



ADDIS ABABA UNIVERSITY

**COLLEGE OF EDUCATION AND BEHAVIORAL STUDIES
DEPARTMENT OF EDUCATIONAL PLANNING AND
MANAGEMENT**

**AN ASSESSMENT OF EDUCATIONAL WASTAGE
IN OROMIA REGIONAL STATE NORTH SHOA ZONE HIDABU
ABOTE SECONDARY SCHOOLS**

By: Asmera Ejara

Advisor: Jeilu (PHD)

December, 2020
Addis Ababa, Ethiopia

AN ASSESSMENT OF EDUCATIONAL WASTAGE
IN OROMIA REGIONAL STATE NORTH SHOA ZONE HIDABU
ABOTE SECONDARY SCHOOLS

by:

Asmara Ejara

A Thesis Submitted to Department of Educational Planning and
Management in Partial Fulfillment of the Requirements for the Degree
of Master of Arts in School Leadership

ADDIS ABABA UNIVERSITY

COLLEGE OF EDUCATION AND BEHAVIORAL STUDIES

DEPARTMENT OF EDUCATIONAL PLANNING AND MANAGEMENT

December, 2020

Addis Ababa

Declaration

I, declare that this research work entitled “Assessment of Educational Wastage in secondary Schools of H/Abote Woreda ”, is the outcome of my own effort and study and that all sources of materials used for the study have been duly acknowledged. I have produced it independently except for the guidance and suggestion of the research advisor. This study has not been submitted for any degree in this University or any other University.

By: Asmara Ejara

Signature_____

Date_____

Approval Page

Approved by Board of Examiners

Chairman, Department Graduate Committee Date Signature

Signed by the Examining Committee:

Advisor Signature Date

Examiners Signature Date

Dep't head Signature Date

Internal Date Signature

External Date Signature

Acknowledgements

At the top of all, I would like to praise Almighty God who gave me the capacity, and strength to complete my study. I would like to express my deepest gratitude to my advisor **Jeilu (PHD)** for his valuable guidance, suggestions, comments, and corrections from the beginning to the end of the study. I am also very grateful to the principals, teachers and students of the sampled schools. My gratitude goes to H/Abote woreda Education office for their valuable cooperation in providing all necessary documents used for the study.

Table of contents

Contents	Pages
Declaration	i
<i>Approval Page</i>	ii
Acknowledgements	iii
List of Tables	vii
List of charts	viii
<i>Abstracts</i>	ix
CHAPTER ONE	1
INTRODUCTION	1
1.1. Background of the study	1
1.2. Statement of the problem	3
1.4. Objectives of the Study	5
1.4.1. General objective	5
1.4.2. Specific objectives	5
1.5. Delimitation of the Study	5
1.6. Significance of the Study	5
1.7. Organization of the Study	6
1.8. Definitions of Key Terms	7
CHAPTER TWO	8
REVIEW OF THE RELATED LITERATURES	8
2.1. Concepts of Educational Wastage	8
2.2 The Effects of Educational Wastage on Schooling	10
2.3. Wastage in education, causes and forms of its existence	11
2.4. Wastage in Education and its Magnitude in Ethiopia	11
2.5. Dropout and Repetition	13
2.5.1. Dropout	13
2.5.1.1. Drop-out Rates by Grade	14
2.5.1.2. Drop-out Rates by Sex	15
2.5.2. Repetition	15
2.5.2.1. Repetition Rates by Sex	16

2.6. Efficiency and coefficient of efficiency	16
2.7. Factors behind Low and High Completion Rate in Education.....	17
2.7.1. Education Policies and Institutional Process.....	17
2.7.2. School based factors	18
2.7.3. School physical Resource and Facilities	18
2.7.4. School Location.....	19
2.7.5. Teacher’s characteristics.....	19
2.7.6. School Management System and Practices	20
2.7.7 Student Related Factors.....	20
2.8. Parent and Community Related Factors.....	21
2.9. Some Effective Methods for Improving Efficiency.....	22
2.9.1. Lowering the Cost of Schooling.....	22
2.9.2. Making Better School Facilities	23
2.9.3. Improving pre-Service and in service Training.....	23
2.9.4. Making Educational Materials More Available	23
2.9.5. Closing the Gender gap.....	24
CHAPTER THREE	25
RESEARCH DESIGN AND METHODOLOGY	25
3.1 Design of the Study.....	25
3.2 The Research Method	25
3.3. Sources of Data	26
3.4 Sampling and Sample size	26
3.5 Summary of Participants.....	26
3.6. Procedures and Instruments for data collection	27
3.6.1. Procedures	27
3.6.2. Data collection tools.....	27
3.6.2.1 Questionnaire.....	27
3.6.2.2. Interview.....	27
3.6.2.3. Document Analysis.....	27
3.6.3. Pilot Study.....	28
3.6.4 Results from Pilot Study	28

3.9.2 Classifying and Categorizing Data.....	29
3.13 Ethical Issues.....	29
CHAPTER –FOUR.....	30
DATA ANALYSIS AND INTERPRETATION.....	30
4.1 Introduction.....	30
4.2 Response Rate.....	30
Analysis of Questionnaires Filled by Teachers	31
4.3.1 Respondents’ Demographic Information	31
4.3.2 Analysis of actual questionnaires filled by teachers and students	32
CHAPTER-FIVE	45
SUMMARY, CONCLUSION AND RECOMMENDATION	45
5.1 Summary	45
5.2 Conclusion	46
5.3 Recommendation	47
References	50
Appendix-A.....	53

List of Tables

Table- 1 Summary of population and sample size.....	26
Table- 2 Reliability Statistics in Cronbach’s Alpha	28
Table- 3 Analysis of Respondents’ Demographic Information	31
Table -4 Teachers’ Response concerning personal factors for education wastage.....	33
Table -5- Teachers’ response concerning Family Related Factors to education wastage	35
Table -6 Teachers’ response concerning School related factors to education wastage	36
Table -7 Teachers’ response concerning socio-economic factors to education wastage	37
Table -8 Teachers’ response concerning Environmental factor to education wastage.....	38
Table -9 Teachers’ response concerning possible interventions to education wastage problems.....	40
Table -10. Student respondents’ demographic information.....	41
Table -11. Students, response concerning factors to education wastage problems	42
Table- 12. Data from document Analysis	43
Table 14. Table 13. Grand Total Enrolment and absenteeism (2009-2011).....	43
Table -13. Rate of Dropout and Repetition 2009-2011	43

List of charts

Chart -1 Respondents' age distribution.....31

Chart - 2 Respondents educational status32

Abstracts

The purpose of this study was to assess the magnitude of educational wastage of secondary schools in H/Abote woreda. To this end, descriptive survey method was employed to reveal the current situation of high rate of grade repetition and drop-out (educational wastage). The data regarding enrolment, repetition and dropouts were obtained from H/Abote educational office and sampled school's document. The study included two schools, 100 students, 30 teachers, and four principals of sample schools. The data gathered through questionnaire, was analyzed using SPSS version 20 and the frequency, percentage, mean, and the standard deviation were computed to determine the magnitude of the problem. Wastage rate for the past three consecutive years (2009-2011) was calculated. The findings of the study indicated that both high repetition rate and drop-outs were registered at the sampled secondary schools, grade nine in particular. The results also revealed that variables that were related education wastage were personal factors, socio-economic factors, school related factors and environmental factors were among the leading factors to education wastage. Based on the findings, some important recommendations were forwarded.

CHAPTER ONE

INTRODUCTION

Ethiopia is a country that is on a journey to its renaissance targeting at achieving peace, unity-with-diversity, broad and rapid socio-economic growth, establishment of democratic systems and good governance (MoE, 2018 p.3). In this section, the background, the statement of the problem, significance of the study, objectives, delimitation, and definitions of terms were discussed.

1.1. Background of the study

Education is the most important factor that significantly affects the life of an individual and empowers him/her to contribute to national development. As a form of investment made on people, education plays a pivotal role in human resource development. Investment in education is made with intent for better returns in the future. “An investment in education is an investment in the productivity of the population. Investment in formal education is considered as precondition to economic growth (Bishop ,1989:21). Since the interaction between educations, economic and social development has been broadly recognized (Levy, 1991:31), the education system of any country is to serve its development objectives.

Over the last several years, the economy grew by nearly 10 per cent per annum, one of the fastest growth rates registered in the world. During this time, significant attention has been given to upgrading economic and social infrastructure and promoting pro-poor spending on education, health, and other services to benefit the poor and the marginalized (Ethiopian Educational Development Roadmap-EEDR, 2018).

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

Economic analysis has consistently shown that investment in education brings higher rate of return than investment in physical capital (Dension, 1964 in Woube,2003). Changes in the education system of any country have to give due attention to the efficiency and effectiveness of primary education. “The progression of students from admission” in the beginning year of their study “Until their successful completion” of the cycle of education (primary or secondary) reflects the degree of efficiency in that level of education (UNESCO, 2015).

The problems of repetition and dropping-out as two aspects of educational wastage reduce the efficiency of secondary education. Repetition, in addition to raising the amount of time required to complete educational cycle and demand for incurring additional money, it 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 dropout partially or totally wasted (UNESCO, 2015). While the performance of an educational system is measured by quality and quantity of results dropout and class, repetition result in the reduction of the productivity of formal education. The gap between the ideal scheme and the observed phenomenon (actual output) in the secondary education system particularly of the developing countries including Ethiopia has now been an area of great concern (MoE, 2018).

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

Quality and efficiency of education at higher levels, contributes to the development of the country, and its weaknesses have an equally significant effect. The study and evaluation of the efficiency of secondary education, thus, seems in order. A close investigation into the problems of wastage in secondary education has an enormous value. With this general framework, the major aim of this study was focused on identifying the problems and magnitude of wastage in secondary schools of North Shoa zone Hidabu Abote woreda.

1.2. Statement of the problem

UNESCO (2003) indicated that children around the world, especially Sub-Saharan Africa countries, fail to gain access to primary schooling. Even large numbers among those who do enroll leave prematurely, dropping-out before the skills of numeracy and literacy have been properly gained. This initiates for a close investigation of the degree of educational wastage of secondary schools.

Like other developing countries, secondary schools in Ethiopia have shown a rapid expansion since 1990. With this rate of development, however, the percentage of Children who reach the final grade of the secondary school education cycle is low, as it has been conducted by (Dereje 2003; Habtamu 2001; Tadesse 2001) and Adane (1993). Most of them have their own area of study as well as geographic boundary. None of them has dealt with educational wastage of secondary school in the woreda under study. This Woreda foud in North Shoa zone, Oromia Region. The area shares boundaries with Degem woreda in the east and south, Derra in the north, and Kuyyu in the west. The peoples' livelihood is dependent on subsistence agriculture largely based on farming crops, such as maize, wheat, teff, peas and beans.

In Hidabu Abote Woreda, drop-out and grade repetition are very common. The basic problem that has initiated the researchers to conduct this study was high rate of educational wastage particularly drop out and repetition in the woreda under study.

Wastage in education as a reflection of the degree of inefficiency in the system `has been termed 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 toward the achieving literacy (Yaikob Temesgen, 2014).

The findings of many of these studies, for example, (UNESCO 2002, 2015), (Simmons 1980) and Brimer and Pauli, (1971) indicated 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 2004), Thomas (1975), Coombs (1985) and Philips (1975) characterize the education system of the developing countries as inadequate. (Seged et al 2001) 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 successfully complete their education is still insufficient.

