation between those who attended preschool education and those who did not. Fourthly, if at all kindergarten experience has had an effect on pupils success/failure in primary school, the persistence of the experience is not well known. It is not,therefore, surprising that preschool education system of this kind fails to affect promotion and repetition difference among primary school children.

Dropout Experience and academic Status

Pupils-respondents, both repeaters and promotees were asked whether they have ever experienced dropping-out. The results as shown in Table 11, reveal that 13.7 percent of the repeaters and 23.5 percent of the promotees had experienced dropping-out of school. It was also observed that 86.3 percent of the repeaters and 76.5 percent of the non-repeaters had no experience of this kind. The results, therefore, indicate that drop-out experience was higher among promotees than among repeaters.The number of promotees who reported that they were once drop-outs is two times larger than that of their counterparts.

The chi-square result ($X^2_{(1)} = 4.67$, $p<.05$) is significant, and shows that there is a strong association between the two attributes - academic status and pupils drop-out experience, but it was not in the expected direction. The possible explanation for this finding could be the following reasons.

1). The study considered only repeaters and non-repeaters of the 1989/90 and 1990/91 academic years. Pupils who have ever repeated once, but now a promotee could have the chance to be included in the sample.

2). Any pupil could be a repeater without having any experience of dropping-out.

3). The present promotees in the sample could have experienced repetition some year before the study was carried out. There is no any indication for that they were not once repaters.

It, thus, appears that the dropout-experience does not necessarily indicate the recent academic status of the pupils. An important observation from the present finding is that dropping-out is a common experience among primary school pupils irrespective of their academic status at present. More over, that more promotees had ever experienced dropping-out indicates that a certain amount of resources has been wasted by promotees. However, the fact that who once dropped-out were returned is encouraging.

Distance from Home to School and Academic Status

The relationship between length of travel and academic status (being a promotee or a repeater) has not been identified clearly. As shown in Table 12, of the total number of pupils who travel long distance from home to school, only 10.8 percent were repeaters and 13 percent were promotees. The highest percentage of both repeaters and promotees walk short distance from home to school. The result indicates

that there exists little or no association between length of travel and pupils academic status. The chi-square result shows that there is no significant difference in the number of repeaters by the distance from home to school.

Table 12: Pupils Characteristics: Home-School Distance, Punctuality, Absenteeism,Attitude and Future Success Expectation and Academic Status (N=301)

Pupils' Characteristics	Academic Status				Results of the chi-square(X^2)
	Responses	Promottees	Repeaters	Total	
Distance from Home to School	Long.> 1 hr. Short,1 hr or less	21(13 144(87.0)	15(10.8 124(89.2)	36(12.0) 265(88)	0.335
Pupil's Punctuality	High Low	123(75.9) 39(24.1)	102(73.4) 37(26.6)	225(74.8) 76(25.2)	.257
Absenteeism	High Low	11(0.8) 151(93.2)	10(7.2) 129(92.8)	21(6.98) 280(93.02)	.019
Attitude towars Learning	High Low	139(85.8) 23(14.2)	122(87.8) 17(12.2)	261(86.7) 40(13.3)	.251
Future achivement Expectation	High Low	112(69.1) 50(30.9)	58(41.7) 81(58.3)	170(56.5) 131(43.5)	18.50*

P<.05

Heyneman (1980) indicated that distance has no relationship with pupils school performance, but it has the possibility to affect one's study time and health. The finding of the present study goes in conformity with what was reported by Heyneman (1980) about Ugandan and Solvadorian children. Undeniably, however, the distance from home to school may, to a great extent, affect drop-outs. Short

distance from home to school does not guarantee increased promotion rate nor does long distance increase repetition rate. However, the effect of distance on pupils performance as an intervening variable cannot be underestimated.

Pupils Level of Punctuality, Absenteeism and Academic Status

Tardiness is expected to have a negative effect on pupils performance, and its consequence, failure. Theoretically, absenteeism is also another variable which is considered to have a significant contribution to academic failure. As shown in Table 12, however, pupils level of punctuality and absenteeism had little or no association with the pupils academic status. The chi-square results (see Table 12) indicated that there is no significant difference between repeaters and promotees by the level of punctuality and level of absenteeism. High level of absenteeism, as reported by Anbasu and Junge (1988) had contributed to school failure,which this particular finding does not confirm. But the relationship between repetition rate and level of absenteeism is positive. As the finding of this study revealed the relationship was significant ($F= 19.59$, $p<.05$) (see Table 17). Such inconsistency of the findings seems to have resulted from sampling and methodological differences in the sections of this study.

Pupils Attitude Towards Learning and Academic Status

About 87.8 percent of the repeaters and 85.8 percent of the promotees reported that they have a high positive attitude towards school-learning. Only a small portion of promotees and repeaters - 14.2 percent and 12.2 percent respectively expressed that their attitude towards learning is low.

The chi-square result ($X^2_{(1)} = 0.2513$, $p>.05$) also reveals that there is no significant difference between the number of repeaters and promotees by the level of attitude towards school learning. This finding does not go in conformity with what has been argued by Rosi (1961). Previous researchers (Rosi, 1961; Fassil et al, 1975; and Brimer and Pauli, 1971)have all stressed the level of one's attitude towards school learning largely influences his success.

In this study,however, almost a similar level of attitude has been reported by both groups. That means no attitude differences have been reported. In this respect, being a promotee or a repeater is not a function of attitude. It may be the result of other factors such as individual, institutional and the national promotion policy (Schwille, et al 1991). Basically repetition and promotion are the results of these factors.

Pupils Future Success expectation and Pupils' Academic Status

Theory and empirical studies (Fassil et al, 1975; Brimer and Pauli, 1971) contend that the way pupils see their future success in school work has a direct relationship with their present academic status.

Item-five of Table 12 reveals that considerably higher number of respondents 170 (56.5%) reported high level of future success expectation. According to their response, they were quite sure of passing the examinations at the end of the year. In case, they fail for circumstances beyond their control, the measure they reported to take was working hard for the next academic year. The last option reported was transferring to another school. The findings indicate that pupils level of future expectation in school work is associated to their present academic status. A Considerable number of promotees (69.1%) expressed high level of expectation in their future success. It has also been observed that 41.7 percent of the repeaters see their future to be bright. While the majority of repeaters (58.3%) reported low level of future success expectation, a relatively lower percentage of promotees reported low level expectation.

The chi-square result ($X^2_{(1)} = 18.50$, $p<.05$) shows that there is a significant difference between repeaters and promotees by level of future success expectation. Therefore, many of the promotees consider their future bright, whereas many of the repeaters were found to have low level of future expectation. This finding therefore confirms Brimer and Pauli's (1971) contention that pupils' future success expectation has a direct relationship with their present academic status. Musgrove (1970) and Fassil et al (1975) concur that self-perception and expectation, as affective variables partially explain the vairation in performance among pupils.

The findings of the present study therefore suggest that establishment of achievement orientation among young primary school children may be one important measure in reducing wastage. Children have to be given the necessary help in developing such an attitude in their future life.

Pupils Family Background and Academic Status

It is a common understanding that the socio-economic status of parents has a lot to do with the progress of young children in school work. The educational and occupational level of parents, family conditions and family-size are some of the major family background variables that are expected to have strong association with the academic status of the

individual pupil. The following table shows the relationship between these attributes.

Table 13: Pupils' Family Background Characteristic and Academic status

Family Characteristic (Background)	Academic Status			X^2
	Promotees	Repeaters	Total	
Parent Education: Illiterate	87(54.7)	72(45.2)	159	
Primary	54(20.3)	55(79.7)	69	57.24
Secondary & above	61(83.6)	12(16.4)	73	
Parents' occupation:				
Professionals	5(50)	5(50)	10(0.03)	
Managerial	30(58.8)	26(50.0)	51(16.9)	
Merchants &	27(43.5)	35(56.5)	67(62)	2.61
Clerical workers	100(57.8)	73(52.2)	173	
Farmers and others				
Family Size: 5 people and above	133(82)	109(78.4)	242(80.4)	.690
less than 5	29(18)	30(21.6)	59(19.6)	
Family Structure:				
live with both parents	106(65.4)	81(58.3)	187(62)	1.63
live only with one of the parents or relatives	56(34.6)	58(41.7)	114(38)	

As shown in the table above, parents' educational level has a strong association with pupils' academic status. The chi-square result ($X_2(_2)$ = 57.24 $p<.05$) shows a significant difference between repeaters and promotees by the parents educational level. Higher number of repeaters were from parents of primary education level and higher number of promotees were from parents with secondary edcucation and above. Therefore, parents' education seemed to have contributed to pupils' progress in school work. This finding confirms the findings of chantavanich, Chantavanich and Fry (1990), Coombs (1985) and others.

But parental occupation as a component of socio-economic status of the family has shown a non-significant difference between repeaters and promotees. The chi-square result ($X^2_{(2)}$ = 2.61, p>.05) is not significant. As shown in the table, a large number of both repeaters and promotees were from farming families.Due to the occupational status, children from professional parents and other urban dwellers were expected to have better academic progress. But the findings of this study do not confirm this assumption.

Although there seems some difference between promotees and repeaters by family size in terms of percentages, the chi-square result ($X^{2(1)}$ =.690, p>.05) shows that there is no significant difference between small size and large size families and academic status. A number of research results indicate the effect of family-size on pupils' progress. But the present finding does not support the previous results. This could be explained by the absence of little or no variation in family size.

Similarly, in spite of the available literature and research evidence (Llyod, 1978) the present finding regarding the effect of family structure on academic status is not in the expected direction. while the contribution of family structure is unquestionable the chi-square result ($X^{2(1)}$ = 1.63) is not significant. The absence of association or the

non-significant result may be explained by the degree of help and encouragement pupils are provided with. Perhaps it may be reasonable to say that the type of guardian with whom children live matters more than living with both parents. The economic,occupational and educational level of the guardian, and there by the value she/he attached to education could be more important. However, the psychological atmosphere in a home of both parents can never be under estimated.

4.3. Teachers' Characterstics and Wastage

Teachers' Characteristics and Repetition Rate (RR)

Table 14 presents the result of the regression analysis of teacher -characteristic - variables on the dependent variable, Rate of Repetition (RR). Among all potential predictor variables, only one, Teachers Expectation and Evaluation of their pupils ability (TEEP) is selected, and other variables could not enter the regression model.

Table 14: Final Summary of Regression on Rate of Repetition (RR)

Step	Variables Entered		Multiple correlation and related values			Values in the final step				Simple Correlation with RR
						Coefficients		Final F.deleted	Constant	
No	No	Variable	Multiple R	Multiple R^2	Change in Multiple R^2	B-raw Coef.	B.Standord Coef.			
1.	1.	TEEP	.520	.270	.270	.0478	.5197	5.18*	-.1108	.5197

* Significant at p<.05

Regression Equation:
.0478 TEEP + -.1108

The beta coefficient (b=.5197) as shown in the table, indicates that teachers expectation of their pupils' ability is directly related to the rate of repetition. Teachers' expectation of their pupils' academic ability is, theoretically, assumed to have an inverse relationship with pupils grade repetition.Chantavanich, Chantavanich, and fry (1990 in their finding also reported that teachers' expectation of their pupils' had a strong positive influence on their performance. However, the present finding is opposite to the expected direction.

