

**Educational Material Resource Management Policy and Practices in  
Secondary Schools of East Hararghe Zone, Oromia Regional State**

**MA THESIS**

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**HARAMAYA UNIVERSITY, HARAMAYA**

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**MASTER OF ART IN SCHOOL LEADERSHIP**

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## **DEDICATION**

This research work is dedicated to my loving mother W/ro Asnakech Mengistu G/mariam for her spiritual support I needed to grow up to maturity and sustain myself in life by means of education.

## STATEMENT OF THE AUTHOR

By my signature below, I declare and affirm that this Thesis is my own work. I have followed ethical and technical principles of scholarship in the preparation, data collection, data analysis and compilation of this Thesis. Any scholarly matter that is included in the Thesis has been given recognition through citation.

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## **BIOGRAPHICAL SKETCH**

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## **ABBREVIATIONS AND ACRONYMS**

ESDP	Education Sector Development Program
FDRE	Federal Democratic Republic of Ethiopia
MoE	Ministry of Education
MOFED	Ministry of Finance and Economic Development
MRM	Material Resource Management
OFED	Office of Finance and Economic Development
PTA	Parent Teacher Association
SPSS	Statistical Package for Social Science
TVET	Technical and Vocational Education and Training
UNESCO	United Nations Educational, Scientific and Cultural Organization



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1. Flow chart showing stratified random sampling of Woredas



# **Educational Material Resource Management Policy and Practice in Secondary Schools of East Hararge Zone, Oromia Regional State.**

**Abebe Mengistu**

## **ABSTRACT**

*The purpose of this study was to investigate the practice and policy of educational material resource management in secondary schools of East Hararge Zone, Oromia Regional state. For this study, descriptive survey method was employed; both quantitative and qualitative data were gathered through questionnaire, interviews, observation and documents. Total of 103 management bodies and 94 teachers were filled and returned the questionnaire. On the other hand 9 woreda and administrative town educational office heads were interviewed. The data collected through questionnaire was analyzed by using frequency, percentages, mean, standard deviation and t-test. Qualitative data collected through interviews, observation, document analysis and open ended questions were analyzed and presented in narrative form. Major findings of the study were: the plans for material resource was prepared without need assessment and not properly prepared. There were lack of gathering pertinent information during purchasing and delay in purchasing. Materials in store were not classified, codified and arranged due to lack of proper storeroom. Inventories were carried out only when needed without regular plan. Disposable and unused materials were accumulated in storerooms and not disposed in time. Efforts to make the MRM policy and guideline accessible to the school community and creating awareness on the issue were poor. The extent of involvement of teachers and non teaching staff in management of material resource was low. The major problems that negatively affected management of material resources were absence of professional personnel for the management of material resources, the absence of participation of teachers and non-teaching staffs in the management of material resources and shortage of budget. The conclusion drawn is that the extent of management of educational material resources in secondary schools under study was low. It is recommended that: the plans should be prepared after need assessment with participation of the users. Schools should conduct purchasing by using purchasing guideline and procedure. Assigning skilled manpower for effective utilization and management of*

*material resources; making MRM policy and guideline accessible and creating awareness for the school community and participate teachers and non-teaching staffs in the management of material resources.*

## **1.**

## **INTRODUCTION**

This chapter is concerned with the introductory part of the study. It includes background of the study, statement of the problem, basic research questions, and objectives of the study, significance of the study, delimitation of the study, limitation of the study and operational definition of key terms.

### **1.1. Background of the Study**

Educational materials are essential components of educational resources to effectively conduct teaching and learning activity. Mbamba (1992; 253) puts educational materials or facilities as “any object or unit areas of space so designed and organized deliberately to support and used in teaching and learning operation.” So, educational materials could be understood that to be any materials, which are used as input or resources that can facilitate the overall teaching and learning process in school. On the other hand, the above writer pointed out that educational material resource management defined as that aspect of managerial functions concerned with planning, purchasing, allocation, distribution and controlling the proper use as well as maintenance of educational materials and facilities in order to realize the objectives of education system.

Worku (2007) indicated that, the success of teaching learning process is practically dependent upon how schools are capable of managing and utilizing material resources. On the other hand, when there is insufficiency of material resources and poor physical facilities, the activity of teaching learning process tends to be less successful. In line with this, institutions are essential to sustainable and beneficial economic growth. They create new knowledge, skills, and policies and thereby mobilize and manage the resources and deliver the services which stimulate and sustain

development. Growth and prosperity are unlikely to be maintained if the institutions, which guide them are dysfunctional.

According to FDRE (1994) material resources are emphasized as one of the major determinant factors for the successful improvement of educational quality. In connection to this, the policy document noted that, “in order to promote the quality, relevant and expansion of education, due attention will be given to supply, distribution and utilization of educational materials, technology and facilities.” The discipline of school business administration concerns the utilization of available resources which are scarce in relation to the needs to achieve the goals of the education system. But the major problem confronting the school administrator is how to utilize the available limited funds, manpower, equipment, building and materials for effective impact on the teaching and learning process (Ehiametalor 2003, in Alemtsehay 2015).