Like other developing countries, general secondary schools in Ethiopia have shown a rapid expansion since the past two decades and consequently, participation has increased immensely, however, the percentage of pupils who reach the final grade of the secondary education cycle is low. These and other similar pieces of evidence indicate that there is some degree of inefficiency in the secondary education system of this country, which calls for a close investigation of the magnitude of wastage. Of course, studies on drop outs in Ethiopia secondary schools Bejeren (1960); Kobes (1975) and problems of participation and performance in secondary school have been made. But neither of these studies have given due emphasis to the magnitude of wastage that occurs as a combined effect of repetition and dropping-out (Alem Nega, 2011 Thesis).

So, the purpose of this study is to examine the magnitude and problems of education wastage in some secondary schools of North Shoa Zone Hidabu Abote woreda. The study will emphasize on investigating the degree to which repetition and dropping-out contribute the over-all wastage in secondary schools. Beside this, the relationship between pupils (personal and family background) characteristics and the incidence of repetition and promotion will be assessed. The relationships between teachers' characteristics, school characteristics and wastage rates, repetition, and dropout rates will also be examined.

1.3 The Research Question
Generally, the study mainly aims to answer the following basic questions.

1. What are the major causes of education wastage in the target study area?
2. What are the effects of Educational wastage on schooling?
3. In which grade of the secondary level does the highest wastage rate a) repetition b) dropout occur?

1.4. Objectives of the Study

1.4.1. General objective

The major objective of this study is to identify the problems and magnitude of wastage in some secondary schools of North Shoa zone Hidabu Abote woreda. To this end, the paper is aimed at attaining the following specific objectives.

1.4.2. Specific objectives

The specific objectives of the study are to:-

1. Assess the factors that contribute to the increment of magnitudes of wastage in some secondary schools of Hidabu Abote woreda.
2. Identify in which grade of the secondary school level the highest wastage rate (repetition and dropout) highly occurs.
3. Examine the major causes of wastage as perceived by teachers, principals and pupils.

1.5. Delimitation of the Study

This study was delimited to the quantitative analysis of wastage rates due to repetition and dropping out in secondary schools of Hidabu Abote woreda. The study was delimited to only 9-10 grades of secondary schools because the researcher believes that the problems of educational wastage was more severe at this level.

1.6. Significance of the Study

A country has made a continuous and thorough evaluation of its schools and the whole education system, to bring about a quantitative and qualitative improvement in its 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 secondary schools 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 secondary education is a serious issue for educators, researchers and policy-makers. In an educational system where the holding power of secondary schools is low and the rate of wastage is high, the degree of inefficiency in the whole educational system will be clear. Such inefficiency may also bring the danger of relapsing to illiteracy, which is a hindrance 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 educational resources are more scarce, and enrollment ratio is relatively low (MoE, 2005), 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.

A. Since the study of educational wastage has not been given much attention in our secondary schools, this study may help for the assemblage of information on the status and degree of wastage in secondary education.

B. 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.

C. 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 practitioners to evaluate the efficiency and relevance of secondary education in serving the national development objectives.

D. The study may also contribute literature on the study of educational wastage in Ethiopian secondary schools and serve as source of information for further and comprehensive nationwide study.

1.7. Organization of the Study

The study organized into five chapters as follows. The first chapter deals with the background of the study, statement of the problem, scope of the study, significance of the problem, and definition of key terms. The second chapter was present the review of the related literature. The third chapter was deals with methodology and procedures employed to collect data and analyze the data. The fourth chapter dealt with the presentation, analysis of the data presentation of the findings. Summary of the findings, conclusions and recommendations were presented in the fifth chapter.

1.8. Definitions of Key Terms

The following important terms and phrases were used in this study based on the context and relevance to the objective of the study.

Academic status is a pupil's academic position indicating either he/she is a promotee or a repeater for the grade he/she is enrolled.

Cohort is a set of individual pupils distinguished by their common school grade in the year of the education cycle.

Educational wastage refers to pupils' dropping out of schools before completion of the cycle of education or grade repetition and/or the "combined effects" of both

Efficiency refers to the relationship between input into the (educational) system and outputs from the system

Effectiveness is "a measure of the disparity between the expectation and performance, or the extent to which an output accords with a stated goal"

Dropouts - pupils who for one or another reason leave school before completing the grade or the educational cycle for which they are enrolled

Failures- pupils who could not meet school requirements to promote from one grade to the next, and who may repeat the same grade next year,

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

Input/ output ratio- an indicator of efficiency with which a school produces a given number of graduates. If the educational system is completely efficient, the input/output ratio will

Out-put- is the number of pupils who successfully complete a given educational cycle (in this case secondary education).

CHAPTER TWO

REVIEW OF THE RELATED LITERATURES

Overview

Ethiopia is a country that is on a journey to its renaissance targeting at achieving peace, unity-with-diversity, broad and rapid socio-economic growth, establishment of democratic systems and good governance, EEDR(Ethiopian Education Development Roadmap ,2018). According to GTP II, greater shares of economic production will come from industry and manufacturing with the consequent demands for middle- and higher-level skilled manpower to be supplied by the educational system. Achieving these visions require further expansion of access to high-quality basic, general and tertiary education; and special efforts to improve the overall literacy and numeracy level of the population and producing capable university graduates that serve the industry (EEDR,2018).

2.1. Concepts of Educational Wastage

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

Similarly, wastage in education describes the failure to achieve the intended results or goals that have been primarily set (G/Hawariya, 2016, Teferi, 2010, UNESCO, 2015). As Yaikob Temesgen(2014),there is an increasing dropout rate in many secondary schools of Ethiopia. Different studies revealed that regional trends of secondary education related to dropout for grade 9-10 was with fluctuating trend within the system in dropout rate, and has been severing the first cycle of secondary schools of the region. The dropout rate for grade 9 was the worst trend compared to grade 10 dropout rates (Yaikob T, 2014)

There are various obstacles that make the realization of educational objectives difficult Wastage is viewed as the main indicator of internal efficiency of an educational systems (G/Hawariya, 2016, Teferi, 2010, UNESCO, 2015). The phenomenon of educational wastage becomes graver 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 is originally belongs to and comes from the language of economists (UNESCO, 2015, Brimer and Pauli, 1971:9) seems to show the resemblance education and industry. However the term is applied to education from the point of view of a nation's resources and expenditure is one of the world's largest businesses (Brimer and Pauli, 1971:9). Wastage in education reduces the effectiveness of the system and as the rate increases, it becomes a symptom of serious defects in the internal operation of the system (UNESCO, 2015). These rates help to understand how the education system utilizes efficiently the limited resources and time. These rates are commonly used to measure the efficiency of the education system in producing graduates of a particular cycle or level. A student has three paths in a particular academic year, i.e. promotion, repetition or drop out. Repeating a grade means using more resources than allocated to a student; and leaving a school (drop out) before completing a particular cycle or level of education is also wastage of resources.

Lower repetition and lower dropout rates overall and at each grade level are the indicators of proper utilization of limited resources. It is important to note the particular ways in which Ethiopia calculates repetition rates, and hence calculates dropout rates (MoE,2009/10). 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 vice-versa. The index of the educational wastage is one when the system is absolutely efficient. Nevertheless, and educational system cannot be completely efficient for there are always failures and school dropouts (UNESCO, 2015). The effort to make an educational system efficient and effective therefore limits itself 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, 2002). As wastage (dropout & repetition) in education goes beyond its quantitative efficiency, it affects the provision of quality education. Although these two aspects of wastage seem to reflect the quantitative features, 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 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 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 the wastage “(UNESCO, 2015). These two dimensions of wastage (Repetition and dropout) are, therefore, the centers around which the major theme of this review and the whole work revolves.

2.2 The Effects of Educational Wastage on Schooling

Educational wastage has been a challenge in many countries. Failures, stagnations and drop-outs are stated as the main factors that cause educational wastage. If an individual fails in school or leaves, before obtaining the diploma or the degree, then the investment made does not give commensurate returns, as both finances as well as human resources are wasted. The ultimate goal of every individual is to obtain employment. Well-paid jobs require good education, hence, if a person is not educated and do not possess the degree, then he may experience problems in finding employment opportunities. Educational wastage has three components, failures, grade repetition and dropouts. There are various forms, through which it takes place, failure of the system to provide universal education, failure to recruit the students within the system, failure to retain students, incapability on the part of the system to set appropriate objectives and inefficiency in the achievement of objectives. Repetition of classes is also one of the important features of educational wastage (Samuel, 2017).

Individuals are required to experience many detrimental effects of educational wastage. These include, unemployment, less income earnings, increase in criminal and violent acts, public dependency and deprived health conditions. This problem is prevalent not only in Ethiopia, but in other countries of the world as well. For instance, in the United States of America, the dropout in high schools has been intense (Samuel, 2017). When individuals are well educated and they experience problems in obtaining good employment opportunities, then in most cases they remain unemployed for a considerable period. This makes them frustrated and depressed, hence, it is vital for the individuals to make use of education by being engaged at least in some honorary work. In this way, they are able to make use of their educational skills and abilities in some manner for the welfare of the community.

2.3. Wastage in education, causes and forms of its existence

The major challenges hindering educational development practices in the district are problems of good governance, poor educational management (G/Hawariya Haile, 2016). As GJHSS (Global Journal of Human-Social Science: Linguistics & Education), Educational wastage exists in a number of forms. Educational wastage exists through five major forms. These are

1. Failure of a system to provide universal education,
2. Failure to recruit children to the system,
3. Failure to hold children within the system,
4. Failure of the system to set appropriate objectives
5. Inefficiency in the achievement of objectives (GJHSS, 2015) .All forms of the existence of wastage listed above are not, however, mutually exclusive; rather they are related to another. The existence of wastage in one of its forms, if measure is not taken to reduce it, it will ultimately allow a room for another form of wastage that may ultimately 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, that has been hampered by an increasing drop-out and repetition rates or low performance level (Halper,1986: 193).

2.4. Wastage in Education and its Magnitude in Ethiopia

As Deribe et al sited in GJHSS (Global Journal of Human-Social Science: G Linguistics & Education) Like other developing countries, primary schools in Ethiopia have shown a rapid expansion since 1974. With this rate of development, however, the percentage of Children who reach the final grade of the primary education cycle is low (GJHSS, 2015). 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 drop-out) is an “in destructible something.

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 and expected to be less expensive by properly utilizing its scarce resources for educational development (Kobes,

1975, MoE, 2009/10). But many studies have revealed that educational wastage is a pressing problem in the developing countries (UNESCO, 2015, Simmons, 1980, Thomas, 1975; Brimer and Pauli, 1971,; and Adams and Bjork, 1969). Besides low rate of school participation, the number of pupils who complete their education is decreasing.

The fore-going discussion show 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 (Brimers and Pauli, 1971). These pieces of evidence suggest that the problem of educational wastage is still graver in the developing countries. The underlying reasons for this have been identifying 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, repetition, 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 interaction of both; for example, children from poor and uneducated families encountered 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.

However, what has to be noted is that those 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 is to show why the phenomenon of wastage is more serious in developing countries such as Ethiopia than in the developed countries.

xxx

2.5. Dropout and Repetition

2.5.1. Dropout

(UNESCO, 2015), defines the term drop out as leaving a school before completion of a given stage of education or some intermediate or non-terminal point in level of education. The basic symptoms of wastage, in particular dropping out depend on the type of education system. It is defined in relation to the characteristics of the various educational systems. The duration of compulsory schooling and the periods between the ages into grades varies between countries of different educational systems.