The possible explanation for this result could be that 1) teachers expectation of their pupils academic ability may be unrealistic or may not be objective 2) high expectation of teachers, in spite of the advantages it has, might have led teachers to prepare highly difficult examinations. Research Findings (MOE, 1978a, E.C.) have also indicated that teachers' failure to prepare appropriate examinations as one of the causes for high educational wastage in Ethiopian schols. Failure to prepare appropriate examinations does not always emanate from lack of teachers' skill but also from failure to understand pupils' developmental and ability level. This is particularly evident in primary schools.

Expecting much and evaluating pupils ability as high, without making any change in the instructional system can not by itself make any improvement in the efficiency of the schools. In school system where no improvement has been made in the teaching-learning process, whatever the degree of teachers' expectation may be, a relationship of this kind is not much surprising. Teachers' expectation of their pupils' academic ability can be helpful in reducing wastage (repetition) when the descripancy between expectation and academic ability is minimum.

The regression analysis, however shows that, this teacher-characteristic variable (TEEP) explains 27 percent of the variance in the dependent variable (RR). The unbiased estimate of the variance (adjusted R^2) also explains about 22 percent of the variance in the rate of repetition (RR). The F-test of significance as shown in the table, ($F_{(1,14)} = 5.18$, $p < .05$) is significant. Thus, teachers expectation of their pupils' is a reasonably good predictor of wastage in terms of rate of repetition.

Teachers Characteristics and Drop-out Rates (RD)

Results of the regression analysis in Table 15 reveals that among the potential predictor variables, only Teachers' level of Training (LT), Teachers' Age (TAA), Teachers'

Attitude toward their profession (TA), Teachers' Expectation and Evaluation of their pupils (TEEP) and Teachers' Educational Level (TEL) were selected.

As shown in the Table 15, Teachers' Level of Training (LT) has an inverse relationship with rate of drop-out (RD). Explaining 33.4% of the variance in the dependent variable (RD), teachers' level of training (LT) has been also selected as the only significant predictor variable of the rate of

Table 15: Final Summary of Regression On Dependent Variable RD

Step No	No. Variables entered		Multiple Correlation and Related Values			Values in the Final step			Constant	Simple correlation with RD
						Coefficients		Final F-		
	No	Variable	Multiple R	Multiple R^2	Change in Multiple R^2	B-raw coef.	Beta Stend Coef.			
1	1	LT	.578	.334	.334	-.0457	-.8941	10.13*	.9048	-.7093
2	2	TAA	.698	.487	.153	.0109	.4635	3.33		.4997
3	3	TA	.739	.546	.058	.0170	.3734	3.29		.4977
4	4	TEEP	.784	.614	.069	-0511	-.3008	2.74		-.4636
5	5	TEL	.827	.684	.070	-.2863	-.2250	2.22		-.4264

* Significant, (P<.05).

Regression Equation
RD (Pred) = -0.0457LT+.0109TAA +.17TA - .0511 TEEP -.2863 TEL +90048

drop-out. The contribution of LT($F_{(1,14)}$ =10.13, p<.05) is significant. Previous researchers have similarly reported that the level of teachers' training beyond its significant

effect on the quality of education (Fuller, 1987), to a great extent affects the holding power of the school (Adams and Bjork, 1969) in making pupils stay longer in school. Similarly, Biniaminov and Glasman (1982) have reported that teachers level of training as the most potent force in improving the school's holding power.

The second independent variable that entered the regression model is Teachers Age (TAA). The beta-coefficient (b=.4635) shows that teachers age (TAA) has a direct relationship with the dependent variable RD. The beta-coefficient indicates, with an increase in the teachers age, there is an increasing rate of pupils drop-out rate. Conversely, the presence of young teaching force is inversely related to the rate of dropout. Teachers Age (TAA) when entered the regression model improves the variance by 15.3 percent. However, its contribution ($F_{(2,13)} = 3.33$, $p > .05$) is not significant.

Although not on the relationship between teachers' age and rate of dropout, studies made on pupils' performance (Heyneman,1980) and progress (Chantavanich, Chantavanich and Fry, 1990) did not appreciate teachers age as a strong variable affecting pupils' progress. However,in their finding, Chantavanich, Chantavanich and fry (1990) reported that older teachers tend to be less active than younger ones.

Their finding further pointed out that teachers with less than ten years of teaching experience had more enthusiasm than older ones.

Although teachers who are older, in most cases, have more experience, the tendency to be fade up of their work and fail to help pupils may be higher among them. More over, in a system where there is no incentive for teachers, it would not be surprising if older teachers be less active in helping and encouraging pupils. Teachers who worked in the system longer having very little promotion, and improvement and do not look for good prospect of development are more likely to be very much lenient in controlling and guiding their pupils. If such is the case, then,the direct relationship observed between teachers age and drop-out rate is very likely to occur.

Teachers' Attitude towards their profession (TA) is the third variable that entered the regression model. As shown in Table 15 teachers attitude is directly related to pupils' rate of dropout (RD). Teachers attitude (TA) explains about 5.8 percent of the variance in the dependent variable. Its contribution ($F_{(3,12)}$ =3.29, p>.05) is not, however, significant. But the direction of the relationship indicated by the beta - coefficient (b = .3373) is not in the expected direction.

Theoretically, teachers' attitude towards their profession is expected to have an inverse relationship with the rate of wastage both in terms of repetition and dropping-out. To put it differently, higher and positive attitude of teachers toward their profession contributes to higher school efficiency. In this study, teachers' attitude scores, at average, range between 9.01 and 14.0 with over all attitude mean score of 11.6, does not indicate a wide variation between different schools with different rates of dropout.

The observed relationship between teachers' attitude and rate of dropout could be explained by whether or not satisfaction has resulted expected level of productivity. Although the effect of job satisfaction is an important element for organizational efficiency, whether or not this satisfaction has generated from teachers' work performance is a crucial question. Sergiovani (1979) argues that "a satisfied worker is not always productive" (p.419) implying that the satisfaction must come from the work itself. But teachers might have reported that they are satisfied with the teaching profession as a job not as a career. Since reducing wastage requires effort, productivity and initative of the teacher, it demands more than such level of satisfaction.

In order to reduce wastage that occurs, due to pupils dropping-out, the teacher has to be motivated to work. His

satisfaction must, therefore, generate from his performance; the performance must be rewarded so that both intrinsic and extrinsic factors be supported each other. It is only then that reported level of staisfaction and higher school efficiency can have positive relationship. It is however worth noting that the reason why teachers attitude towards their profession is directly related to higher drop-out rate needs a closer and further investigation.

Teachers' Expectation and Evaluation of Pupils' (TEEP) academic ability and Teachers' level of Education (TEL) as shown in Table 15 have inverse relationships with the dependent variable RD.

Teachers expectation and evaluation of their pupils' is inversely related to RD. The inclusion of this variable into the regression model raises the variance by 6.9 percent. However, the F-ratio ($F_{4,11)}$ =2.74, p>.05)is not significant.

Its direction of relationship with the dependent variable, (RD) is, however in the proposed direction that teachers expectation and regard to their pupils' is a sort of encouragement provided that it does not go beyond limits. When pupils perceive that their teachers have good regard and expectation within the bounds of their ability it may encourage them, and the possiblity of survival in school will

be raised. This finding therfore implies that teachers' expectation, within limits, is more likely to raise pupils survival rate in school.

Teachers Educational Level (TEL), similar to what has been observed about LT has an inverse relationship with the rate of dropout. As the beta coefficient (b= -.2950) indicates higher level of teachers' education is related to lower rate of drop-out,or lower level of teachers education is associated to higher rate of pupils' drop-out. This teacher characteristic variable changes the variance in the dependent variable by 7 percent, but still its contribution ($F_{(5,10)}$ =2.22, p>.05) is not significant.

The relationship between teachers educational level and wastage has been reported by previous researchers Biniaminov and Glasman (1982),Humphreys (1970), Brimer and Pauli (1971) and Williams (1965) have all reported that high teacher qualification as a measure of quality teaching and a means of reducing wastage. It is thus possible to say that higher level of teachers education through the provision of better guidance and education may have a strong effect in reducing wastage that come due to early school leaving from primary school.

The final summary of regression analysis of the selected predictor variables (as shown in Table 15) together explains 68.4 percent of the variance in the dependent variable RD. The estimate of the variance (adjusted R^2=.527) explains 52.7 percent of the variance in the dependent variable RD. The f-test of significance ($F_{(5,10)}$ =4.34, p<.05) indicates that their power of predicting the dependent variables is significant. It is, thus, evident that the selected variables,when considered together in the model are reasonably good predictors of the rate of dropout. Improving these teacher characteristic variables may help to reduce wastage due to dropping-out.

Teachers Characteristics and the Rates of Wastage (RW)

The results of the stepwise regression analysis, in Table 16 shows that among all potential predictor variables Teachers' level of Training (LT), Teachers' Age (TAA) and Teaching Experience (TE) were selected, and other variables could not enter the regression model.

As is shown in Table 16, LT and TAA were found to have significant relationship with rate of wastage (RW). The standard beta coefficients indicate that teachers level of training is inversely related with over-all wastage rate (the

combined effect of repetition and dropping out). This finding implies that through the improvement of teachers' level of training, the rate of educational wastage in primary education can be reduced.

Table 16: Final Summary of Regression On RW

Step	Variables Entered		Multiple correlation and related values			Values in the final step				Simple correlation with RW
No	No	Variable	Multiple R	Multiple R^2	Change in Multiple R^2	B-raw-coef.	Beta-standard coef.	Final F-deleted	Constant	
1	1	LT	.557	.310	.310	-.0494	-1.0214	14.43*	.0833	-.7389
2	2	TAA	.708	.502	.192	.0189	.8503	6.66*		.5975
3	3	TE	.748	.559	.057	-.0722	-.3207	1.55		-.3382

* p<.05

Regression Equation:

RW (Pered) = -.0494LT+.0189 TAA +-.0722TE+.0833

Training as one of the important means of improving school efficiency has been recorded by previous studies. For example, Biniaminov and Glasman (1982) reported that schools with highly trained teachers had low rate of wastage. The present finding also goes in conformity with the findings of Coombs (1985), Fuller (1987) and Brimer and Pauli (1971). Coombs (1985) puts, that the declining quality of teacher training in many of the developing countries, in which Ethiopia is not an exception,has a significant contribution to high rate of wastage.

Teachers' level of training (LT), as shown in the table above,explains 31 percent of the variance in the dependent variable, rate of wastage (RW),and its contribution ($F_{(1,14)}$ =14.43, p<.05) is significant. However, it is worth noting that the effort to reduce educational wastage does not and should not rely only on the training of teachers. Making all conditions favourable that encourage teachers utilize their training knowledge and skill is another side of the effort.