Based on these variations a drop out is here defined as a pupil who leaves school before the end of the final year of the educational stage in which he/she is enrolled. This means whether a pupil completes the compulsory education with a minimum age or not once he/she leaves the school before the end of the cycle is considered as a drop out (UNESCO, 2002). This definition also applies for those countries, which do not have compulsory education laws. The term drop out is much related with the education cycle in which the pupil is involved. Therefore leaving school after the completion of a compulsory cycle without going on to the secondary cycle does not constitute drop out, because not all national education policies allow all pupil to go to the next cycle. Some portion of the pupil remains at the first cycle. Then, according to Brimer and Pauli (1972: 15), drop out at the primary level is virtually not existent in industrialized countries because they enforce compulsory education laws. In the less developed regions, however, early drop out is a major problem. There are three categories of theories that explain why drop outs abandon school; categories are “Drop-out” “Pullout” or “Push-out” theories (Glennie and Stern, 2002: 10). “Drop out” refers to attributes of the individuals that precipitate early school departure. Factors like readiness and attitude of the student, health problem, and mal nutrition are examples of drop out theory. This theory, consider student personal characteristics as factors for dropping out of school. Lessanu (2004:30). Employment opportunities are also examples of pull out factors that attract students to drop out of school.

School factors dispirit students from continuing with their education. Unattractive school condition, policy is some of the examples that can act as push factor to students. The tendency for students to drop out is also associated with their school experiences like: dislike of school: Low academic achievement: retention at grade level: a sense that teachers and administrators do

not care about students; and inability to feel comfortable in a large, depersonalized school setting (U.S. Department of Education, 1999:31). In school factor that deter the attendance of students can be categorized as “push out” factors. The first and most important reason for dropping out, especially in the developing countries is the, pull out” factor. The need for having a time that would be used to sell the labor and in return get a means of subsistence in which the family or the individual would depend on has contributed to a greater proportion of school drop outs, Lessanu, (2004: 31).

Many studies have shown that, among other things, education systems in the developing countries are characterized by high dropout rates and poor pupils” performance (Carnoy, 1982). The problem is enormously widespread in many developing countries while it seems significant in the developed nations. Similar research findings also revealed that school drop-out is a serious and prevalent problem especially in low income countries (World Bank, (2010) where education is less developed and resources are scarce (Bray, Clarke and Stephen, 1986).

The phenomenon of dropping-out is a severe problem for the individual and the society. The individual will remain with low academic skill 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 sphere (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 Glanman, 1982).

2.5.1.1. Drop-out Rates by Grade

Various studies show that drop-out rates are higher in the first level of education, especially in developing countries. For example, Brimer and Pauli reported that in thirty-six of the forty-six countries of Africa, Asia and Latin America the highest drop-out rate were observed in the first level (1971). The Chileans case also reveals that drop-out rates were higher in the first two grades of the lower educational level (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 secondary education.

2.5.1.2. Drop-out Rates by Sex

Sex difference in drop-out rate is another area which has attracted the attention of researchers and policy makers. Basically, females' participation in education of the developing countries is lower rate 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 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 urban schools and 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 (World Bank, 2010; Bjerer, 1969).

An earlier study in Ethiopia (Kyapaghian, 1960) recorded higher drop-out rate among girls while the other study which was conducted in by MoE,(2009/10) showed that quite opposite result. Although there seem to be inconsistency in the results presented above, the time factor has to be considered. But more recently, Anbassu and Junge (1988) and the report from the Ministry of Education (MoE, 2009/10) recorded that the drop-out rates are higher among females than among males.

2.5.2. Repetition

Repetition is defined as "a year spent by a pupil in the same grade and doing the same work as in the previous year" Brimer and Pauli (1971: 18). In terms of cost, repetition increases education cost, because repeaters reduce the intake capacity of the school and prevent other children from entering school or causes overcrowding of classrooms. Repetition is one of the constraints of developing countries. Psacharopoulos and Wood hall (1985: 209). Another form of school wastage occurs when occurs when pupils have to repeat grades. In developing countries especially, this is often a prelude to drop-out (UNESCO, 2015). School systems around the world differ widely in their policies toward pupils who fail to master the work appropriate to a particular grade level. In a majority of countries, both developed and developing, educators require such pupils to repeat the grade in order to give them additional time and material that

they failed to master the first time around. The practice is typically applied in grade 1 out of a conviction that it is important for pupils to get off to good start in their education.

However, repeating the final primary grade is also widespread in countries where admission to secondary school is based on passing an end-of-primary school examination. A minority of countries appear to believe that repetition creates more problems than it solves and therefore follow a policy of automatic promotion. Accordingly, pupils proceed to the next grade even when they have not mastered the material of the previous grade. Some educators argue that pupils who did not learn something the first time are not likely to benefit from repeating the same academic year. A wiser policy, they argue, is to provide such pupil additional assistance and allow them to proceed to the next grade with their peers, (World Bank, 2010)).

2.5.2.1. 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 boys. Contrary to this, other research findings showed that the level of repetition was higher among girls (UNESCO, 2002). Similar findings were recorded in sixty-six of the ninety countries studied around 1980. The study made recently has also revealed lower repetition rates among girls than among boys in all countries studied in Latin America, the Caribbean and Europe (UNESCO, 2015). But the same study has shown that the percentage of repeaters in the majority of Africa countries was higher among girls than boys. This confirms the concentration of Bray, Clarke, and Stephen (1986). The percentage of repeaters in Ethiopia is also found higher among girls than boys (MoE, 2009/10; UNESCO, 1990).

2.6. Efficiency and coefficient of efficiency

The concept of “efficiency” as used by economists, refer to the relationship between the inputs in a system and the outputs or outcomes from the system. However, according to (Yaikob, 2014), measuring the efficiency of education system is problematic due to difficulties in defining and measuring educational outputs and outcomes as well as quantifying the relationship between inputs and outputs and/or outcomes. Any way an education system is considered to be efficient if it produces the desired outputs or outcomes at a minimum cost. The desired quality of output is measured in terms of a maximum number of pupils who have acquired the necessary knowledge and skill as prescribed by the society.

Therefore, as stated above an education system is considered to be efficient if for a given input of resources (human, financial and material) is maximized the desired output both in quantity and quality. The coefficient of efficiency is the ratio of the optimal number of pupil-years required with no repetition and dropout, to produce a number of graduates from a given cohort which is expressed as a percentage of the actual number of pupil-years spent to produce the same number of graduates. It measures the impact of dropout and repetition combined in relation to graduates. The higher the coefficient of efficiency the better and when the rate is 100 or close to 100 there is an efficient education system.

2.7. Factors behind Low and High Completion Rate in Education

As indicated above, many children who enter the school system do not complete cycle in the given time frame. This is becoming one of the challenges of achieving UPE goals at 2015. And many factors could be behind low completion rate secondary schools. According to (Abagi, et al, 1997), the major factors that affect low completion rate at secondary school could be divided into three or four categories. These are education policies and institutional processes, school-based factors, household, community based factors, and student based factors. Even though their impact varies from school to school, the above categories of factors low completion rate have caused inefficiency in all education levels. Thus, since low completion rate is serious wastage in a system it must be solved as immediate as possible.

2.7.1. Education Policies and Institutional Process

Under these categories of factors one can evaluate insures such as policies or budget allocation, cost of secondary education, political will, poor management, monitoring and feedback (Abagi, 1997). The budget allocated to education at secondary school per a child the cost of education which might be incurred by government or parent; poor management monitoring, and evaluate major impact on internal efficiency of schools. For instance, if burden of the cost of education is shifted to parents, due to poverty level of parents they might be unable to finance their children's educational cost. For example, in Kenya as cost-sharing policy is introduced in primary school since, in 1998, this shift in policy has made parents and community unable to support their children of school inefficiency (Bishop, 1989).

Any way this policy factor does not seem an influential factor in our country, because cost sharing is not introduced at general primary and secondary schools. Government allocates a

block grant to each student. In addition to this, the policy related factors are like, student textbook ratio, student classroom ratio, teacher student ratio policies affect the policy on teacher's salary, and policies on school feeding program etc also affect school internal efficiency.

2.7.2. School based factors

Several school –based factors have been cited as being responsible for high or low completion rates among primary and secondary school. Pupils in most African countries among these the main ones are school environment and location, access of educational facilities and material, classroom dynamics (use of more efficient method), teachers qualification and attitudes toward their work and pupils and overloaded curriculum, are the main areas (Abagi,1997). Therefore, one of the most important factors that enable us to determine high or low internal efficiency is the organization and structure of the school. According to Simmons (1986:45), school based factors include school facilities, teacher characteristics. School management regulation and guidance and the classroom dynamic or the interaction of the student, teacher and the curriculum are the dominant factors.

2.7.3. School physical Resource and Facilities

school physical resources and facilities include school buildings, furniture, equipments of laboratory pedagogical center, library, textbooks etc. Many writers have tried to study the effect of school physical resources and facilities on academic achievement of students in particular and internal efficiency in general. For instance, (Shiuindu, 1999:17) indicates that shortage to physical resources and facilities at school level cause wastage of education, by raising the repetition and dropout rates. Similarly as stated in Harrison and Hanusheck recent review studies on the relationship between facilities and student achievement in developing countries 22 out of 34 studies showed positive relationship. However, three studies showed inverse relationship and nine studies were found that it was insignificant (Teferi, 2010). This review of the study indicates that the school facilities and academic achievement of students are associated directly. In other words, other things being equal, as school facilities increase the number of good achievers or children increases, and vice versa. It is true that many educationalist give emphasis for the availability of school facilities, which affect the quality of teaching poor school facilities may affect students' performance. In some cases it has more impact on girls than boys. The effect is clearly seen when girls reach puberty, they need seats permanently and also separate

latrine. The non existence of these facilities is likely to be contributing factors for girls' dropout (Rose, 1997:6). In addition to this sexual harassment and school location and distance affect girls' dropout.

2.7.4. School Location

School location has been described as one of the factors of rising school dropouts and repetition rates. Distance to school and danger to travel are major problems categorized under this factor. This problem is mostly felt in rural schools than urban schools. It also affects girls than boys. For instance as one study conducted in Egypt reports," among enrolled girls who lived 2km from their school were achieved 8% lower than that girls who lived 1km from their school. Whereas for boys who lived farther away was 4% lower" (World Bank, 1990:34-35). In Ethiopia as great proportion of the population is living in scattered settlements of rural area this factor seems critical factor for internal efficiency of primary school.

2.7.5. Teacher's characteristics

Generally the qualities of teaching staff in schools affect the internal efficiency of schools. The characteristics that are related with quality of teachers include teachers attitude, qualification, experience, motivation, classroom management and their interaction with students' academic achievement in particular and school repetition rate in general (Bishop, 1989: 74). For instance the effect of teachers input on cognitive achievement was studied by many researchers and the summary of the results of the study are reported as follow. As Harison and Hanucheck in (Teferi,2010) summarized 96 studies conducted in developing countries they reported that among 63 studies conducted on the relationship between teacher education and students' academic achievements 35 of them showed positive relationship. However, the studies were found to have insignificant effect. In contrast the above mentioned fact (Simmons and Alexander, 1986: 90-91). Reviewed many research findings and stated the following conclusions:

- Teachers' certification and academic qualification are not important at primary and lower Secondary grades.
- Teachers' experience and salary tends to have positive influence on academic achievement.

Smaller teacher-pupils ratio has little effect on students' achievement. Similarly studies carried out in Asian countries confirmed that schools which have increase class size had yet shown

reduced wastage in terms of drop out and repetition (Bishop, 1989). On the other hand, few class observations in Kenya indicated that there are cases where teachers' negative attitudes "push" pupils, especially girls, out of schools. These pupils are those who are neglected, abused, and miss-handled and sent out of class during teaching learning periods.

The results of all the above cases are absenteeism, hate of schooling, poor academic performance and non-completion of the education cycle (Bishop, 1989). In addition to this sexual harassment and pregnancies is found to affect girls' participation and repetition rate in education. Finally, in the sphere of teacher's characteristics low teacher motivation is one of the most important causes for wastage in education. Low teacher motivation leads to teacher absenteeism and attrition, which are the prominent problems of developing countries. Teacher absenteeism reduces students' learning time, while teacher attrition increases costs of teacher training.