Teachers Age (TAA) has a direct relationship with the rate of wastage (RW). When entered the regression model teachers age explains about 19.2 percent of the variance in the dependent variable (RW). The F-test also indicates that ($F_{(12,13)}$ =6.66, p<.05) the relationship is significant. The reason for the direction of the relationship is similar to what has been said about its effect on the rate of dropout. It is also evident that although not significant, teachers age is one of the predictor variables selected to predict the dependent variable RD. Since the Rate of wastage is the over-all sum of RD and RR, to find teachers' age as a significant predictor of Rate of Wastage is not surprising.

The Regression analysis also reveals that Teaching Experience (TE) as one of teacher - characteristic variables increases the variance in the rate of wastage by about 5.7 percent which of course ($F_{(3,12)}$ =1.55, p>.05) is not

significant. As the beta - coefficient shows, teachers experience has an inverse relationship with the rate of wastage in primary schools. Previous research findings of similar nature, Chantavanich, Chantavanich and Fry (1990), and Brimer and Pauli (1971) reported that high teachers' experience is related to low rate of wastage. A similar report in our case also indicated that rural schools due to lack of trained and well experienced teachers are characterized by high rate of wastage (MOE, 1978a, E.C.).

These two findings seem to be contradictory. Teachers Age (TAA) and Teaching Experience (TE), while they seem complementary the results seem contradictory. What would be the possible explanation for this?

Although older teachers have better experience, this may not always be true. Besides this, previous research (Chantavanich, Chantavanich and Fry, 1990) has shown us that younger teachers were more enthusiastic to their profession than older ones. On top of this, however, experience is the potential the teacher gains from his active involvement, whereas age is a length of time one has lived. Here it seems apparent that age has an indirect relationship with school efficiency through experience gained by the person. However, it has to be noted that experience alone can do little unless it is supported by training and up dating programs.

The three predictor variables selected, (See Table 16) together explain 55.9 percent of the variance in the rate of wastage, which is significant ($F_{(3,12)}$ =5.07, $p<.05$). The unbiased estimate of the variance (adjusted R^2 = .449) explains 44.9 percent of the variance in RW, significant at the same level of confidence.

In summary, among all teacher characteristic variables, teachers' expectation and evaluation of pupils' academic ability (TEEP) was the only significant predictor variable of RR. Teachers level of training (LT) was the only significant teacher characteristic variable that predicted RD, and LT and TAA were significant predictors of the rate of wastage (RW). The results suggest that improving the teacher - characteristic variables would result in reduced wastage rate that occur due to repetition and dropping-out.

4.4. School Characteristic and Wastage

School Characteristics and Repetition Rate-Y_1

Table 17 presents the results of the multiple regression analysis on the rate of repetition (Y_1) with all school characteristic variables considered. The results clearly show the relative contribution of each independent variable and the combined contribution of all variables to the

regression coefficient and to the over-all variance that could be explained by these variables.

Table 17: Summary of the Multiple Regression On Y_1

Step No	Variable Entered		Multiple R	Multiple R^2	Change in Multiple R^2	B-raw coef.	Beta-stand coef.	Final F-to delete	Constant	Simple correlation with Y_1
	No	Variable								
1	1	X_1	.342	.117	.117	-.1256	-1.6788	5.65*	-.5546	-.3421
2	2	X_2	.355	.126	.009	-.0007	-0.0213	.001		.2582
3	3	X_3	.356	.127	.001	.0394	.8795	8.595*		.0589
4	4	X_4	.361	.130	.003	-.0003	-5.9152	22.89*		-.1892
5	5	X_5	.365	.133	.003	.0036	1.3233	24.63*		.1957
6	6	X_6	.640	.410	.276	.0080	3.6205	17.15*		.2558
7	7	X_7	.697	.486	.076	.0041	.6756	2.82		.3044
8	8	X_8	.717	.514	.028	-.0005	-.0388	0.032		-.1541
9	9	X_9	.791	.626	.111	-.0130	-.2729	.402		-.0723
10	10	X_{10}	.822	.675	.050	-.0644	-1.2973	6.970*		-.1504
11	11	X_{11}	.826	.682	.006	.0203	.5878	11.213*		.0224
12	12	X_{12}	.877	.769	.088	.0278	.6427	2.13		.2781
13	13	X_{13}	.989	.979	.209	.0617	1.4239	19.59*		.0678

*Significant , $p<.05$

Regression Equation: Y_1 (pred) = $-.1256X_1 + -.0007X_2 + .0394X_3 + -.0003X_4 + .0036X_5 + .080X_6 + .0041X_7 + -.005X_8 + -.0130X_9 + -.0644X_{10} + .0203X_{11} + .0278X_{12} + .0617X_{13} + .5546$

The result of the multiple regression analysis presented in Table 17 shows that school Location (X_1) as one of the school characteristic - variables is inversely related to rate of repetition (Y_1) indicated by the beta standardized coefficient (b = -1.67788). The beta coefficient indicates that rural schools (represented by the value 1) is inversely

related to repetition rate. This, in other words means that urban area schools have direct relationship with high repetition rate. School location explains 11.7 percent of the variance in the dependent variable Y_1. The F-test also shows that the contribution of X_1 ($F = 5.65, p<.05$) is significant. This finding goes in the opposite direction of the theoretical assumption regarding rural and urban differences, and various research findings (Cooksey, 1981; Colcough, 1980; Llyod, 1978; Craft, 1970; Adams and Bjork, 1969). All of the above writers and rsearchers reported that rural schools of the developing countries are characterized by higer repetition rate than urban schools. Similarly, a local research finding (MOE, 1978 E.C.) reveals that higher repetition rate was observed in rural schools.

Some of the basic reasons these previous researchers give to such a result is due to better literacy level and all other rural-urban inequalities. Urban schools are considered advantaged while the rural schools are at a disadvantage with regard to the above indicated factors.

The finding of this study could, however, be explained by the following reasons:

1). Rural schools could have benfited from teaching their pupils the whole day while the urban schools teach using the shift system. The shift system decreases

(minimizes) the time pupils stay at schools and schools that exercise it provide lessons in a congested manner. The whole time pupils stay in school is spent in class. With a very short time duration, pupils are provided with a lot of information, which of course, is particularly, difficult for young children. In such a situation, higher repetition rates in urban schools is very likely to occur.

2). Rural schools have small class size, and in these days they are suffering from under - enrollment. Urban schools on the other hand, are overcrowded. (MOE, 1982 E.C.). Overcrowding as one of the factors that cause wastage, may have contributed to higher repetition rate in urban schools. It can thus be argued that such a result is not something to be expected.

Table 18: Final Summary of the stepwise regression on Y_1

Step No	Variable Entered		Multiple correlation and Related Values			Values in the Final Step				Simple correlation with Y_1
	No	Variable	Multiple R	Multiple R^2	Changes in M-R^2	Coefficients		Final F- to Delete	Constant	
						B-raw coefficients	Beta-stend coefficients			
1	1	X_1	.342	.117	.117	-.0256	-.3421	1.86	.0804	-.3421

Adjusted R^2 = .054

Regression Equation: Y_1 (pred) = -.0256 X_1 +.0804

The stepwise regression analysis of school location (X_1) on the rate of repetition (Y_1) as shown in table 18 indicates a similar direction of relationship with what has been

observed in the multiple regression analysis. The beta - coefficient reveals that school location (rural school, in this case) is inversely related to rate of repetition. Since it is the only school - characteristic variable that entered the regression model, it explains 11.7 percent of the variance in the dependent variable Y_1. The analysis of the stepwise regession result also indicates that controlling the biases that might have occurred due to sampling error or otherwise, the adjusted variance explains only 5.4 percent of the variance in the dependent variable rate of repetition (Y_1). The contribution of school location ($F(1,14) = 1.86, p > .05$) is not significant as the F-test of significance reveals.

Although the result of the stepwise regression shows that X_1 is not a good predictor of Y_1 (when partialed out) it still indicates that rural schools are related to lower repetition rate than urban schools. This is also consistent with what has been presented in Table-18.

Principal Qualification (x2) and Experience (x3).

As shown in Table-17 beta-coefficients reveal that principal's qualification is inversely related while principal's experience is directly related to the rate of repetition (Y_1).Principals' qualification (x2) changes the variance by .9 percent which, of course, is not significant ($p>.05$). Principal' experience (X_3) on the other hand, raises the variance by about .1 percent only and yet its contribution is significant as indicated by the final F-delete ($F_{(2,13)} = 8.59, p<.05$).

As school characteristic variables, both principals' qualification and experience have direct effect on school efficiency and quality of education. Previous research findings (Chantavanich, Chantavanich and Fry,1990; MOE,1978b, E.C.) have reported principals' qualification and experience are related to low level of pupils' failure (repetition) and quality of education. This finding confirms previous findings with regard to qualification and differs with respect to principal experience.

The present finding reveals two inseparably linked facts. On the one hand, it shows the positive relationship between school internal efficiency and principal's

qualification, on the other hand, it suggests that principals experience alone can do nothing positive for school efficiency. It thus implies the need for training and qualification as a principal, which has been emphasized by writers such as Katz (1969) and Farrant (1980).

The observed relationship between principal experience (X_3) and rate of repetition (Y_1) could be affected by (1) experience measured in terms of the number of years of service which most probably is inadequate to really measure how much a person is experienced. (2) various personality dispositions of the principal might have its own effect (3) that experienced principals may lack leadership skills. Beyond this the curvilinear relationship that may exist between experience and school efficiency, as reported by Chantavanich,Chantavanich and Fry (1990) might have affected the rate of repetition regardless of high level of principal's experience.

The result, thus, suggests whatever the level of experience the principal has, there is always the need for training and qualification through in-service and preservice programs.

Number of Pupils (x4), Teachers (x6), Classrooms (x7) and Pupil-Teacher Ratio (X5) and Y1.

As shown in Table-17 the beta coefficients indicate that X_5, X_6 and X_7 are found to have direct relationship with the dependent variable, where as 4 is found to have an inverse relationship with rate of repetition. These school-characteristic variables change the variance in the regression - X_4 and X_5, by .3 percent each, X_6 by 27.6 percent and X_7 by about 7.6 percent Among these, only the contribution of X_7 ($F=2.82, p>.05$) is not significant, while others are significant beyond 95 percent level of confidence.

The size of student population (X_4) as one of the school characteristic variables may have an effect on school efficiency in general and pupils' repetition rate in particular. UNESCO (1980) associated high percentage repeaters with the size of enrolment, particularly in the first grade. Another study by Rosi(1971) on other hand, has come up with that both large and small class size are disadvantaged, than the medium ones. However, the general enrolment size in a school may not necessarily imply the existence of large class-size. Chantavanich ,Chantavanich and Fry(1990) on the other hand reported that big schools had higher efficiency. In conformity with the latter, the present result reveals high number of pupils is related to low rate

of repetition. The difference in the size of pupils enrolment seems to indicate the difference in size of the community. It,thus, appears evident that the big size of enrolment does not necessarily result in high rate of repetition

Other two school-characteristic variables that were found to have a direct positive relationship with the rate of repetition are pupil-teacher ratio (X_5) and the number of teachers in a school (X_6). High pupil-teacher ratio is related to high wastage (repetition rate). This result goes in conformity with what has been said by Tekeste (1990). According to him, the number of pupils the teacher can teach effectively is an important element in improved instruction. Precisely, the higher the pupil-teacher ratio the more likely is higher rate of repetition or wastage rate in general.