2.7.6. School Management System and Practices

School management is one of the important factors that affect internal efficiency of schools. For instance the school management has an important role in improving the learning capacity of learners, because they coordinate teachers in staffing standards teaching the curriculum in a relevant way, and providing additional support (Susy, 2008). However, there are several factors that influence school management practice namely the top management, qualification of head teachers, qualification and training of school teacher, and most importantly the commitment and initiative taken by the head teachers and teachers (Kathmandu, 2001). In order to improve the status of school management many countries have adopted and emphasized on decentralized management system. School level decentralized management is believed to improve school efficiency.

2.7.7 Student Related Factors

Student characteristics are among most important factors that affect internal efficiency of schools. In a class room due to individual difference and background students come to school with different characteristics that affect the students' level of participation and achieving in education (Teferi, 2010). For instance due to this difference students come up with different physiological and psychological makeup and as a result of this students attending the same class

are considered to have difference in personality such as physical, mental, intellectual, moral and motivational factors that in turn have a contribution to educational wastage different levels.

In light of the above stated facts and according to Kathmandu (2001) among many student characteristics that affect internal efficiency includes:

- Variation in sex and age group,
- Difference in socio- cultural background such as disadvantaged community,
- Difference in economic condition
- Parental attitude towards education in general and girls“ in particular
- Parents educational awareness and literacy level
- Opportunity cost of child labor and house hold work
- Difference in childrens’ living location (in remote and rural area)
- Vulnerability such as orphans and those affected by HIV/AIDS.

Addition to these, refugees, internally displaced children that by conflict and natural disaster are victims of repetition and drop out which in turn affect internal efficiency of schools. Eggen and Kauchack (1992: 1978) explained that the students with the following characteristics are found to be either under achievers, slow learner or children at risk and students“ characteristics that lead to inadequacy and grade repetition are: Low motivation, Low Self-esteem, Dissatisfaction with their school environment, Poor school attendance, and lack focus on their task and not respecting school regulation.

2.8. Parent and Community Related Factors

In developing countries, like Ethiopia, there are many reasons why parents or the community discouraged to send their children to school. Even though many parents managed to send their children and made them enrolled in schools but in the mean time those enrolled students become drop outers or repeaters. According to (Abagi, 1997) house hold or community based factors that affect completion rate in education includes: House hold attitudes to education, Opportunity cost of education, Socio-cultural factors and traditions (example, early marriage), Gender issues, socialization and religious factors.

Generally parents' economical, socio-cultural, religious and educational background affects the internal efficiency of schools. According to Suzy,(2008:13-15), Factors contributing to repetition in particular and internal efficiency of sub-Saharan African include the following: The cost of schooling, remoteness of the school, illness and malnutrition, lack of sanitation blocks at school, the need to work, limited access to secondary schooling, quality and relevant of schooling instructional time in schools and language of instruction.

2.9. Some Effective Methods for Improving Efficiency

The causes of school wastage are many in number, but they can be fall into general categories. These are causes of school wastage rooted in the overall social and economic environment and those stem from the way school system itself is organized and operates (Teferi, 2010) Social and economic forces are largely beyond the control of the educators but may be influenced by public policies in areas such as health, transport services and labor laws (Ibid).

However, educational officials can readily address certain factors contributing to school wastage. For instance, studies in different countries have shown that school wastage correlates with several economic, social, educational and demographic variables (Shiundu, 1999). Generally, countries with similar social incidences sometimes report quite different pattern of repetition while countries quite different level of development tend to have dissimilar level of drop-out (UNESCO,2015).

Thus, according to (World Bank, 2010)), some of the general mechanisms used to reduce school wastage include the following:

2.9.1. Lowering the Cost of Schooling

Even when public schools are ostensibly free, parents must bear various direct costs to educate their children. Often they must purchase school supplies and text books, while school uniforms may be a source of pride for pupils and their families, they can represent a major cost for parent with limited means. Developing countries frequently imposed de facto tuition fee charges in the form of fees for registration, examination and other services. In many cases these, user fees" total money times the amount the government's expenditure per pupil.

Lack of proximity to school is an important cause of wastage, especially for younger children in rural areas who need a school close to their homes. Some countries are overcoming this obstacle by setting up community schools or „branch“ or „feeder“ school“ connected to established schools even though these small schools often can offer only the first few grades of secondary schools, they can have a positive impact on access, especially for girls.

2.9.2. Making Better School Facilities

A number of countries, such as the Philippines, have found that school attendance can be improved a wastage reduced by organizing school calendars so that pupils in rural are not expected to attend school during planting and harvest seasons when their families need their labor. Similarly, the hours of the school can be set to take into account of the fact that some pupils, especially girls, must perform household chores.

2.9.3. Improving pre-Service and in service Training

Numerous studies have established that skilled teaching has a strong positive impact on pupil achievement. For example, a recent study in rural Pakistan found that investments improve teacher quality and increase student exposure to teachers are likely to have high returns in schooling effectiveness than those that improve physical infrastructure and equipment. Another recent large-scale research project in the United States found that the wide disparities in achievement between black and white pupils attending different schools were almost entirely accounted for the qualifications of teachers. But improving the quality of teachers training requires more than imparting new pedagogical techniques.

2.9.4. Making Educational Materials More Available

Teaching aids, including textbooks, are scarce in many schools in developing countries. Faced with inadequate budgets that must cover teachers“ salaries first, many ministries of education have little funding left to spend on textbooks and supplies. Numerous studies have demonstrated that the availability of textbooks is one of the major contributors to effective learning. xxx

2.9.5. Closing the Gender gap

Last but not the least, attaining the goal of Education for all requires the gender gap in primary education to feed secondary education. Schooling that characterizes most developing countries. To do so, it is necessary to understand the causes of the gap. Various measures have proved effective in increasing girls' enrollment, such as waiving or reducing school fees for girls, supplying free textbooks, providing stipends for girls, offering flexible school hours and establishing childcare centers for the young siblings of girl pupils. To encourage the enrollment of girls, programs in Pakistan and Niger give girl pupil a take-home food ration. Such incentives tend to encourage regular attendance and reduce drop-out. In some countries, the location of schools and their physical facilities influence girls' access to education. xxx

Chad, Pakistan, Senegal and Yemen have made special efforts to build new classrooms for girls. Similarly, in some rural areas and traditional communities girls' enrollment tends to increase when there are women teachers in the school. In the long term, education itself can help close the gender gap. Curricula that convey positive images of girls and women contribute to removing gender biases and harmful attitudes towards women. Educated women are better equipped to exercise their rights and educated men are more considerate and ready to regard women as equals. Enlightened public policy can hasten reaching a critical mass of educated men and women who truly understand the importance of educating their sons and daughters (World Bank, 2010) of wastage is not yet over-come such a study would be more important at primary and secondary level than at higher educational level.

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

3.1 Design of the Study

The main purpose of this research was identifying the problems and magnitude of education wastage in secondary schools of North Shoa zone Hidabu Abote woreda. To achieve this purpose a descriptive survey research design was employed. The rationale behind the selection of this study design was twofold. First, the study involved the survey of the key challenging factors for assessment of wastage in each sample secondary schools. Secondly, there were prediction on how to eradicate the educational wastage of secondary schools of the zone based on the findings of the study.

3.2 The Research Method

As to Kothari C, research in education and other fields divided into two main parts, *qualitative and quantitative* approaches. *A quantitative research is a type of research that explains phenomena by collecting numerical data that are analyzed mathematically.* In contrast to this; *Qualitative approach to research is concerned with subjective assessment of attitudes, opinions and behavior* Kothari C, R (2004).

On the other hand, in addition to the above two approaches the mixed *method approach* is usually forwarded by different scholars as the third option. For example, as Creswell, J. a research design can be either qualitative or quantitative or mixed methods. A **mixed method**, there for, is the third paradigm in which the researcher attempts to carry out qualitative and quantitative methods simultaneously and both with the same purpose(s) (Creswell, J.W.2003).

Therefore, in this research, the researcher applied the mixed methods. The main reason for using this approach was to get the advantages of the combination of the two approaches.

3.3. Sources of Data

Primary data were collected from the sample 9-10 secondary schools of Hidabu Abote woreda principals, teachers and students of the study they could provide relevant information to understand the problem under study. In addition to this, various recorded documents with respect to wastage in education were used from the sample schools, and the woreda education office.

3.4 Sampling and Sample size

In order to determine the sample and sample size of the study, two types of sampling techniques were used. The first one was the purposive sampling. Accordingly, from the total four secondary schools containing grades 9-10 in the target woreda, two of them (namely Yaya Ejersa and Amaraftin, secondary school) were selected as sample schools using purposive sampling. Purposive sampling is a sampling technique by which the researcher purposely selects participants from the population. The second one was simple random sampling. The simple random sampling was employed to select participants from teachers and students of the sample schools. There are 450 students and 78 teachers in these sample schools. Therefore, from the total 450 students, 100 of them (50 males and 50 females) and from the total 78 teachers, 30 of them (15 male and 15 females) will be selected using simple random sampling to fill questionnaires. Moreover, the directors and vice directors of the sample schools will be included to the participants for interview by the help of availability sampling. This is because; availability sampling helps to include all the available participants when population is very small.

3.5 Summary of Participants

No	Sample	Population	Sample size	Percentage	Sampling technique used
1.	Teachers	78	30	38%	Simple random sampling
2.	School principals	4	4	100%	Availability Sampling
4.	Students	450	100	22%	Simple random sampling
	Total	532	134	25%	

Table 1: Summary of population and sample size

3.6. Procedures and Instruments for data collection

3.6.1. Procedures

This study has its own procedures in order to keep the sequences of the tasks that took place in the form as stated below. The procedures carried out to describe the existing status of educational wastage in the sample schools of North Shoa zone, Hidabu Abote district has the following procedures: first relevant literatures were reviewed in order to relate the study with what was said or done previously by the scholars. Second, appropriate data collecting tools were identified. Third, the tools were administered to 10 non sampled participants. , and the data was collected, presented, analyzed and interpreted and finally a report on the study was prepared.

3.6.2. Data collection tools

The following tools were employed to collect data for the study. The study used both quantitative and qualitative data and the data that gathered by the help of instruments namely, questionnaires, interview and document review. Moreover, the questionnaires were pre tested.

3.6.2.1 Questionnaire

As Roger, S. and Victor, J. (2006) questionnaires can enable the researcher easily collect data from wide range of participants. This was the main reason why the researcher of this study decided to use questionnaires. For this research, closed ended **Likert scale** question for teachers and students, were developed in English language and translated to local language (Afan Oromo) with the help of language teachers to avoid confusion and misunderstandings.

3.6.2.2. Interview

In order to collect additional data to the questionnaire, the researcher used interview. In this case, four principals were interviewed to gather detail information. For the sake of this five semi-structured questions, which were almost similar with the teachers' questionnaires, were prepared and asked each respondents.

3.6.2.3. Document Analysis

In order to find the facts in the study area, the researcher will analyze different documents, such as students' roster, mark list, attendance paper, students' enrollment reports, etc. Hence, the analysis will be done based on the information obtained from the documents. This is done mainly to identify the of class repetition and rate dropouts in the sample schools..

3.6.3. Pilot Study

First of all, a pilot study was carried out before the main study on 10 participants (6 male & 4 females). They were selected using simple random sampling. Therefore, in order to achieve high degree of validity and reliability, the questionnaires were administered to the pilot study samples. The samples were provided the Afan Oromo version. They were asked to fill the questionnaires and to give their comment on the layout, clarity of instructions, as well as the wordings of each question items and then the questionnaires were collected back for analysis and improvement.