The number of teachers in a school (X_6) is a significant predictor (school-characteristic) variable of the rate of repetition (Y_1). It is expected that higher population of the teaching force would have a positive contribution in reducing wastage (both in terms of repetition and dropping-out of school). But the finding of this study shows the opposite. This could be firstly due to the fact that high number of teachers was reported in urban areas where high repetition rate has been observed. Secondly, the presence of high number of teachers could not still improve the size of pupil-teacher

ratio, unless it could bring some change in the pupil-teacher ratio, the reported "high number of teachers" can do very little in reducing wastage, repetition rate. In such a situation, the observed relationship between high number of teachers and high rate of repetition could not be surprising.

Undoubtedly, enough number of teachers in a school would help to reduce wastage (repetition), but a discussion about the number of teachers have to consider the number of pupils enrolled, the proportion of the number of pupils and teachers, and the proportion between the number of pupils and classrooms available.

Similar to what has been discussed above, number of classroom in school (x7) has shown a positive relationship. The direction of the relationship indicated by the standard beta coefficient reveals that in schools that have a relatively high number of classrooms, high rate of repetition is observed. Although it is not a significant predictor of rate of repetition (Y_1), it is opposite to the expected direction. The reason for such a result is quite similar to what has been said about the number of teachers and its relation with rate of repetition.

Since a relatively high number of classrooms were reported in urban schools, and this number of classrooms

could not minimize the pupil-classroom ratio in these schools. Although this reported number of rooms is said "higher" in comparison with others, in reality there are no enough classrooms particularly in urban schools. A simple comparison between the biggest and the smallest schools reveals that the pupil-classrooms ratio would be 131.7 i.e.65.8 (in each shift) pupils/classroom and 11 pupils/ classroom respectively. With this observation, to find high number of classrooms positively related to low rate of repetition could not be seen some thing unbelievable.

In the final analysis what these findings reveal is that schools that reported high numbers of teachers and classroom do not have enough of these with a reasonable proportion to their student population. It also seems that the positive relationships that have been observed between independent variables-number of teachers (x6) and number of classrooms (x7) have indirect relationships through other variables, such as pupil-teacher ratio and pupil-classroom ratio.

Availability of school Facilities (x8) School-Community Relationship (x9) and Teaching Group Cohesiveness (x10) and Rate of Repetition (Y1).

The availability of school facilities, school community relationship and teaching group cohesiveness are found to

have inverse relationships with the dependent variable. These variables increase the variance differently. X8 increases the variance by 2.8%, but the increment is not significant ($F=.032, p>.05$). This finding, although not significant, goes in line with the arguments made by Fuller (1987), Humphreys (1970) and Urwick and Juanaidi (1991). They emphasized on the positive relationship between the availability of school facilities and low level of repetition rate (wastage).

Similarly, school community relationship (x9) is inversely related (as shown in Table-18) with repetition rate. High school-community relationship is related with low rate of repetition. This school-characteristic variable when entered the regression model has changed the variance by 11.1%. However, the F-test shows that the result ($F=.402, p>.05$) is not significant. The direction of the relationship, however, is in line with previous findings reported by Riley (1986), Mach (1984) Edmonds (1979) Scott and Welberg (1979). The present finding indicates that school efficiency or low level of wastage due to rate of repetition requires the participation of the community. The participation of the community at large increases school efficiency, and reduces wastage .

Teaching group Cohesiverass is assumed to have a positive relationship with school efficiency. The findings of

the present study show that high teaching group cohesiveness is related to low rate of pupils grade repetition. The regression analysis shows that 5 percent of the variance in the dependent variable, Y1 is accounted for by the social relationship (cohesiveness) among members of the teaching group. The contribution of this variable ($F=6.97, p<.05$) is significant. The available literature shows that school organizational climate, particularly among members of the teaching group has a significant contribution in reducing wastage. It thus appears that the finding of the present study is in line with the available literature.

The results of the multiple regression analysis in Table-17 also reveals that other school characteristic variables, teachers absenteeism (x11), average teaching load (x12) and pupils' level of absenteeism (x13) have direct and positive relationships with rate of repetition.

Teachers absenteeism changes the variance in the regression by .6 percent, and teaching load by 8.8 percent whereas pupils absenteeism increase the variance by 20.9 percent. The relationship of these variables to the independent variable is in the expected direction. The contributions of X11 ($F_{(11,4)}=11.21, p<.05$), x13 ($F_{(13,2)}=19.59$, $p<.05$) are significant, while the contribution of X_{12} ($F_{(12,3)}=2.13, p>.05$) is not significant. The non-significant

variation in the rate of repetition due to teachers teaching load may be explained by the absence of wide variation in teachers' teaching load in a semester. The average score for teachers load in a semester is 3.86, where the minimum and maximum scores are 2.0 and 5.0.This means the minimum number of periods are 11-15 and the maximum is 26-30 periods, which is not more than the required.

The multiple regression analysis which was made to see the joint contribution of the independent variables to the variation of the dependent variable (Y_1) has been presented in Table-17.The result indicates that these school characteristic variables could explain 97.9 percent of the variance (R^2=.979) in the dependent variable. The unbiased estimate of the variance (adjusted R^2=.839) reveals that all the indepent variables jointly explained 84 percent of the variance in the dependent variable (rate of repetition). The F-test, however shows that ($F_{(13,2)} = 7.05, p>.05$) is not significant.

But since all school characteristic-variables were not considered in this study, and due to the error that would likely occur by sampling, chance or otherwise, the variance of the dependent variable explained by the independent variables is significant beyond 80 percent confidence level. For the above mentioned reasons this is reasonably high result.

School Characteristics and Rates of Dropout.

The multiple regression analysis was made to identify the joint contribution of the independent variables to the variation in the dependent variable, rate of dropout (Y_2). The results are presented in Table 19

Table 19: Summary of the Multiple Regression on Y_2

Variable entered		Multiple correlation and Related values			Values in the Final Step				
		Multiple R	Multiple R^2	Change in multiple R^2	Coefficients		Final F-to Delete	Constant	Simple correlation with Y_2
No	Variable				B-raw coef.	Beta-stand Coef.			
1	X_1	.718	.516	.516	.0470	.3401	.336	.3528	.7183
2	X_2	.787	.620	.104	-.0031	-.0493	.009		-.0927
3	X_3	.831	.691	.071	-.0430	-.5198	4.347*		-.0481
4	X_4	.851	.724	.034	.0001	.6530	.404		.6544
5	X_5	.855	.731	.007	-.0035	-.6870	9.613*		-.6454
6	X_6	.895	.801	.070	-.0029	-.7192	.980		-.6219
7	X_7	.896	.804	.003	.0017	.1501	.202		.4730
8	X_8	.918	.843	.039	.0055	-.2317	1.642		-.0643
9	X_9	.960	.922	.080	.0822	-.9351	6.823*		-.5036
10	X_{10}	.963	.927	.005	-.0737	-.8030	3.857		.2088
11	X_{11}	.969	.938	.011	.0220	.3439	5.556		.1562
12	X_{12}	.984	.969	.031	.0065	.0807	.049		.4298
13	X_{13}	993	.985	.016	-.0318	-.3969	2.204		.0504

*Significant, $p<.05$

Regression Equation:

$$Y_2 \text{ (pred)} = .0470X_1 + -.0031X_2 + -.0430X_3 + .0001X_4 + -.0035X_5 + .0029X_6 + .0017X_7 + .0055X_8 + .0822X_9 + -.0737X_{10} + .0220X_{11} + .0065X_{12} + -.0318X_{13} + .3528$$

The results of the regression analysis on the rate of dropout (Y_2) shows that principal-experience (x3) pupil-teacher ratio (x5) and school-community relationship (x9) increased the variance by 7, .7 and 8 percent respectively. The contributions,of x3($F_{(3,12)}$= 4.35,p<.05);x5($F_{(5,10)}$ = 9.613,p<.05) and x9($F_{(9,6)}$ =6.82,p<.05) were significant.

The results of the multiple regression reveal that school location has a direct relationship with rate of dropout. In this case, rural schools tend to have higher dropout rates than urban schools. This finding confirms previous findings reported by Tadesse (1975) who found that the dropout problem is significant in rural areas of Ethiopia. Other similar findings were also reported by Kobes (1975) and more recently by Anbasu and Junge (1988).

Size of pupils' enrollment (x4), the number of classrooms in a school (X7), teachers absenteeism (x11) and teaching load (X12) were found to have direct relationships with the rate of dropout (Y_2). Size of the pupils enrollment might have contributed to the dropout rate due to the fact that in a school where the student population is large, there may be shortage of places, classrooms and other school facilities. It is also evident that in schools where teachers absenteeism and teaching load is high, the rate of dropout is expected to be high, indicating direct relationships between

the independent and dependent variables. Besides the theoretical assumption that absenteeism affects organizational efficiency (Pigors and Mayes, 1981) a research finding (MoE,1978a, E.C.) revealed that absenteeism, beyond relationship, has a causal effect on wastage in schools. This has also been indicated that teachers absence has been a problem that inhibit the proper implementation of school calendar (MOE,1978a, E.C.) which has resulted in high rate of wastage.Similarly high teaching load would result in inadequate teacher's preparation, which in any way affect pupils' survival rate. The findings of the present study is therefore in line with previous findings. However, the contributions of these school characteristic variables in predicting the dependent variable, rate of dropout, were not significant as revealed by the final F-ratio (see Table 18).

Other school-characteristic variables-principals qualification, number of teachers in the school, availability of facilities, and teaching group cohesiveness, as revealed by the beta coefficients have inverse relationships with rate of dropout. While their relationship with the dependent variable is in line with the expected direction. Principal's qualification increases the variance by 10.4 percent and the number of teachers contributed 7 percent, whereas, the availability of school facilities changes the variance by 3.9 percent. Teaching group cohesiveness on the other hand,

increases only .5 percent to the variance of the multiple regression. However, as revealed by their respective final F-ratio, the results were not significant ($p>.05$). Despite the low level of significance, the findings of this study are in conformity with the findings of Chantavanich,Chantavanich and Fry (1990) who reported that schools run by better qualified and experienced principals were efficient.

Similarly the results of this study are in line with the findings of Edmonds (1979) who pointed out the positive effect of group cohesiveness; and with Urwick and Junaidi (1991) who reported that the variation in school efficiency is a result of differences in physical facilities. In addition, the contribution of adequate number of teachers in a school, as Coombs (1986) argued, is a crucial element in school efficiency. Shortage of teachers in a school means leaving some portion of the student population without or with little help (guidance).

Pupils' absenteeism as a school characteristic variable is expected to have a positive relationship with wastage-dropout rate. But the result indicates an inverse relationship with the dependent variable. The possible reason for this could be related to the indirect effect (absence of direct relationship between absenteeism and rate of dropout. Pupils absenteeism may result failure (repetition) and

repetition may cause dropping-out. It thus appears that pupils absenteeism could have a strong effect on the rate of dropout through other school-characteristic variables.

The summary of the multiple regression on the rate of dropout reveals that all independent variables considered, explained 98.5% (R^2=.985) of the variance in the rate of dropout, which may better be explained by the unbiased estimate of the variance (Adjusted R^2=.889) explaining that 88.9% of the variation in the rate of dropout is accounted for by school characteristic variables. This result is significant (p<.1).

Table 20: Summary of the Stepwise Regression On Y_2

Step	Variables Entered		Multiple correlation and related values			Values in the Final step				Simple correlation with 1/2
No	No	Variable	Multiple R	Multiple R^2	Change in Multiple R^2	B-raw coeff.	Beta-standard coef.	Final-F to deleted	Constatnt	
1	1	X_{12}	.795	.632	.632	.0293	.3663	9.51		.6808
2	2	X_4	.835	.698	.066	-.000029	-.3575	4.71	-.0266	-5476
3	3	X_9	.895	.800	.103	-.0373	-.4242	12.72		-.7322
4	4	X_5	.921	.848	.043	-.0019	-.3749	5.19		-.5663

*Significant atp<0.05

Regression Equation:

$$Y_2 \text{ (pred)} = .0293X_{12} + -.000029X_4 + -.0373X_9 + -.0019X_5 + -.0266$$

The stepwise regression analysis was made to identify the relative contribution of school characteristic variables

that significantly predict the rate of dropout. The results of the stepwise regression analysis summarized in Table 20, reveals that teaching load, number of pupils enrolled, school community relationship and pupil-teacher ratio were relected as significant predictors of wastage as a form dropout rate.

As shown in the above table, the beta coefficients indicate that teachers' teaching load shows a direct relationship with the rate of dropout while the remaining relected variables have inverse relationship. Teachers' teaching load explains 63.2% of the variation in the rate of dropout; while number of pupils enrolled, school-community relationship and pupil teacher ratio increase the variance of the regression by 6.6%, 10.3% and 4.3% respectively. The contribution of each of these variables was significant ($p<.05$).

The joint effect (contribution) of these school characteristics variables, as the results reveal, explain 84.8% ($R^2 2=.848$) of the variance in the dependent variable-rate of dropout. The (adjusted $R^2=.791$), unbiased estimate of the variance in the dependent variable, shows that 79.1 percent of the variation in the rate of pupils dropout in primary school is accounted for these school characteristic variables. Their joint contribution ($F_{(1,14)} =15.22, p<.001$) was significant.

The directions of relationship of teaching load with rate of dropout is in the proposed direction, and the same is true to school-community relationship with the dependent variable. The observed inverse relationship between the size of pupils enrollment, and pupil-teacher ratio with the rate of dropout could be explained by the effect of other variables and possibly by the location of the school. Although the number of pupils enrolled, and pupil-teacher ratio, in most cases, are higher in urban schools, the dropout rates tend to be higher in rural schools. The direction of the relationship observed between these two school characteristic variables and, the dependent variable-rate of drop-outs is, therefore, palatable.

School characteristic and Over-all Wastage Rate (Y3).

Over-all wastage rate, the sum total of repetition and dropout rates is related to school characteristic variables. Table 21 summarizes the results of the multiple regression analysis made between the school characteristic variables and rate of wastage.

The results of the multiple regression analysis (when all variables considered enter the regression model) reveal that school location, principal's qualification, principle's experience and student population showed inverse relationships with rates of wastage. These variables increase

the variance (R^2) in the rate of wastage by 31.6 percent (in this case R^2= change in R^2), 15.9 percent, 7.2 percent, and 5% in order of their position in the table. But their relative contributions to the multiple regression coefficient were not significant (as shown by their respective F-ratio) except student-population whose contribution (F1, 14= 4.75, p<.05) is significant.

Table 21: Summary of the Multiple Regression On Y/3 (N=16)

Variables entered		Multiple Correlation of Related values			Values in the Final step				Simple correlation with Y_3
					Coefficients		Final F-to Delete	Constant	
No	Variable	Multiple R	Multiple R^2	Change in Multiple R^2	B-raw coef.	B-stand coef.			
1	X_1	.562	.316	.316	-.0761	-.5826	.699	-.2073	.5619
2	X_2	.689	.474	.159	.0023	.0390	.004		.0531
3	X_3	.739	.546	.072	.0038	.0482	.027		-.0180
4	X_4	.772	.596	.050	.0002	.2.6583	4.745*		-.5813
5	X_5	.782	.611	.015	.0001	.0268	.010		-.5703
6	X_6	.782	.612	.000	.0050	1.2892	2.231		-.5086
7	X_7	.789	.622	.010	.0056	.5347	1.813		-.3229
8	X_8	.847	.717	.095	.0060	.2657	1.530		.1613
9	X_9	.978	.956	.239	.0677	.8156	3.680		.5740
10	X_{10}	.979	.959	.003	-.0075	.0863	.032		.3094
11	X_{11}	.981	.963	.004	.0015	.0245	.020		.1512
12	X_{12}	.981	.963	.000	.0335	.4423	1.035		.2984
13	X^{13}	.990	.979	.016	.0297	.3933	1.534		-.0160

*Sig. at p = .05 Adj R^2 = 844

Regression Equation: Y_3 (pred) = $-.0761X_3+-.0023X_2+-.0038X_3+$
$-.0002X_4+.0001X_5+.0050X_{6-.0056X}7+.0060X_8+.0677X_9+-.0075X_{10}+.0015X_{11}+.0335X_{12}+.0297X_{13}+-.2073$

Among these four variables, school location differed in the direction of its relationship with the dependent variable

from what was expected, whereas others were in the expected direction. The possible reason for this could be the effect of other variables. Although it is not significant, this finding indicates that rural school tend to have lower rate of wastage, while the opposite was expected. However, the simple regression on the depend variable showed a coefficient of variation of (R2=.316). The result indicates that rural school location is directly related to high rate of wastage, and explains 31.6% of the variation in the dependent variable. The result ($F_{2,14} = 6.46, p<.05$) is significant. The direction of relationship which is observed in the multiple regression seems due to the effect of other variables.

Independent variables such as pupil-teacher ratio,number of teachers, and number of classrooms, teacher-absenteeism were found to have positive relationship with rate of wastage. The contribution of number of teachers, and teaching load to the variance were none (zero), and others such as teaching group cohesiveness and teachers absenteeism were also much close to zero.

Another group of independent variables include, availability of school facilities, school community relationship had negative relationship with the rate of wastage. Availability of school facilities and school community relationships changed the variance by 9.5% and

23.9% respectively. But the results were not significant ($p<.05$). The possible explanation for the directions of the relationships of the independent variables with the dependent variable, wastage is the same to what has been discussed in previous sections.

To sum up, all school characteristic variables included, were not significant predictors of wastage when considered together, except the number of pupils. All these variables jointly explained 97.9% of the variation in the dependent variable, rate of wastage. The adjusted R2=.8439, indicates that school characteristic variables explained (Controlling all the biases) about 84.4% of the variation in the dependent variable (rate of wastage).

Table 22: Final Summary of Regression On Y_3 (N=16)

Step No	Variables entered		Multiple correlation and related values			Values in the final step				Somple correlation with Y_3
						Values in the Final step		Final F-	Constant	
	No	Variable	Multiple R	Multiple R^2	Changes in Multiple R^2	B-raw coef.	Beta-stand Coef.			
1	1	X_4	.581	.338	.338	-.0001	-.8901	60.12		-.5813
2	2	X_9	.793	.629	.291	-.0286	-.3448	6.63		-.5740
3	3	X_8	.865	.748	.119	-.0060	-.2690	3.83		-.1613
4	4	X_2	.906	.820	.072	-.0367	-.6161	16.87	-.3139	.0531
5	5	X_{13}	.937	.878	.058	.0286	.3781	10.38		-.0160
6	6	X_{10}	.960	.921	.043	-.0381	-.4388	4.92		.3094

Significant at p=0.05

Regression Equation:

Y_3 (pred) = $-0001X_4+.0286X_9+.0060X_8+-.0367X_2+.0286X_{13}+-.0381X_{10}+-3139$

The final summary of the stepwise regression analysis on the rate of wastage (Table 22) reveal that number of pupils, school community relationship and the availability of school facilities, principals' qualifications, pupils absenteeism and teaching group cohesiveness were selected as significant predictors of wastage rate. The results indicate that the contribution of each independent variable to the variance in the dependent variable is significant ($p<.05$). The highest contribution were made by the number of pupils, 33.8% and school-community relationship, 29.1%.

The selected predictor variables jointly explain 92.1% of the variance in the rates of wastage, the unbiased estimate of variance of which is ($R^2=.8684$) explaining 86.8%) of the variation in the rate of wastage. This result ($F_6,9=17.50$) $p<.01$) significant.

4.5. Major Causes of Wastage in Primary Schools.

It has been recognized that there is no one single factor responsible for wastage in education. The combination of a number of factors contribute to pupils' grade repetition and early school leaving. The responses from primary school pupils teachers, and principals regarding the major factors of grade repetition and dropping-out are presented-below.

Among the factors that cause pupils' repetition in primary schools, pupils failure to study hard, lack of time for study, inappropriate examinations, pupils health problems lack of suitable place for study and high level of pupils absence from school were selected as the most important factors. Majority of the pupils (72%) reported that

Table 23: Major Causes for grade Repetition: Pupils' Responses

Ser. No.	Causes for Repetition	Respondents		Rank
		No.	%	
1	Irrelevant curriculum	67	22.3	9
2	Unattractiveness of the lessons	44	14.6	14
3	Inappropriate examinations	159	52.8	3
4	Shortage of text-books and learning materials	82	27.0	8
5	Inedequacy of teachers preparation and presentation of the lessons	60	20.0	12
6	Overcrowded classes	65	21.6	10
7	Pupils failure to study hard	218	72.0	1
8	Lack of suitable place for study	132	43.9	5
9	Lack of time for study	169	56.0	2
10	Lack of parental encouragement	105	34.9	7
11	Lack of encouragement from teachers	62	20.6	11
12	Frequent absenteeism of the pupil	132	43.9	5
13	Long distance from home to school	46	15.3	13
14	Pupils health problem	157	52.2	4
	Total	1498*	99.5	-

*The number of expected responses were 1505

the most important factor that contribute to pupils failure (grade repetition) was failure to study hard. Such an evaluation and attribution of failure to ones weakness seems a rare case. This finding may indicate that pupils tend to accept the weakness of their group in making preparation for examinations.

Lack of time (56%) and suitable place (43.9%) for study were selected by the indicated percentages of pupils-respondents. These factors are mainly rooted from and may reflect economic status and family support. It has been recognized that better off families have a greater opportunity to help and encourage their children by providing them with the necessary facilities (Elliot and Wendling, 1966). On the other hand, pupils from economically and culturally disadvantaged families do not have enough time and suitable place for study. Such factors which are linked with family-economic support and encouragement have been identified as major problems for pupils successful promotion. The findings of this study confirm the contention of Edmonds (1979) lack of parental support which can be measured by the priorities children are provided is partially a function of family economic status. Teachers' ranking of the listed factors also shows (Table 24) that shortage of time for study is the third ranked factor that cause grade repetition. The first and the second factors were shortage of text books and

lack of proper guidance and encouragement from teachers. Teachers seem to feel that they do not provide enough guidance and encouragement for their pupils. This may be related to teachers sense of efficacy.