Then, the SPSS (Statistical Package for Social Sciences) version 20 was used to determine **reliability and validity** of the questionnaire. SPSS is a set of related computer programs for storing, analyzing and reporting on statistical results (Gorard S, 2004).

The main purpose of the pilot study was to check the reliability and validity of the instruments designed for the study and to obtain useful insights for the main study. The instrument pretested was questionnaires.

Then, based on the feedback some improvements were made in the wording order and appropriateness to eliminate ambiguities. Moreover, a few redundant and irrelevant items, which were identified by the participants, were excluded and the questionnaires are revised accordingly..

Finally, the actual questionnaires were administered to the samples of the study and collected back for analysis.

3.6.4 Results from Pilot Study

Finally, the first 10 items of the revised questionnaires were tested for reliability using SPSS version 20 and the result was presented as shown in table 1 below.

<i>Teachers and Principals Questionnaire</i>			<i>Students' Questionnaire</i>		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	No of Items	Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	No of Items
0.74	0.79	20	0.68	0.75	15

Table 2. Reliability Statistics in Cronbach's Alpha

As it was depicted in the table, the reliability for teachers and students' questionnaires were 0.74 and 0.75 respectively in Cronbach's Alpha. Cronbach's Alpha is the most popular method of examining reliability. The calculation of Cronbach's Alpha is based on the number of *items* (i.e. the number of questions on a questionnaire) and the average inter-item correlation. Cronbach's Alpha ranges from 0 for a completely unreliable test (although technically it can dip below 0) to 1 for a completely reliable test (Perry R. et al, 2004).

3.9.2 Classifying and Categorizing Data

In this stage, data gathered through the questionnaires, interviews and document analysis were organized in a systematic manner. Reading, re-reading, coding the data and facilitating the identification of major categories were major activities. In addition, the data summarized. Assessment of Educational Wastage in Oromia Regional State North Shoa Zone Hidabu Abote Secondary Schools was accompanied by the table and figure (visual documentation), to aid understanding. All the different ways was represented the data, become the basis to interpret the analysis.

3.13 Ethical Issues

Marczyk & De Matteo (2005) identified four main ethical issues that need to be addressed in the process of undertaking a research. These are: protection from harm, informed consent, right to privacy, and honesty with professional colleagues. Accordingly, the researcher was firstly, tried to not to expose participants from any physical or psychological harm. Secondly, requested their consent and participated only on a voluntary basis. Thirdly, respected the participants' right to privacy and reported the findings in a complete and honest fashion.

CHAPTER –FOUR

DATA ANALYSIS AND INTERPRETATION

4.1 Introduction

Assessment of Educational Wastage in Oromia Regional State, North Shoa Zone Hidabu Abote Secondary Schools. The data for this study was generated through both qualitative and quantitative method. The data gathered through questionnaires and document analysis were analyzed quantitatively where as the data interview was analyzed qualitatively. The raw data was collected through the selected techniques in light of the objectives of the study. The raw data gathered were coded, tallied, tabulated and organized in relation to the types of research questions and nature of data collected. Accordingly, quantitative data was analyzed by using computer software called *Statistical Package for Social Sciences (SPSS)*. By the help of SPSS descriptive statistics such as frequencies, percent, mean, standard deviation and the variance were analyzed.

4.2 Response Rate

The respondents were divided into students, teachers and school principals. The total questionnaires distributed for those samples were 35, with interview guides prepared for four key informants and generally, 134 respondents were involved. All the sampled students and teachers filled the questionnaires and returned it with their response on time. In addition, the interview was conducted with 4 principals successfully.

Analysis of Questionnaires Filled by Teachers

4.3.1 Respondents' Demographic Information

Table 3: Analysis of Respondents' Demographic Information

No	Background information	N	Options	f	%
1	Sex	30	Male	15	50.00
			Female	15	50.00
2	Age	30	25-30 Years	5	16.66
			31-35 Years	12	40.00
			36-40 Years	10	33.33
			41-50 Years	3	10.00
			50+	0	0
3	Educational Level	30	Diploma	3	10.00
			Degree	22	73.33
			Masters	5	16.66
4	Service duration in teaching	30	1-5 years	8	26.66
			6-10 years	7	23.33
			11-15 years	9	30.00
			16-20 years	5	16.66
			20+ years	1	0.33

N=total respondents, f=frequency, %=percentage

Table 3 above shows that half of the respondents (50%) were males and another half were females. On the other hand, as we can see in the table, from the total samples 12 (40%) were aged between 31-35years and 10(33%) were aged in between 36-40 years(see chart-1).

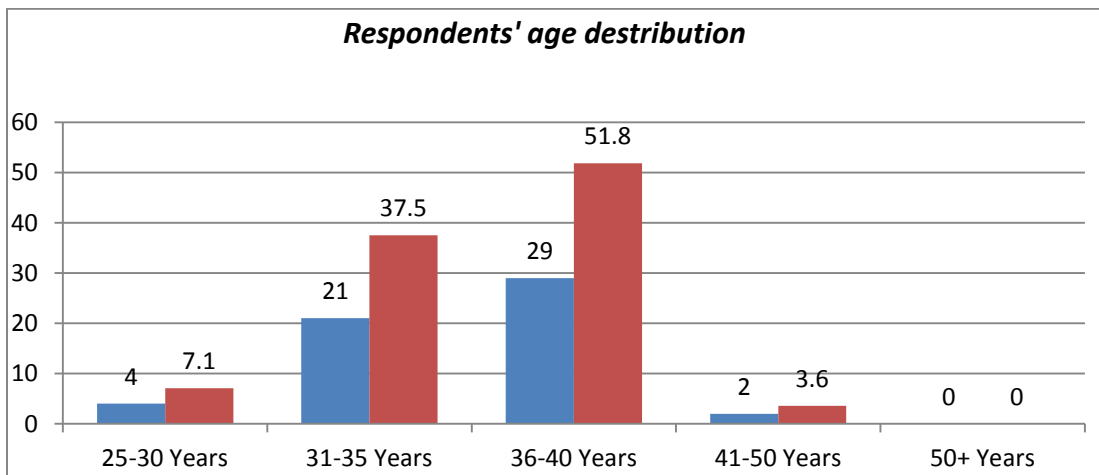


Chart-1 Respondents' age distribution

When we consider educational status of the respondents, majority number of them, 22(73.33%) were first-degree holders while 5(16.6%) masters degree qualified and the remaining few

percentage was diploma holders. This figure signifies that majority of the teachers in the sampled schools did not fulfill the minimum qualification requirement of EEDR(Ethiopian Educational Development Roadmap(2018), which says secondary school education should be taught by masters degree teachers.

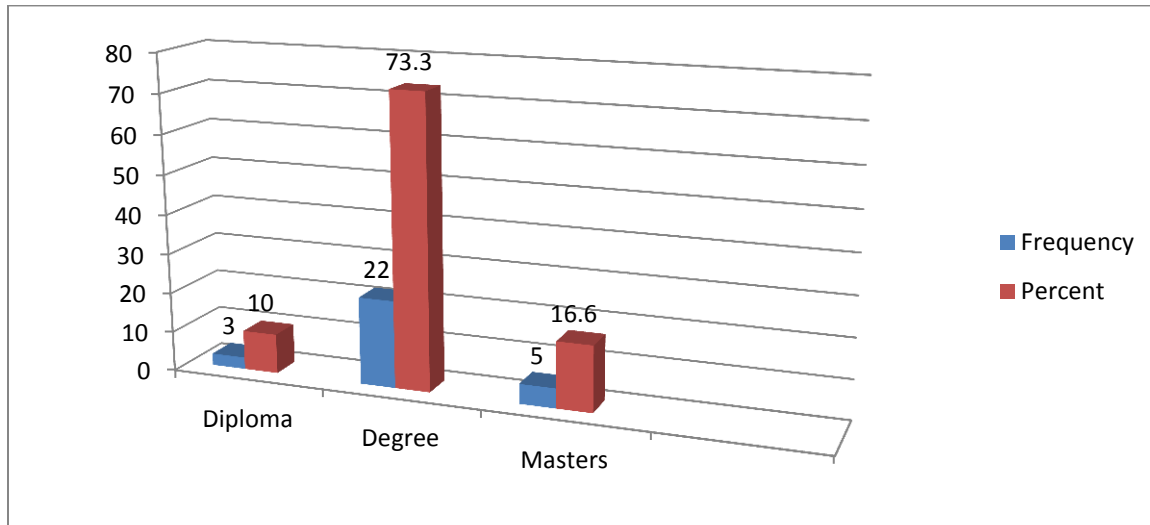


Chart 2-Respondents educational status

More importantly, 9 (30%) had 11-15 years teaching service and 8(26.60%) had 1-5 years teaching services. 7(23.3%) of the respondents, however, had in between 16-20 years experience in teaching.

4.3.2 Analysis of actual questionnaires filled by teachers and students

The following tables, tables 4-9 shows response analysis of questionnaires filled by teachers and table 10 contains response of students' questionnaire. The respondents were asked to rank to what extent the given items cause education wastage. The degree of the influence was given as *Very High, High, Moderate, Low, and Very Low*. Then the analysis were performed and presented as follow.

Table 4 Teachers' Response concerning personal factors for education wastage								
No	Items	N	Options	f	%	Mean	Std. Dev.	Variance
1	Lack of interest	30	Very High	19	63.3	1.73	.785	.616
			High	10	33.3			
			Low	1	3.3			
			Total	30	100.0			
2	Poor academic performance (fear of failure)	30	Very High	21	70.0	1.67	.711	.506
			High	7	23.3			
			moderate	1	3.3			
			Low	1	3.3			
			Total	30	100.0			
3	Frequent absenteeism	30	Very High	19	63.3	1.67	.884	.782
			High	11	36.7			
			Total	30	100.0			
4	Health problem/sickness	30	Very High	21	70.0	1.63	.809	.654
			High	7	23.3			
			Low	2	6.7			
			Total	30	100.0			
5	Lack of self confidence	30	Very High	26	86.7	1.53	.507	.257
			High	4	13.3			
			Total	30	100.0			
6	Lack of adequate effort	30	Very High	17	56.7	1.67	.758	.575
			High	9	30.0			
			moderate	2	6.7			
			Low	2	6.7			
			Total	30	100.0			
7	Misconduct	30	Very high	20	66.6	2.03	1.033	mj
			High	10	33.3			
			Total	30	100.0			
						11.93	0.78	0.64

Items number 1-7 in the table 4 above shows teachers' response concerning personal factors for education wastage. For instance, for item number one that says "Lack of interest to education could bring education wastage", 19(63.3%)(replied that it very highly influence while 10(33.3%) said that it highly influence education wastage. Only one (3.3%) however, replied the replied it had a moderate influence. There for, based on this evidence, we can possibly conclude that lack of interest had a negative impact on education. The second item was about to what extent poor academic performance of students could be the cause for education wastage. As a

result 21 (70%) agreed that its effect was very high while 7(23.3%) said it had high effect. Item number three says ‘to what extent frequent absenteeism could cause education wastage.’ and all of the respondents 30(100%) agreed that it had high influence. In the same way for item number four, almost majority of the respondents 28(93.4) thought that health problem was another factor that highly caused education wastage. In similar vein, for items number six all the respondents 30(100%) replied that lack of self confidence(less determination) may create education wastage. In addition to this for items number 5 and 6 that majority of the respondents agreed that lack of adequate effort and misconduct could highly bring education wastage. The central tendency (eg. mean score) 1.70 and the dispersion (eg. Std. deviation and variance) for all items in table four above were and 0.78 and 0.64 respectively. As to Eggen and Kauchack, (1992: 1978) the students with the following characteristics are found to be either under achievers, slow learner or children at risk and students’ characteristics that lead to inadequacy and grade repetition are: Low motivation, Low Self-esteem, Dissatisfaction with their school environment, Poor school attendance, and lack focus on their task and not respecting school regulation.