Pupils also reported that inappropriate examinations as the major cause for grade repetition. Similar findings were reported by previous studies (Brimer and Pauli, 1971,MOE, 1978a, E.C.). Brimer and Pauli considered difficult examinations as one of the internal factors of wastage. Inappropriate examination to the age and grade level of pupils has in fact a more destructive effect on pupils progress.

Health problems of pupils was also another major factor selected by 157 (52.%) of the pupil-respondents that causes grade repetition. This factor, on the other hand, was ranked last by teachers. However, health problem as a major cause of failure cannot be under estimated. In addition to these, pupil respondents consider frequent absenteeism as one of the major causes of educational wastage in terms of repetition. Many days of absence for a pupil implies missing a wide portion of the lessons offered in class. High level of absenteeism is one of the factors that may cause poor performance. Research results in Ethiopia (MOE,1978a, E.C.) and Thailand, Chantavanich and Chantavanich and Fry (1990)

have shown that high level of absenteeism was associated with high rates of wastage-(repetition) and low level of school internal efficiency.

Teachers' and principals' rankings (Table 24) show that shortage of materials, lack of enough encouragement and guidance, lack of enough time for study, irrelevance of the curriculum and pupils frequent absence from class were the highly ranked reasons, for pupils' failure and grade repetition. There appeared differences between teachers and principals in ranking the factors for pupils grade repetition. The ranks are presented below.

Table 24: Teachers and Principals Rankings for Causes of Repetition

Item No.	All Teachers aveage Rank	Principals Average Rank	Urban Teachers Average Rank	Rural Teachers Average Rank
1	5.8	5.9	6.2	4.9
2	7.6	6.8	8.0	7.2
3	8.2	9.9	8.3	7.9
4	3.4	4.1	3.1	4.4
5	8.6	9.3	9.2	7.0
6	8.7	7.9	8.8	8.5
7	6.6	7.3	6.8	6.5
8	9.5	11.3	9.4	10.0
9	5.7	7.3	4.9	8.4
10	8.0	8.7	8.6	6.3
11	4.7	3.9	4.7	4.6
12	6.5	6.1	6.6	6.3
13	9.8	7.1	9.5	7.8
14	11.0	8.5	10.8	12.1

* The items are listed in Table 23

As shown in the above table, the average rank order given by all teachers and principals, despite the observed differences on some items shows a high relationship. In order to determine the degree of agreement in their rank, the correlation coefficient was made. The result indicates that the agreement between teachers and primary school principals was found strong ($r=o.77, p<.01$) The degree of agreement between urban and rural school teachers judgements on the causes for grade repetition were compared and the correlation coefficient was computed. The result shows that there appeared a strong concordance ($r=0.74, p<.01$) between urban and rural-school teachers judgement.

In addition, teachers, through the direct report they made emphasized that overcrowded classes, irrelevant curriculum, high level of pupils' absence, high teaching load, and low attitude and interest were some of the major problems for grade repetition. Although these factors were identified as major causes for primary school pupils-repetition, their combined effect could be much more strong than their separate influence. It has to be also noted that factors which have not been given emphasis in this discussion have similar effects. Indeed, they have; but what has been tried above is simply to show the extent of their effect.

Table:25: Causes for Pupils' Dropping-out and Teachers' Rankings (Average Ranks)

	Causes for school drop-out	All Teachers		Urban Teachers for		Rural Teachers for	
		Boys	Girls	Boys	Girls	Boys	Girls
1	Poor academic performance (failure)	6.9	6.7	6.6	6.1	8.5	8.5
2	Pupil's health problem	11.2	10.8	10.7	10.5	10.9	11.5
3	Lack of material and financial support	4.2	4.9	4.1	4.8	3.8	5.3
4	Lack of future prospect in education	2.6	3.7	2.4	3.3	3.0	4.8
5	Long distance from home to school	10.9	9.9	11.4	10.7	8.9	7.8
6	Parental illness or death	7.9	8.2	8.1	8.1	7.5	8.3
7	Frightenning road condition from home-school	13.5	11.7	14.3	12.3	11.1	9.8
8	Lack of money for school contribution (fee)	8.8	9.8	8.5	10.0	9.6	9.0
9	Excessive envolvement in domestic work	10.7	8.8	8.5	7.9	8.9	10.8
10	Free of academicfailure	10.7	10.5	12.3	10.2	11.7	10.8
11	Discriplinary measures	11.5	12.7	11.0	12.5	12.5	13.2
12	Hetroginity in age composition in class	11.3	11.4	11.4	11.5	10.9	11.0
13	Use of croporal punishment by school personnel	15.4	15.6	15.8	16.1	14.3	13.9
14	Late admission and early marriage	9.4	7.1	10.8	7.4	5.7	6.4
15	Lack of interest ineducation	8.2	8.8	8.7	8.4	10.6	9.8
16	Inappropriate curriculum (text-books)	12.2	12.6	12.3	12.8	12.5	12.2
17	Lack of encouragement and motivation from teachers	15.1	14.6	14.9	14.5	15.9	14.2
18	Work outside home for earning money	9.6	10.9	9.4	10.9	10.9	10.6
19	Brokenhome (family disunity)	10.1	10.3	10.0	10.2	11.1	10.6

Causes for Pupils dropout: Teachers Rankings

As shown in Table 25 teachers were asked to rank the factors in the list as they affect boys and girls separately. Urban and rural school teachers were also requested to rank the factors in accordance to their importance (from highest to the least) in affecting girls and boys drop-outs. Because of many tied ranks, the average ranks were computed.

The results reveal that most of the factors affect both boys and girls almost in a similar degree. The first five factors which were ranked high by all teachers were (1) lack of future prospect in education (2) financial and material problem (3) poor academic performance (failure) (4) late admission and early marriage and (5) pupils participation in excessive demostic work. Pupils responses also show that (1) pupils health problem (2) lack of financial and material support, and (3) failure in examinations were the three most important factors that cause pupils drop-out. As shown in Table 26, 191 (63.5%) and 188 (62.5%) of the pupils reported the problem of finance and failure in examination were the most serious problems that cause pupils dropping-out of school. Similar findings were reported by many researchers like Rumberger(1987),Tanguiane (1990) and Tadesse (1974) and others.

Table 26: Major causes for Pupils Dropout: Pupils Responses

Causes for Dropping out	Responses		
	No	%	Rank
Lack of Financial and material support	191	63.5	2
Failure in Examinations	188	62.5	3
Parental disurity (Broken Family)	148	49.2	5
Pupils health problems	226	75.1	1
Need for children's labour at home	132	43.9	7
Early marriage	139	46.2	6
Long distance from home to school	74	24.6	9
Lack ofinterest in education	96	31.9	8
Parental illness or death	167	55.5	4

Failure in examination (repetition)as one of academic factors that cause early-school leaving is a widely known problem. The incidence of failure particularly at early years of schooling has a strong effect in making children perceive themselves as incompetent for school learning and decide to dropout. (Elliot and Wendling, (1966) and Tadesse (1974).

Lack of future prospect in education which was ranked as the first most important factor causing pupils' dropout is related to the value attached to education. Young children want to have people who can be taken as their model and example through whom they can see the value of education. But this has been a problem for the prevailing employment problem. Considering this, the number one important factor is therefore passable, particularly these days.

Further more, parental illness or death and broken family were reported as the major causes for primary school pupils' dropout. As shown in Table 26 167(55.5%) and 148(49.2%) of the pupil respondents reported parental death and family disunity respectively as causes of early school learning. Teachers' rankings also confirm that parental death or illness as family related problem causes school leaving (dropout).

Whether or not teachers' rankings of the factors as they affect girls and boys very or relate, a correlation coefficient (corrected form of rank-order correlation coefficient Hays (1981) was computed. All teachers' judgements on the factors for boy and girls show a strong relationship ($r=0.94$, $p<.01$).

In addition to this, urban and rural school teachers' separate judgements of the factors regarding their influence on boys and girls show that urban school teachers ranked lack of future prospect, fanancial problem and failure as the three most important factors for pupils' dropout. Whereas rural teachers considered late admission and early marriage as the third most important factor, while they agree to the first and the second ranks made by urban teachers. Dropping out on account of academic failure was not considered most important for rural school children, whereas it is the third problem for urban school boys and girls. Tadesse (1974) similarly reported that academic failure was not as important cause for rural children dropouts as it was for urban school-children.

Pupils' participation in demostic work has also identified as one of the important factor for both boys and girls in urban schools, whereas it was considered more important for boys in rural schools. This could be related to the fact that boys are more required to work in farms and engaged in animal care than girls do. A great deal of literature and previous research results, for example Tadesse (1974) and Anbasu and Junge (1988) showed that the problem is more prevalent in rural than in urban areas. But the findings of the present study fail to confirm this. Despite the lack of systematic study regarding this, however,it is now a

common observation that a great number of urban children are engaged in works outside home to earn their living. This might have contributed to urban pupils drop-out than participation in demostic work.

In general, urban teachers' judgements on the influence of the factors listed on boys strongly correlate with their judgements of the role of these factors on girls drop-out. The correlation coefficient ($r=0.93$, $p<.01$) is significant. Similarly, rural teachers' judgements on the same factors for boys and girls were almost similar. This could be shown by the agreement of the judgements they passed separately for boys and girls. The degree of agreement was very high that the correlation coefficient ($r=0.96, p<.01$) is significant.

To summarize, based on pupils' responses and teachers and principals rankings, lack of future prospect in education, material and financial support, poor academic performance, parental illness or death were the major factors for school dropout according to their importance. Added to these, late admission and early merriage, lack of money for school contribution (fee) and lack of interest in education and excessive participation of children in demostic work were some of the major important factors.

On the other hand, disciplinary measures, inappropriate curriculum, frightening road conditions, corporal punishment and lack of encouragement from teachers were among the factors that were ranked low by teachers. However, the rankings only indicate the relative importance of each factor as viwed by teachers. When particular situations are considered, the last ranked factor could be most important than that ranked first.

Lastly it has to be noted that no single factor or cause can alone be responsible for dropping-out of school. A number of causes jointly result in pupils' dropping-out (Tadesse,, 1974). The drop-out problem, as a school phenomenon is perhaps, something unavoidable. But identifying the causes many help to act up on them. Since many of the problems have their roots from the social, economic, and socio-cultural state of the nation, satisfactory results could be obtained when the school and the community jointly act on these problems.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary and Conclusion

The major purpose of this study was to look into the magnitude, location and the major factors that contribute to wastage in primary schools of Bahir Dar Awraja. An attempt was also made to show whether or not educational wastage has any relationship with pupils', teachers' and school characteristic variables.

In order to achieve the purpose of this study, basic questions were raised regading the degree of the problem at present, the grade level where the problem is severe; the relationship between wastage and pupils' teachers' and school charectistics variables. Question was also raised about what are the major causes of wastage

The study was carried out in 16 schools that were selected using the stratified and quota sampling techniques. To select the particular schools that were to be included in the sample, the random sampling technique was employed . One hundred-twenty teachers and 301 pupils selected randomly and all the 16 principals (one from each school) were taken as sources of information. In addition, data regarding pupils'

enrollment, repetition and drop-out were collected from Bahir Dar Awraja Educational Office and from documents of the sample schools.

The data obtained were analysed using percentages, the chi-square of independence, the multiple and stepwise regresion. The rank order correlation coefficients were also computed to show the agreement in the judgements of rural and urban school teachers'and principals on the causes of pupils' drop-out and repetition. The analysis made warant the following major findings and conclusions.

1. Wastage in primary schools of Bahir Dar Awraja is of a high magnitude. It was found that, of the total number of pupils who entered grade one in 1985/86 academic year 35 percent of them reached grade six. In addition, only 22 percent of the pupils' from this cohort successfuly completed primary education.

2. Of the two aspects of wastage, the phenomenon of grade repetition has made higher contribution to the over-all wastage. The results showed that from the 1985/86 first grade entering chort about 70.9 percent of the total wastage was due to grade repetition. Higher repetition rate occured in the

first and last grade of primary education. It was also found that repetition rate was higher among girls than among boys in urban schools than in rural schools. In all the years considered, higher percentage of urban school girls repeated grades than their rural counterparts. The results, however, show a declining tendency of repetition from grades two to five and from year to year.

3. As it has been evident in previous studies (simmons, 1980) Anbasu and Junge, (1988) the findings of the present study have shown that the drop-out rate is higher in the first two grades. The findings further indicated that the drop-out rate is relatively higher among girls than among boys following the flow of the 1985/86 first grade entering cohort. In addition, the drop-out rate is found to be higher in rural than in urban schools.

In general, from these observations, it seems evident that over-all wastage rate in spite of its short term declining tendency (i.e from one grade to the next and by year), remains to be grave. The problem tends to be more severe in the first grade; in rural schools, than in urban schools, among girls than among boys.

4. Pupils' characteristic variables in general do not seem to have a significant relationship to pupils' present academic status. Personal characteristics such as sex, age, residence, preschool experiences, attitude towards learning, level of punctuality and absenteeism had shown a non-significant relatioship with pupils' academic status. Similarly, family background characteristics (parents' occupation, economic status, family size and family structure) do not seem to have significant association with pupils' present academic status. In spite of this general picture, it has been found that pupils' expectation of their future success and parental education are significantly related to their present academic status. Promotees were found to have higher future achievement expectations than repeaters. Similarly, a high proportion of the promotees were from parents with secondary and above level of education when compared to the repeaters. What is common to both repeaters and promotees is that the highest proportion of them were from illiterate parents.

The findings therefore seem to indicate that to be a promotee or a repeater is not dependent on ones' personal and family background. Nevertheless,

future achievement expectation and educational level of parents seem to influence ones' academic performance. However, the findings as a whole seem to indicate the homogeneity of the sample population.

5. Teacher-characteristic variables as a whole failed to have a significant relationship with repetition, drop-out and wastage rates. The results of the stepwise regression analysis however, have rvealed that.

   a) Teachers' evaluation and expectation of their pupils' performance has a direct and significant relationship with rate of repetition.

   b) Teachers' evaluation and expectations of their pupils' performance, teachers age, attitude towards their profession, teachers' level of education and level of training have jointly explained the rate of drop-out significantly. However, their independent contribution, axcept level of training, is not significant.

   c) Teachers' Level of training, age and experience jointly have a significant relationship with rate of wastage. Teacher

level of training has, however, had a strong power of predicting the rate of drop-out and over-all wastage rate.

It has been found that with an increase in the teachers' level of training, and experience the rate of wastage tends to decrease. But with an increasing teachers' age the rate of wastage tends to increase. The findings vividly show that the selected teachers' characteristic variables have a strong relationship with wastage when considered jointly.

6. School characteristic variables, when considered jointly were not significatly related to repetition, drop-out and over-all wastage rates. However, the relative contribution of each of the variables indicates that,

a) repetition rate tend to decrease where the size of enrollment is high, teaching group is more cohesive, and in rural schools. On the other hand, with an increase in principal's experience (years of service), pupil-teacher ratio, number of teachers, high level of teacher and pupils' absenteeism, rate of repetition tends to increase.

b) The size of enrollment and school community relationship are inversely related to the rate of drop-out. But teaching load and pupil-teacher ratio are directly related to rate of drop-out. An increase in pupil-teacher ratio and teachers' teaching load increases the rates of drop-out.

c) Size of enrollment, school community relationship, the availability of facilities, principals qualification, teaching load and teaching group cohesiveness jointly have a significant relationship with rate of wastage.

Despite the observed inconsistency, the findings indicate that school characteristic variables have a lot to do in affecting the rate of wastage. The findings in general tend to reveal that teachers characteristics and selected school characteristic variables are important in explaining the variation in the rate of repetition, drop-out and wastage.

7. Among the possible factors which were thought to have important contribution to repetition, it was generally reported that school (institutional) individual, economic and family related factors had

significant impact. In specific terms, failure to study hard inappropriate examinations, helath problems lack of suitable place for study, frequent absenteeism and lack of parental encouragement were reported as factors causing repetition by pupil respondents. Teachers' rankings have also indicated that lack of enough time for study irrelevant curriculum, overcrowded classes, high teaching load and pupils' lack of interest were important factors that cause grade repetition.

8. Respondents also ranked, lack of prospect in education, financial and material problem, poor academic performance, late admission and early marriage (more important for rural girls), pupils' involvement in demostic work, parental death and broken home as the most important causes for drop-outs. The factors ranked according to their improtance in causing school drop-out can, in general, be categorized under factors related to the institution, individual, socio-cultural and economic these findings are, of course, consistent with previous studies rumberger, 1987; Tanguiane, 1990). The rank order correlation coefficients also reveal that teachers agree in their judgements of the factors as they affect boys and girls, urban

seems to be related with the inability to control other variables that might have affected the result. The other problem may be related to the sample size. The relationship among school characteristic variables could be another problem. It seems, therefore, recommendable that further research with the inclusion of other variables that were not treated in this study and with a large size sample be carried out.

2. Since wastage rate, (drop-out and repetition and their combined effect was severe in the beginning grades where the majority of the pupils are mentally and psychologically immature the use of strict grade promotion policy is not commendable. It is thus important to properly implement the promotion policy proposed by the Ministry of Education (MOE, 1980 E.C.) that pupils from grades 1-3 be given automatic promotion. However, automatic promotion alone can not reduce wastage unless the necessary improvements are made in the system. Considering the effect of automatic promotion on the quality of education the provision of compensatory lessons and programs, and continuous evaluation would help to redress the drawbacks of automatic promotion. The Ministry of Education has to follow-up and facilitate the implementation by assigning enough number and qualified teachers in schools. In the

long run, however carrying out a nation wide comprehensive study on how to use automatic promotion with out affecting the quality of education seems important. In addition, to minimized wastage in primary education by preparing the child for the task he will confront in the future would help much. To this end, the Awraja Educational offices Regional Educational office and the Ministry of Education would initiate and agitate the community to establish and consolidate kindergartens.

3. In spite of the advantages it has in increasing the size of enrollment and alleviate the problem of class size, and shortage of teachers, the shift system has great effect on wastage. The use of the shift system does not allow children to spend more of their time in schools, and hinders the completion of the syllabus designed for a particular time. In the long run, avoiding the use of the shift system in primary schools would help to minimize wastage and improve pupils' performance.

4. As long as factors related to teachers and schools could bring differences in the rate of wastage, the proper and planned utilization of all resources allocated to one level of education seems helpful in achieving the

objectives set for that level. Since many of the junior secondary schools in our case are annexed to primary schools, human and material resources seem to be utilized for the level they were not allocated. This, undeniably, is a disadvantage for young primary school children and the nation at large. These junior secondary schools (most of them) were established with no plan (MOE, 1982 E.C). It is thus helpful to separate junior secondary schools from primary schools. This would help the proper and maximum utilization of resources allocated to the education of young children. Junior secondary schools may either have their own buildings or be annexed to senior secondary schools, where the latter are available.

5. As the findings of the study have indicated, teahcer characteristic variables affect the magnitude of wastage in primary schools. Since teachers are the salient inputs in education, the improvement of factors associated to teachers seems to have a paramount importance. It would there fore be important that:

   a) Bahir Dar Awraja Educational office prepares up-dating programs such as seminars, workshops. This would help teachers to up-date and up-grade their professional competence.

b) In-service teacher training programs be intensfied and given due attention from the Ministry of Education.

c) The Ministry of Education launch in-service program through distance education. A study on the possibility of making such a program acessible and suitable for teachers before embarking on it is, however, important.

6. Since the probllem ofwastage, in general and drop-out rate in particular, is severe in rural areas where 85 peer-cent of the population live, Awraja Educational, Regional offices, and the Government have to give due attention to the problem. It seems commendable to raise the participation of parents in school affairs. The participation of parents, can be realized only when parents understand school objectives. Thus raising the level of parents' education may help alot. To this end, therefore, the literacy program has to be intensified at the national level.

7. The problem of late admission and early marriage as a significant problem affecting pupils' drop-out rate needs to be controlled. The government at higher level and regional administrative bodies would set marriage

policies and agitate for its implementation.

Inaddition, it would be helpful to recruit teacher trainees on the basis of their interest and academic potential.

Finally, inorder to decide what solution would be helpful a comprehensive and nation wide study needs to be carried out using the cohort method that may show where and how much the educational system is losing its resources due to high rate of wastage.

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School Code:_____

An interview schedule to be answered by primary school pupils with the close supervision of home room teacher. Put a " / " mark infront of the item of your choice.

Name of the school _____

1. Academic status of the pupil: Promotter____ Repeater____.
2. Age_____. 3.Sex Male____. Female_____.
4. Marital Status:_____

   Unmarried____ Married____ Divorced____.
5. Residence: Urban____ Rural____
6. Before you entered primary school in which of the following did you attend?

   Kindergarten____

   Church School____

   Quaranic School____

   Literacy Program____

   Attended none____
7. Do your parents live together?

   Yes____ No____
8. With whom do you live now?

   With both parents ____

   Only with one of them ____

   With other relative or guardian ____.
9. Parents Educational level.