Table 5- Teachers' response concerning Family Related Factors to education wastage

N o	Items	N	Options	f	%	Mean	Std. Dev.	Variance
1	Lack of awareness about value of education	30	Very High	19	63.3	1.43	.679	.461
			High	10	33.3			
			Low	1	3.3			
			Total	30	100.0			
2	Negative attitude toward value of education	30	Very High	21	70.0	1.40	.724	.524
			High	7	23.3			
			moderate	1	3.3			
			Low	1	3.3			
			Total	30	100.0			
3	Enforcing children to quit school	30	Very High	19	63.3	1.37	.490	.240
			High	11	36.7			
			Total	30	100.0			
4	Home workloads to the pupil	30	Very High	21	70.0	1.43	.817	.668
			High	7	23.3			
			Low	2	6.7			
			Total	30	100.0			
5	Parental illness/death	30	Very High	26	86.7	1.13	.346	.120
			High	4	13.3			
			Total	30	100.0			
6	Disagreement and family divorce	30	Very High	17	56.7	1.63	.890	.792
			High	9	30.0			
			moderate	2	6.7			
			Low	2	6.7			
			Total	30	100.0			
						1.39	0.65	0.46

As it was depicted in table five above teachers responded to factors that are related to family of the students. Accordingly, items number one and number two were concerned with lack of awareness of family about the value of education and negative attitude toward education. To this item, almost all of the respondents, 29(96.6%) agreed that the influence of unawared family about the value of education was very high. On the other hand, items number 3 and 4 were about if enforcing children to quit school for the purpose of home work loads to the pupil causes education wastage. As a result, more than 95% of the respondents confirmed that these problems had significant contribution to educational wastage. Furthermore, items number five and number

six, which state that, the effect of parent illness, disagreements and family divorce on education wastage. Replying to these items, 30(100%) for item number five and 26(87%) for item number six highly agreed that the problems had negative influence on education. The central tendency (eg. mean score) 1.39 and the dispersion (eg. Std. deviation and variance) for all items in table four above were and 0.65 and 0.46 respectively.

6 Teachers' response concerning School related factors to education wastage

N o	Items	N	Options	f	%	Mean	Std. Dev.	Variance
1	Lack of counseling service when facing a problem (at school level)	30	Very High	16	53.3	1.47	.507	.257
			High	14	46.7			
			Total	30	100.0			
2	Shortage of school facilities	30	Very High	10	33.3	2.33	1.213	1.471
			High	8	26.7			
			moderate	4	13.3			
			Low	8	26.7			
			Total	30	100.0			
3	Use of corporal punishment by school personnel	30	Very High	8	26.7	2.33	1.028	1.057
			High	8	26.7			
			moderate	10	33.3			
			Low	4	13.3			
			Total	30	100.0			
4	Suitability of school environment for instructional programs	30	Very High	18	60.0	1.40	.498	.248
			High	12	40.0			
			Total	30	100.0			
5	Content loaded curriculum /heavy curriculum	30	Very High	9	30.0	2.50	1.306	1.707
			High	9	30.0			
			Low	12	40.0			
			Total	30	100.0			
6	Difficulty of language of instruction	30	Very High	14	46.7	1.67	.711	.506
			High	12	40.0			
			moderate	4	13.3			
			Total	30	100.0			
7	Teaching approaches of teachers is dominantly teacher centered	30	Very High	22	73.3	1.27	.450	.202
			High	8	26.7			
			Total	30	100.0			
8	Poor continuous assessment practices	30	Very High	22	73.3	1.27	.450	.202
			High	8	26.7			
			Total	30	100.0			
9	Poor class room management systems	30	Very High	24	80.0	1.20	.407	.166
			High	6	20.0			
			Total	30	100.0			
10	Poor management of the school based student academic support	30	Very High	13	43.3	2.37	1.273	1.620
			moderate	10	33.3			
			Low	7	23.3			
			Total	30	100.0	1.7	0.78	0.74

As it is indicated in table five above, teachers responded to School related factors to education wastage. Accordingly, items number one was concerned with lack of counseling service for

students at school level. To this item, all of the respondents, 30(100%) agreed that the influence of the absence of counseling service was very high. On the other hand, items number 2 and 4 were about shortage of school facilities and unsuitability of school environment for instructional programs. As a result, for the first item, more than 16(53.4%) and for the second one all of the respondents replied that shortage of school facilities and inappropriate school environment had high contribution to education wastage. In addition to this, students were also provided similar questions and almost similar responses were found. As to Rose, (1997:6), the absence of school facilities is likely to be contributing factors for girls' dropout. Furthermore, items number 6-10 were concerned with the impact of content loaded curriculum /heavy curriculum, difficulty of language of instruction, teaching approaches of teachers is dominantly teacher centered, poor continuous assessment practices, poor class room management systems and poor management of the school based student academic support on educational wastage. Hence, responding to these items, more than 90% were confirmed that all these problems had high impact in causing educational wastage. The central tendency (mean score) 1.7 and the dispersion (Std. deviation and variance) for all items in table four above were and 0.78 and 0.74 respectively.

Table 7 Teachers' response concerning socio-economic factors to education wastage

No	Item	N	Options	f	%	Mean	Std. Dev	Variance
1	Absence or lack of support from family	30	Very High	21	70.0	1.30	.466	.217
			High	9	30.0			
			Total	30	100.0			
2	Shortage of food and clothing	30	Very High	18	60.0	1.40	.498	.248
			High	12	40.0			
			Total	30	100.0			
3	Lack of money for school fees	30	Very High	19	63.3	1.50	.731	.534
			High	7	23.3			
			moderate	4	13.3			
			Total	30	100.0			
4	Lack of money for rent house	30	Very High	19	63.3	1.53	.776	.602
			High	6	20.0			
			moderate	5	16.7			
			Total	30	100.0			
5	Lack of money to buy school uniform	30	Very High	11	36.7	2.43	1.223	1.495
			High	2	6.7			
			moderate	10	33.3			
			Low	7	23.3			
			Total	30	100.0	1.6	0.7	0.60

Table 7 above is about socio-economic factors that contribute to educational wastage. Accordingly, items number one was concerned with absence or lack of support from family to students. To this item, all of the respondents, 30(100%) agreed that the influence of the absence of family support was very high. On the other hand, items number 2 to 5 were about the impact of factors such as shortage of food and clothing, lack of money to buy school uniform, lack of money for rent house and lack of money for school fees, on education wastage. As a result, all respondents 30(100%) for items number two and 26(86.6%) for number three, replied that shortage of money and lack of food were high contributing factors for education wastage. More importantly, for these items, majority of the respondents were confirmed that these problems had high impact in causing educational wastage. In addition to this, data gathered from interview question on item number seven (see table 11) confirmed that financial problem was among leading factors in education wastage. The central tendency (mean score) 1.6 and the dispersion (Std. deviation and variance) for all items in table four above were and 0.7 and 0.6 respectively. According to the report of World Bank(2010), more than 75% of children , who quit their education, were due to financial problems.

Table 8 Teachers' response concerning *Environmental factor to education wastage*

N o	Item	N	Options	f	%	Mean	Std. Dev.	Varian ce
1	Long distance from home to school	30	Very High	22	73.3	1.27	.450	.202
			High	8	26.7			
			Total	30	100.0			
2	Suitability of school environment for instructional programs	30	Very High	19	63.3	1.57	.774	.599
			High	6	20.0			
			moderate	5	16.7			
			Total	30	100.0			
3	Cultural impact/ harassment	30	Very High	14	46.7	1.83	.874	.764
			High	7	23.3			
			moderate	9	30.0			
			Total	30	100.0			
4	Influence of peer group	30	Very High	18	60.0	1.53	.776	.602
			High	7	23.3			
			moderate	5	16.7			
			Total	30	100.0			
5	Expansion of gambling houses	30	Very High	21	70.0	1.40	.675	.455
			High	6	20.0			
			moderate	3	10.0			
			Total	30	100.0			
						1.52	0.70	0.50

Table 8 above contains *environmental factors to education wastage*. Accordingly, items number one was concerned with the contribution of long distance from school. To this item, all of the teachers respondents, 30(100%) and all the students respondents, 100(100%) (see table 11 ,item number two) replied that it has high impact on education. On the other hand, items number 2 and number three were about the impact of factors such as Suitability of school environment for instructional programs and cultural harassment on education wastage. As a result, all respondents 25(73.3%) for items number two and 21(70%) for number three, replied that suitability of school environment for instructional programs and cultural impact/ harassment could have high contribution to education wastage. Furthermore, items number four and five were related with the impact of pressure of peer group and the expansion of gambling centers on education wastage. Consequently, all of the respondents for item number four and 27(90%) for item number five confirmed that these problems had high impact in causing educational wastage. The central tendency (mean score) 1.5 and the dispersion (Std. deviation and variance) for all items in table four above were and 0.7 and 0.5 respectively.

Table 9 Teachers' response concerning possible interventions to education wastage problems

No	Item	N	Options	f	%	Mean	Std. Dev.	Variance
1	Improving access to schooling	30	Very High	27	90.0	1.10	.305	.093
			High	3	10.0			
			Total	30	100.0			
2	Improving adult literacy of parents	30	Very High	25	83.3	1.17	.379	.144
			High	5	16.7			
			Total	30	100.0			
3	Making school facilities or making the school more flexible	30	Very High	26	86.7	1.13	.346	.120
			High	4	13.3			
			Total	30	100.0			
4	Improving teaching methods	30	Very High	23	76.7	1.30	.596	.355
			High	5	16.7			
			moderate	2	6.7			
			Total	30	100.0			
5	Enhancing inclusive education or special need education	30	Very High	8	26.7	2.43	1.073	1.151
			High	6	20.0			
			moderate	11	36.7			
			Low	5	16.7			
6	Making educational materials more available	30	Very High	22	73.3	1.30	.535	.286
			High	7	23.3			
			moderate	1	3.3			
			Total	30	100.0			
7	Making awareness creations	30	Very High	16	53.3	1.67	.802	.644
			High	8	26.7			
			moderate	6	20.0			
			Total	30	100.0			
8	Closing the gender gap	30	Very High	24	80.0	1.27	.583	.340
			High	4	13.3			
			moderate	2	6.7			
			Total	30	100.0			
9	Strengthen educational management information system	30	Very High	27	90.0	1.10	.305	.093
			High	3	10.0			
			Total	30	100.0			
10	Strengthen community involvement in schooling	30	Very High	25	83.3	1.17	.379	.144
			High	5	16.7			
			Total	30	100.0			
11	Feeding program	30	Very High	27	90.0	1.10	.305	.093
			High	3	10.0			
			Total	30	100.0			
						1.34	0.50	0.31

Items 1-11, in table 9 above, were teachers' response concerning possible interventions to education wastage problems. Items number one, number three and number six were about Improving access to schooling, Making the school more flexible, and making educational materials more available that were suggested as solutions. Responding to these items, all the respondents, 30(100%) for items number one and number three and 29(96.6%) for items number

six replied that these factors played significant roles in alleviating educational wastage. Similarly, items number two, seven and ten were about improving adult literacy of parents, expanding community involvement in schooling and making awareness creation activities as solutions to the problem. As a result, for item number two and number ten, all the respondents (100%), for number seven 27(80%) of the respondents forwarded that these solutions could play important roles. Additionally, Improving teaching methods, enhancing inclusive or special need education , closing the gender gap , feeding program and strengthen educational management information systems were another alternative solution items that teachers were asked to rank. Accordingly, for items number nine and 11 all of the respondents30(100%) agreed that these solutions were highly important, while for items number four and number eight, 28(93,3%) agreed that the solutions could be good mechanism to reduce education wastage problem. As to (Shiundu, 1999) studies in different countries have shown that school wastage correlates with several economic, social, educational and demographic variables.