   Higher education (college) university - degree (diploma)____

   Secondary education (7 - 12) ___

Sometimes ____

Rarely ____

Never ____

16. Do you have a suitable place for study at home?

Yes ____ No ____

17. Do you have enough time for doing homework and study?

Yes____ No____

18. Have you ever been disturbed (intempted) while you are studying?

Always ____

Often (most of the time) ____

Sometimes ____

Very rarely ____

Never at all ____

19. Do your parents (guardians) provide you with help and encouragement in your school work?

Yes, they do ____

No, they don't ____

20. How often do your parents (one of them in the family) check that you have done your home work (assignment)?

Always ____

Often (most of the time) ____

Sometimes ____

Very rarely ____

Never ____

21. How often do you help your parents in working at home?

Always ____

Often (most of the time)____

Sometimes ____

Rarely ____

Never ____

22. How often do you arrive at school in time?

Always ____

Most of the time ____

Sometimes____

Only rarely ____

Never, have I arrived in time ____

23. How long does it take you to walk from home to school?

More than two hours ____

two hours ____

One and a half hours ____

Half to an hour's time____

Less than half an hour ____

24. How many days are you absent from school within a semester?

21 days or more ____

16 - 20 days ____

11 - 15 days ____

6 - 10 days ____

5 days or less ____

25. Do you always like going to school?

Yes ____ No____

26. What is your main reason for going to school?

I like learning ____

I like my teachers ____

My parents ordere me to go ____

I see my friends going ____

I don't really know, why ____

27. What would you feel if you are obliged to discontinue

schooling?

It would make me sad ____

I wouldn't mind ____

I would rather be happy ____

28. If you have ever failed (repeated) a grade/s/ in which grade was it?

grade: 1____; 2____; 3____; 4____;

5____; 6____.

29. From the time you began primary education till now, how many times have you repeated grades (failed)?

None ____ twice ____

Only once ____ three times ____ four times ____

30. Below is a list of reasons for pupils repetition in primary schools. Please select and mark five reasons which you think are most important, and put a " / " mark infront of each statement (phrase). Answers more than five are also possible.

1) Irrelevant curriculum ____
2) Unattractive and uninteresting lessons ____
3) Inappropriately set and difficult examinations ____
4) Lack of books and learning materials ____
5) Teachers failure of proper preparation and presentation of the lessons____
6) Learning in overcrowded classrooms ____
7) Pupils failure in studying hard ____
8) Lack of suitable place for study____
9) Lack of enough time for study____
10) The absence or lack of parental encouragement____
11) Lack and absence of encouragement from Teachers____
12) Frequent absenteeism from class____
13) Long distance from home to school ____

14) Pupils' health problem

31. How sure are you of passing the (next) grade at the end of this year?

I am quite sure____

I am sure ____

I can not be sure____

32. What will you do if you would fail in examination at the end of the year?

I will study hard next time____

I will transfer (to) (change) for another school____

I will discontinue schooling____

33. Have you ever dropped-out of (discontinue) school?

Yes____ No____

34. If your answer for question No ____ is yes; what was the reason for your dropping-out? (Tell)

35. If your answer is "yes" for question No____, for how long did you stay out-of school?

- For one year or less ____
- Two years ____
- Three or more years ____

36. If your brothers, sisters, friends and/or neighbours have dropped-out before completing their primary education, they might probably left schooling for the following reasons. From the problem listed below select only five major one. Put a " / " mark infront of each item. Answers more than five items are also possible.

Reasons for dropping-out of school

1. Lack of finance and materials for schooling ... ____
2. Failure in examinations ... ____
3. Parental disunity due to death or divorce ... ____
4. Pupils health problem ____
5. Pupil's involvement in demostic work ____
6. Early marriage ____
7. Distance from home to school ____
8. Lack of interest in education ____
9. Parental illness or death ____

Appendix 1 (b)

Questionnaire to be filled by primary school teachers of Bahir Dar Awraja.

Please give your response either by providing the appropriate answer or putting an 'x' mark infront of the alternative you chose.

Name of the school _____.

1. Teacher's Age____ 2. Sex: Male____ Female____

3. Education level attained:

grade 12 ____

grade 11 ____

grade 10 ____, others, if any_____.

4. Years' of Teaching experience:

11 years and above ____

6 - 10 years ____

5 years or/and below ____

5. Pre-service training, duration of pre-service training

12 years ____

1 year ____

less than 1 year ____

None ____

6. Have you ever participated in an inservice program?

Yes ____ No ____

7. If your answer for question no. 6 is yes, in which of the following were you involved?

Summer program college courses ____

Summer program TTI program ____

Workshops ____

Seminars ____

8. Did you join the teaching profession in your own choice?

Yes _____ No ____

9. Teaching is an interesting profession:

Strongly agree____ disagree____

Agree ____ Strongly disagree____

Undecided____

10. If you are given the chance to choose your occupation, would you chose teaching as your profession?

Yes____ No____

11. How much are you satisfied in your profession?

Very much satisfied____

satisfied____

undecided ____

dissatisfied____

Very much dissatisfied____

12. In the school you teach, how much is the interest of pupils towards learning:

Very high ____

high ____

Undecided ____

low ____

Very low____

14. On the basis of their current interest and performance what do you expect from your pupils?

Very high results ____

high results ____

undecided ____

low ____

Very low level results ____

15. During this semester how many periods do you teach?

26 periods or more/week____

16 - 25 period/week ____

5 periods or less____

16. How much time do you spend in lesson planning and preparation 1 week?

6 hours or more____

3 - 5 hours ____

2 hours or less____

17. How many times do you give homeworks?

Four times or more____.

Three times ____

Two times / week ____

Only once / week ____

Not at all ____

18. How much time do you spend in correcting homeworks?

6 hours or more ____

3 - 5 hours ____

2 hours or less ____

		Rank M	Rank F
I.	Lack of time for study	____	____
J.	Lack of encouragement from teachers	____	____
K.	Lack of parental encouragement	____	____
L.	Frequent absenteeism of the pupil	____	____
M.	Long distance from home to school	____	____
N.	Pupils health problem	____	____

21. Direction:- Below is a list of factors that are thought to be the causes for dropping-out. Please rank the items in accordance with their importance in causing dropping-out. Considering the influence they may have on boys and girls rank the items separately for both sexes.

		Rank M	Rank F
A.	Poor academic performance	____	____
B.	Pupil's health problem	____	____
C.	Lack of material and financial support	____	____
D.	Lack of future prospect in education	____	____
E.	Long distance from home to school	____	____
F.	Parental illness or death	____	____
G.	Frightenning road condition from home to school	____	____
H.	Lack of money for school contribution (fee)	____	____
I.	Excessive envolvement in domestic work	____	____
J.	Fear of academic failure	____	____

		Rank	
		M	F
K.	Disciplinary measures	____	____
L.	Hetroginity in age composition in a class	____	____
M.	Use of corporal punishment by school personnel	____	____
N.	Late admission and early marriage	____	____
O.	Lack of interest in education	____	____
P.	Inappropriate curriculum (text book)	____	____
Q.	Lack of encouragement and motivation from teachers	____	____
R.	Work outside home for earning money	____	____
S.	Broken home (family disunity)	____	____

Appendix 1(c)

Questionnaire to be filled by elementary school principals concerning the characterstics of the school.

Direction: Following are questions with alternative answers. Indicate your response by "x" sign in the boxes provided. For those questions with blank spaces write your answer briefly.

- Name of the school _____
- Year of establishment _____

1. Location of the school plant
   - A. Town/ with population exceeding 2000/ ____
   - B. Rural /with population below 2000/ ____
2. Training of the principals in principalship
   - A. Trained ____
   - B. Untrained ____
3. Educational level
   - A. 12 + 2 ____
   - B. 12 + I ____
   - C. 10 + 2 ____
   - D. Specify if any other _____
4. Number of years as a principal
   - A. More than eleven years ____
   - B. 6 - 10 years
   - C. 5 years of below

Items concerning school and student characterstics

5. Number of students enrolled in the academic year 1984 E.C.

   _____

6. Number of teachers in the academic year 1984 E.C. _____
7. Number of classrooms in the year 1984 E.C. ____

8. Does the school have a library?

   A. Yes ____

   B. No ____

9. If your answer for question no. 8 is "yes", how do you assess the quality of service given by the library

   A. Very good ____

   B. Good ____

   C. Fair ____

   D. Unsatisfactory (low) ____

   E. Very low ____

10. Do students obtain text books for all subjects they take

   A. Yes ____

   B. No ____

11. The extent to which educational materials and teaching aids are accessible in the school

   A. Very high ____

   B. High ____

   C. Medium ____

   D. Low ____

   E. Very low ____

12. The extent to which the school is interrelated with the community and with parents

   A. Very high ____

   B. High ____

   C. Medium ____

   D. Low ____

   E. Very low ____

13. The extent to which teachers intereact and help each other

A. Very high ____
B. High ____
C. Average ____
D. Low ____
E. Very low ____

14. The frequency to which teachers are absent in a semester

A. 21 days and above ____
B. 16 - 20 days ____
C. 11 - 15 days ____
D. 6 - 10 days ____
E. 5 days and below ____

15. Teachers' average teaching load

A. 26 periods and above ____
B. 21 - 25 periods ____
C. 16 - 20 periods ____
D. 11 - 15 periods ____
E. 10 periods and above ____

16. The frequency to which students are absent in a semester

A. Very high ____
B. High ____
C. Medium ____
D. Low ____
E. Very low ____

17. Direction:- Below is a list of possible failure for grade repetition. Based on your experience, and observation rank the items according to their contribution. Indicate the most prevalent problem first and the least important last.

Causes for Repetition

		Rank M	Rank F
A.	Irrelevant curriculum	____	____
B.	Unattractiveness of the lessons	____	____
C.	Inappropriate examinations	____	____
D.	Shortage of text books and learning materials	____	____
E.	Inadequacy of teachers preparation and presentation of the lesson	____	____
F.	Overcrowded classes	____	____
G.	Pupils failure to study hard	____	____
H.	Lack of suitable place for study	____	____
I.	Lack of time for study	____	____
J.	Lack of parental encouragement	____	____
K.	Lack of encouragement from teachers	____	____
L.	Frequent absenteeism of the pupil	____	____
M.	Long distance from home to school	____	____
N.	Pupils health problem	____	____

18. Specify if there are any other problem that result in grade repeitition

_____

_____

19. Direction: Below is a list of factors that are thought to be the causes for dropping-out. Please rank the items in accordance with their importance in causing dropping-out. Considering the influence they may have on boys

and girls rank the items separately for both sexes.

		Rank M	Rank F
A.	Poor academic performance	____	____
B.	Pupil's health problem	____	____
C.	Lack of material and financial support	____	____
D.	Lack of future prospect in education	____	____
E.	Long distance from home to school	____	____
F.	Parental illness or death	____	____
G.	Frightenning road condition from home to school	____	____
H.	Lack of meney for school contribution (fee)	____	____
I.	Excessive envolvement in domestic work	____	____
J.	Fear of academic failure	____	____
K.	Disciplinary measures	____	____
L.	Hetroginity in age composition in a class	____	____
M.	Use of corporal punishment by school personnel	____	____
N.	Late admission and early marriage	____	____
O.	Lack of interest in education	____	____
P.	Inappropriate curriculum (text-books)	____	____
Q.	Lack of encouragement and motivation from teachers	____	____
R.	Work outside home for earning money	____	____
S.	Broken home (family disunity)	____	____

Thank you again

Appendix – 3

Pupils Enrolment : Actual Cohorts of the 1985/86 – 1990/91