Analysis of students' questionnaire

Table 10. Student respondents' demographic information

<i>No</i>	<i>Background information</i>	<i>N</i>	<i>Options</i>	<i>f</i>	<i>%</i>
1	Sex	100	Male	67	67.00
			Female	33	33.00
2	Age	100	15-20 Years	60	60.00
			21-25 Years	27	27.00
			25- 30 Years	10	10.00
			30+ Years	3	3.00
3	Grade Level	100	Grade-9	60	60.00
			Grade-10	40	40.00

As we can see from table 10 above, from the total 100 students 67 of them were males while the remaining 33% were females. This gender variation was due to the variation of number of male student population. Moreover, majority of the students,(60%) were aged in between 15-20 years and 27% were aged in between 21-25 years. Furthermore, 60% of them were in grade nine while the remaining in grade ten.

Table 11. *Students, response concerning factors to education wastage problems*

No	Item	N	Options	f	%	Mean	Std. Dev	Variance
1	Long distance from home to school	30	Very High	95	95.0	1.05	.219	.048
			High	5	5.0			
			Total	100	100			
2	Students' lack of interest in learning	30	Very High	85	85.1	1.22	.559	.312
			High	8	7.9			
			Moderate	7	6.9			
3	Teachers' poor academic performance	30	Very High	97	96.0	1.04	.196	.038
			High	3	4.0			
			Total	100	100.0			
4	Frequent repetition	30	Very High	98	97.0	1.03	.171	.029
			High	2	3.0			
			Total	100	100.0			
5	Lack of counseling service when facing a problem (at school level)	30	Very High	90	90.1	1.10	.300	.090
			High	10	9.9			
			Total	100	100.0			
6	Frequent absenteeism	30	Very High	96	95.0	1.05	.218	.048
			High	4	5.0			
			Total	100	100.0			
7	Financial problems	30	Very High	96	96.0	1.04	.196	.038
			High	4	4.0			
			Total	100	100.0			
8	Use of corporal punishment by school personal	30	Very High	92	91.1	1.09	.286	.082
			High	8	8.9			
			Total	100	100.0			
9	Lack of parental encouragement	30	Very High	85	84.2	1.16	.367	.135
			High	15	15.8			
			Total	100	100.0			
10	Health problem/sickness	30	Very High	88	87.1	1.13	.337	.113
			High	12	12.9			
			Total	100	100.0			
11	Parental illness or death	30	Very High	94	93.1	1.13	.337	.113
			High	7	6.9			
			Total	100	100.0			
12	Involvement in family work	30	Very High	94	93.1	1.07	.255	.065
			High	7	6.9			
			Total	101	100.0			
13	Influence of peer group	30	Very High	95	94.1	1.07	.255	.065
			High	6	5.9			
			Total	101	100.0			
14	Lack of educational materials	30	Very High	89	88.1	1.06	.238	.056
			High	3	3.0			
			Moderate	9	8.9			
			Total	101	100.0			
15	Cultural impact/ harassment	30	Very High	96	95.0	1.21	.589	.346
			High	5	5.0			
			Total	101	100.0			
						1.0	0.3	0.10

Note: The data collected from the students' questionnaire which contain almost similar response with that of the teachers' response, were tried to be included in the analysis of searchers' questionnaire above.

Table 12. Data from document Analysis

Schools	Enrolment (Grades 9-10)									Recorded Absence								
	2009			2010			2011			2009			2010			2011		
	Male	Femal	Total	Male	Femal	Total	Male	Femal	Total	Male	Femal	Total	Male	Femal	Total	Male	Femal	Total
Amaraftin	120	88	208	250	89	307	256	96	352	122	76	198	155	58	213	89	40	129
Yaya Ejersa	241	103	344	252	215	354	330	180	510	224	109	333	160	53	213	130	76	206
Total	361	191	552	502	304	661	586	276	862	346	185	522	315	111	426	219	116	335

Table 13. Grand Total Enrolment and absenteeism (2009-2011)

Schools	Enrolment			Absenteeism			Percentage of Absenteeism
	Male	Female	Total	Male	Female	Total	
Amaraftin	626	273	899	366	174	540	60.0
Yaya Ejersa	1079	498	1577	514	238	752	47.68
Total	1705	771	2476	880	412	1292	52.18

Source: H/ Abote woreda education office (2012)

Table 14. Rate of Dropout and Repetition 2009-2011

Schools	Drop out						Repetition					
	2009		2010		2011		2009		2010		2011	
	N	%	N	%	N	%	N	%	N	%	N	%
Amaraftin	38	18.2	33	10.7	37	10.5	36	17.3	34	11.0	37	10.2
Yaya Ejersa	41	11.9	45	12.7	48	9.4	25	7.2	32	9.0	39	7.6
Total	79	12.3	78	11.8	85	9.8	61	11.0	66	11.0	76	8.8

N= Number of dropouts/repeaters, %= percentage of dropouts/repeaters

The above table (table 13) shows the rates of drop out and repetition. Consequently, the rates of drop outs for the year 2009, 2010 and 2011 were 12.3%, 11.8% and 9.8% respectively. On the other hand, the reputation rates were for the given three years were 11.0%, 10% and 8.8 respectively.

To sum up, the evidences gathered through questionnaires, interviews and document analysis showed that there was big education wastage, which was mainly caused by personal factors, school related factors, socio-economic factors, family related factors and environmental impacts. Personal causes include, lack of interest and motivation, misconduct, excessive absenteeism, etc. school related factors were factors such as poor school environment, poor teaching and assessment methods, lack of materials in the school, lack or absence of guidance and counseling, etc. similarly, socio-economic factors includes lack of money to buy foods, school uniform school fees, rent house etc. More importantly, lack of awareness about value of education, negative attitude toward value of education, enforcing children to quit school, home workloads to the pupil, disagreement and family divorce etc were from family related factors.

Education wastage can highly harm a given society or country in many different ways. For example, repetition, which is defined as “a year spent by a pupil in the same grade and doing the same work as in the previous year” (Brimer and Pauli (1971: 18), increases education cost, because repeaters reduce the intake capacity of the school and prevent other children from entering school or causes overcrowding of classrooms. Similarly, when we take drop out, it harms the socio-economic conditions of the students or the students’ family. Absenteeism, on the other hand, also causes poor education quality.

CHAPTER-FIVE

SUMMARY, CONCLUSION AND RECOMMENDATION

5.1 Summary

The purpose of this study was to assess the magnitude of educational wastage of secondary schools in H/Abote woreda. The study mainly aimed to answer the following basic questions.

1. What are the major causes of education wastage in the target study area?
2. What are the effects of Educational wastage on schooling?
3. In which grade of the secondary level does the highest wastage rate a) repetition b) dropout occur?

To achieve the objective of the study, descriptive survey method was employed to reveal the current situation of high rate of grade repetition, drop-out and absenteeism (educational wastage). The data regarding these elements (enrolment, absenteeism, repetition and dropouts) were obtained from H/Abote educational office and sampled school's document. The study included 2 schools, 100 students, 30 teachers, and 4 principals of sample schools. The data gathered through questionnaire, was analyzed using SPSS version 20 and the frequency, percentage, mean, and the standard deviation were computed to determine the magnitude of the problem. Wastage rate for the past three consecutive years (2009-2011) was calculated.

The findings of the study indicated that both high repetition rate and drop-outs were registered at the sampled secondary schools, grade nine in particular. The results also revealed that variables that were related education wastage were personal factors, socio-economic factors, school related factors and environmental factors were among the leading factors to education wastage. Based on the findings, some important recommendations were forwarded.

5.2 Conclusion

The problems of repetition and dropping-out as two aspects of educational wastage reduce the efficiency of secondary education. Repetition, in addition to raising the amount of time required to complete educational cycle and demand for incurring additional money, it 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 dropout partially or totally wasted (UNESCO, 2015). While the performance of an educational system is measured by quality and quantity of results dropout and class, repetition result in the reduction of the productivity of formal education. The gap between the ideal scheme and the observed phenomenon (actual output) in the secondary education system particularly of the developing countries including Ethiopia has now been an area of great concern (MoE, 2018).

Like other developing countries, secondary schools in Ethiopia have shown a rapid expansion since 1990. With this rate of development, however, the percentage of Children who reach the final grade of the secondary school education cycle is low, (Dereje 2003; Habtamu 2001; Tadesse 2001) and Adane (1993).

As GJHSS educational wastage exists in a number of forms. Educational wastage exists through five major forms. These are failure of a system to provide universal education, failure to recruit children to the system, failure to hold children within the system, failure of the system to set appropriate objectives and inefficiency in the achievement of objectives (GJHSS, 2015).

To sum up, the evidences gathered through questionnaires, interviews and document analysis showed that there was big education wastage, which was mainly caused by personal factors, school related factors, socio-economic factors, family related factors and environmental impacts. Personal causes include, lack of interest and motivation, misconduct, excessive absenteeism, etc. school related factors were factors such as poor school environment, poor teaching and assessment methods, lack of materials in the school, lack or absence of guidance and counseling, etc. similarly, socio-economic factors includes lack of money to buy foods, school uniform school fees, rent house etc. More importantly, lack of awareness about value of education, negative attitude toward value of education, enforcing children to quit school, home workloads to the pupil, disagreement and family divorce etc were from family related factors.

Education wastage, which is expressed in terms of absenteeism, dropout and repetition, can highly harm a given society or country in many different ways. For example, repetition, which is defined as “a year spent by a pupil in the same grade and doing the same work as in the previous year” (Brimer and Pauli (1971: 18), increases education cost, because repeaters reduce the intake capacity of the school and prevent other children from entering school or causes overcrowding of classrooms. Similarly, when we take drop out, it harms the socio-economic conditions of the students or the students’ family. Absenteeism, on the other hand, also causes poor education quality.

5.3 Recommendation

Based on the major findings of the study concerning the causes of dropouts in secondary schools of Oromia regional state, North Shoa zone, Hidabu Abote Woreda, the following recommendation was forwarded.

Different studies have shown that education plays crucial roles in the betterment of human life. But at the same time numerous problems such a absenteeism, dropout, and repetition, have been identified to be hindrances to education quality. These obstacles are mainly caused by school related factors, family related factors, socio-economic backgrounds of the pupil, personal factors etc. Therefore, to alleviate these problems:

- Well trained, more experienced and brilliant teachers should be assigned to secondary schools
- Family illiteracy rate reduction measures should be taken widely to overcome the negative attitudes illiterate society have
- Great attempts should be made to make secondary schools center of excellence by providing all necessary educational materials , equipment’s and required skilled human resources
- Economic problems were also identified to be among great factors to bring education `wastage. As a result, school-feeding programs should be established wherever possible

- Providing guidance, counseling services at school levels are also very important to closely understand and help students with different problems
- Schools must set good classroom management systems to control unauthorized absenteeism
- The government (Ministry of education, Regional and zonal and woreda level educational offices and agents should strive to make school environment more secured and free of conflicts and disagreements that may arise from political instabilities etc.

References

- Abagl, O. and Odipo, (1997). Efficiency of Primary Education in Kenya: Situational Analysis and Implications for Educational reform, Discussion paper, No. 004/97, Nairobi:
- Alem Nega(2011).Factors that cause secondary school dropout. Unpublished research paper.
- Ayalew Shibeshi (1989). “Some trends in Regional Disparities in Primary Schools Participation in Ethiopia”. “The Ethiopian Journal of education. Vol. 11, No. 1.
- Best W. J. & Kahm V.J. (2003). Research in Education (7th ed). New Delhi: Prentice Hall of India.
- Bjeren, G. (1969). Mekale (Ethiopia) Elementary School Drop-out (1967). Uppsala: The Scandinavian Institute of Africa Studies.
- Brimer, M.A. and Pauli, L. (1971).Wastage in Education: A World problem: Paris: UNESCO.
- Cameeron, J. (1965). “Wastage in Tanganika with Special Reference to Primary schools.” TeacherEducation. Vol. 61, No. 8.
- Cresswell , J.W.(2003)Research Design: qualitative, quantitative and mixed approaches. Thousand Oaks, CA: Sage Publications.
- Coombs P.H. and Hallak Jacques (1987). Cost Analysis in Education; A Tool for Policy and Planning , EDI series in Economic Development, The World Bank London.
- Doughne, M. (1971). Economic Dimension Education. London: McMillan and Co. Ltd.
- Panitchpakdi, S. (1974). Educational Growth in Developing Countries: An Empirical Analysis. Rotterdam:Rotterdam University Press.
- Eggen, P. and Kauchack, D. (1992). Education Psychology: Classroo connections, New York: Macmillan.

G/hawariya Haile(2016).Educational Development Practices and Challenges in Local Governance Context: A case of Gulomekeda Woreda, Eastern Zone of Tigray Region, Ethiopia

Global Journal of HUMAN-SOCIAL SCIENCE (2015): Linguistics & Education Volume 15 Issue 6 Version 1.0: Double Blind Peer Reviewed International Research Journal
Publisher: Global Journals Inc. (USA) Online ISSN: 2249-460x & Print ISSN: 0975-587X

Gorard Stephen(2004). Quantitative Methods in Social science.OUP.NewYork.

Kathmandu, Tripureshwor (2001). Research Ceenter, A study on improvement of internal efficiency of primary school in Nepal (17-34).

Kobes, J.C. (1975). Primary School Dropouts: A Case study of A Small Rural Town in Ethiopia. Colombia: Colombia University teachers" College. (Ed. D. Thesis).

Kothari.C,R.(2004). Research Methodology. Methods and Techniques.2nd ed. New Delhi. New age publisher.

Lisanu Asheber (2004). Factors Affecting Internal Efficiency of Rural Primary School in Tigray Region. Addis Ababa University, Master"s Thesis.

MoE (2009/10) Education Statistics, Annual Abstract 2002 E.C. /2009-2010 Addis Ababa MIS

Nebiyu Tadesse, (1999). Educational Materials and Finance Management USAID/BESO Project

(Unpublished)

Psacharopoulos, G. J. (1989). "Why Education Reform Fail: A comparative Analysis"

Seyoum T. and Ayalew S. (1989). Fundamentals of Educational Research: For Students and Beginning Researchers. Addis Ababa University (Unpublished).

Susy Ndarhutse (2008). Grade Repetition in Primary School in Sub-saharan Africa: An evidence base for change. Retrieved 10 Nov. 2010, <http://www.cfbt.com>

Rodger Stotz, (2015) Underlying Principles Series. The incentive marketing association(ima).

Unpublished journal article.

Rose, Pauline et al (1997). Gender and Primary Schooling in Ethiopia, England Institute of Development Studies.

Teferi W/Hawariya(2010).The Practices And Problems Of Reducing Educational Wastage In Oromia Regional State Through The Pc3. Project Of World Learning – Ethiopia. AAU.

Tekeste, Negash (1990). The crisis of Ethiopian education: Some Implications for Nation Building. Uppsala: Uppsala University.

Thomas, J. (1975). World problems in education: A Brief Analytical Survey. Paris:

UNESCO, (2002). EFA Global Monitoring Report 2002: Education for All, Is the World on Track? Paris: UNESCO.

UNESCO, (2015). Wasted Opportunities when schools fail repetition and dropouts in primary schools. France: UNESCO.

World Bank, (2010). “Education in Ethiopia. *Strengthening the Foundation for Sustainable Progress*. United Nations Millennium Development Goals, 10 Nov. 2010,

Yaikob Temesgen(2014). An Assessment Of Educational Wastage: In Selected Secondary Schools Of Illu Aba Bora Zone. AAU.

Appendix-A
ADDIS ABABA UNIVERSITY
SCHOOL OF GRADUATE STUDIES
Questionnaire to be filled by Teachers.

Dear Director/Teacher

The main purpose of this questionnaire is to collect information that will help to assess factors related to *education wastage* in selected secondary schools of north Shoa zone, Hidabu Abote District. It is purely academic study and in no way affects you personally or organizationally because information supplied through this questionnaire will be treated in strict confidentiality and personal details will be kept unspecified. For the success of this study, your genuine, frank and timely responses are very crucial. Therefore, I kindly request your honest cooperation to fill this questionnaire.

Thank you in advance for your cooperation!

General Direction:

- a. You do not need write your name on the paper.
- b. Put a tick mark on the space provided.
- c. Write additional options, if any, on the space provided.
- d. Please follow instructions provided for each part.

You are kindly requested to give an appropriate response in the space provided and in case of questions with alternative responses.

Part I- Background Information

1. Name of the school _____
2. Region _____
3. Zone _____
4. Woreda _____
5. Sex : Male Female
6. Your current position in the school: Principal Unit Leader Teacher
7. Principals' field of study: EDPM Non EDPM
8. Your current Highest Educational 10+3/12+2 BA/BSc/ BEd Certificate Other if any _____

9. Principal's or Teacher's Work Experience 0-5 Years 6-12 Years ≥ 13 Years

Part II: Questions be Answered.

The definitions of some technical terms that are essential to respond to questions are below:

Internal Efficiency: Refers to the measurement of performance of the education system which shows students successfully completing a given level without wastage.

Repetition: Refers to the proportion of students who have remained in the same grade over one year and used additional resource for the grade. The resource is in the form of teacher salary, school materials etc.

Drop out: Leaving a school before completion of a given stage of education or some intermediate or non-terminal Level of education.

III: Rate the following factors that favor students to drop out in your school. Based on your judgment put the degree of contribution of each factor by putting an "X" mark in a column you select.

a. Personal Factors to education wastage

No	Item	Very High (5)	High (4)	Moderate (3)	Low (2)	Very Low(1)
1	Students' lack of interest in learning					
2	Poor academic performance (fear of failure)					
3	Frequent absenteeism					
4	Health problem/sickness					
5	Lack of self confidence					
6	Lack of adequate effort					
7	Misconduct					

b. Family Related Factors to education wastage

No	Item	Very High (5)	High (4)	Moderate (3)	Low (2)	Very Low(1)
1	Lack of awareness about value of education					
2	Negative attitude toward value of education					
3	Enforcing children to quit school					
4	Home workloads to the pupil					
5	Parental illness/death					
6	Disagreement and family divorce					

c. School related factors to education wastage

No	Item	Very High (5)	High (4)	Moderate (3)	Low (2)	Very Low(1)
1	Lack of counseling service when facing a problem (at school level)					
2	Shortage of school facilities					
3	Use of corporal punishment by school personnel					
4	Suitability of school environment for instructional programs					
5	Content loaded curriculum /heavy curriculum					
6	Difficulty of language of instruction					
7	Teaching approaches of teachers is dominantly teacher centered					
8	Poor continuous assessment practice by giving class work, homework, test and project work.					
9	Poor class room management systems					
10	Poor management of the school based student academic support programs such as tutorial and girls' special support					

d. Socio-economic factors to education wastage

No	Item	Very High (5)	High (4)	Moderate (3)	Low (2)	Very Low(1)
1	Absence or lack of support from family					
2	Shortage of food and clothing					
3	Lack of money for school fees					
4	Lack of money for rent house					
5	Lack of money to buy school uniform					

e. Environmental factor to education wastage

No	Item	Very High (5)	High (4)	Moderate (3)	Low (2)	Very Low(1)
1	Long distance from home to school					
2	Influence of peer group					
3	Cultural impact/ harassment					
4	Suitability of school environment for instructional programs					
5	Expansion of gambling houses					

f. Items related to possible solutions to education wastage problems

No	Items	Very High (5)	High (4)	Moderate (3)	Low (2)	Very Low(1)
1	Improving access to schooling					
2	Improving adult literacy of parents					
3	Making school facilities or making the school more flexible					
4	Improving teaching methods					
5	Enhancing inclusive education or special need education					
6	Making educational materials more available					
7	Making awareness creations					
8	Closing the gender gap					
9	Strengthen educational management information system					
10	Strengthen community involvement in schooling					
11	Feeding program					

Appendix-B
ADDIS ABABA UNIVERSITY
SCHOOL OF GRADUATE STUDIES
Questionnaire to be filled by Teachers

Questionnaires to be filled by Students of sampled schools.

Dear Student!

The main purpose of this questionnaire is to collect information that will help investigating factors related to *education wastage* in selected secondary schools of North Shoa Zone, Hidabu Abote District. It is purely academic study and in no way affects you personally or organizationally because information supplied through this questionnaire will be treated in strict confidentiality and personal details will be kept unspecified. For the success of this study, your genuine, frank and timely responses are very crucial. Therefore, I kindly request your honest cooperation to fill this questionnaire.

Thank you in advance for your cooperation!

General Direction:

- e. You do not need write your name on the paper.
- f. Put a tick “✓” mark on the space provided.
- g. Write additional options, if any, on the space provided.
- h. Please follow instructions provided for each part.

You are kindly requested to give an appropriate response in the space provided and in case of questions with alternative responses.

Part I- Background Information

- 1.1 Name of the school _____
- 1.2.Region _____
- 1.3.Zone _____
- 1.4.Woreda _____
- 1.5. Sex Male Female
- 1.6. Age 15 ≥ 15 16 ≥ 16 17 ≥ 17

1.7.Grade Level Grade 9 Grade 10

Part II: Questions be answered.

Rate the following factors that favor students to drop out in your school. Based on your judgment put the degree of contribution of each factor by putting an “X” mark in a column you select.

No	Item	Very High (5)	High (4)	Moderate (3)	Low (2)	Very Low(1)
1	Long distance from home to school					
2	Students’ lack of interest in learning					
3	Teachers’ poor academic performance (fear of failure)					
4	Frequent repetition					
5	Lack of counseling service when facing a problem (at school level)					
6	Frequent absenteeism					
7	Shortage of school facilities					
8	Use of corporal punishment by school personal					
9	Lack of parental encouragement					
10	Health problem/sickness					
11	Parental illness or death (family problem)					
12	Involvement in family work					
13	Influence of peer group					
14	Lack of educational materials					
15	Cultural impact/ harassment					

Thank you!

Appendix-C
ADDIS ABABA UNIVERSITY
SCHOOL OF GRADUATE STUDIES

Questionnaire to be filled by Teachers

Interview Questions for Sample School Principals

To the Respondents:-

This Interview question is prepared for the purpose of conducting a study on *Factors contributing to education wastage in* H/Abote secondary schools. To achieve the purpose, your cooperation in responding this interview questions is highly important. The success of this study by and large depends on your honest and sincere responses to the question items. The data you provide will be kept confidential and will not be disclosed to any third party. You are, therefore, kindly requested to provide the required information.

Interview Guides

1. Is there education wastage such as dropout in your school?
2. If your answer is “Yes” what is the magnitude of the wastage? High, medium or low?
3. What do you think are factors that contribute to education wastage, dropout in particular?
4. What action did you take to stop/reduce education wastage in your school?
5. Which gender of students is more vulnerable to dropout? Male or female? Why?
6. What do you suggest as a solution to alleviate the problem?

Thank you!!!