In every organization there are a number of resources to be used for the attainment of the organizational objectives. Human, equipment, materials, information and time are among the most common resources. Barnett (1996) noted that, among many other educational resources, material resources play major roles in terms of achieving the intended educational objectives, so that great attention should be given for them. Amare (1999) indicated that, the scarcity of material resource in the required quality, quantity and underutilization of the existing resources are some of the most essential factors that affect the accomplishment of educational objectives. Moreover, the scarcity of material resource and lack of clear school level policy of material resources management and direction are the major educational problem in Ethiopia. The school principals, concerned administrative staffs, teachers, storekeepers and any other members of the staff in the school should necessarily know what resources are required and how these resources are managed and utilized to serve the students. The material resource management ability competence and commitment of all institutional members and the principal management skill in particular have a great role for a better achievement of educational objective.

Gopalakrishnan and Sundaresan (2003) indicated the function of material management includes planning, purchasing, receiving, stores, inventory controls, scrap and surplus disposal. Effectively and efficiently implementation of this function enables the school to achieve the intended goals successfully. However, teachers and non-teaching staffs in the secondary schools of East Hararge

Zone heard condemning the management of material resource with reference to these function and shortage of material resources during annual meetings and trainings. This is one of the major reasons that initiated the researcher to select the topic.

### **1.1. Statement of the Problem**

Similar to that of financial resource, material resources are scarce by their nature. Due to scarcity of material resource the issue of effective management of educational materials requires the attention of all stakeholders. Arnold et.al, (2008) indicated that material resource management is a balancing act. This means it is a coordinating function responsible for planning, purchasing, receiving, storing, inventory control for checking the flow of materials and unused material disposal. If an educational institution conducts these material management function effectively it leads to the attainment of the educational objective set, while poor conduct of these functions are liable for failure.

In connection to this, Gopalakrishnan and sundaresan (2003) stated that in view of the complex nature of material resource management function and its important contribution to the overall company objective, many organizations have found it desirable to compile a policy manual covering all aspects of material resource management. This means, policy should be spelled out on the various function served by material management. Hence, in order to manage its different resource each school has to have policy or guideline regarding to various function served by material management.

The extent to which an organization like educational institution attains their objectives is proportional to the educational resource available and their utilization. Hallack, (1990) indicated that, in the process of the establishment of a plan of priorities for investment in education and training, policy makers must take into consideration the need for increasing the efficiency, serviceability and functional reliability in the utilization of material resources. Hence, great attention should be given to material resources management in the educational institutions to lengthen the efficiency in the usage of material resource. The overall quality of education of a given countries often is determined by the availability of material resources in educational sector. In connection to this, FDRE (1994) indicated that, to promote the quality, relevant and expansion

of education, due attention should be given to supply, distribution and utilization of educational materials, technology and facilities.

However, teachers and non-teaching staffs in the secondary schools of East Hararge zone have been complaining the management of material resource in reference to shortage, purchasing, disposition and utilization of materials during annual meetings and trainings. In addition according to the report of educational media office of eastern region, in the secondary school located in East Hararge zone out of 345 plasma screens 80 of them are dysfunctional. Furthermore, in the zone out of 158 computers 75 are dysfunctional. The researcher was initiated to conduct this study in order to investigate the major influencing factors of the management of educational material resources.

Asmelash (2014) in his study at TVET level in Addis Ababa pointed out that, the availability of basic needed in each department is insufficient in the requirement of quantity or non-existents. The workshop centers were not more functional due to lack of budget allocation, absence of maintenance and lack of supervision. Alemtsehay (2015) studied the practice and problems of educational material in Addis Ababa and has reported that need assessment practice and timely maintenance practices were the problem existed in the school. Moreover, Worku (2007) in his study indicated that, managing and controlling of material resource was left to the storekeepers, the necessary guidelines to manage material resource were not disseminated to the user, most of the concerned bodies seldom participate in material resource management and TVET colleges were not in a position to manage their material properly. In addition, Taffesse (2007) conducted research on material resources management in preparatory schools. His study indicated that materials are not identified, recorded and coded properly; most of the principals and the administrative staffs in the school do not have the necessary training and experiences in relation to their position.

This research is different from the above studies because it focuses on the policies and practice of educational material management in secondary schools of East Hararge Zone. It was dealing with material management functions (such as, planning, purchasing, storing and handling, inventory control and disposal of material resources), usage of guideline and procedures, participation of

stakeholders and the problem that affects Educational material management and utilization. Therefore, the researcher believes that the existing gap will be filled through this study.

## **1.2. Basic Research Questions**

In order to conduct the study, the researcher formulated the following research question.

11. What is the practice in educational material management function in the government secondary schools of East Hararge Zone?
12. How do Educational material management guideline and procedures are used by the school management in the government secondary school of East Hararge Zone?
13. To what extent do stakeholders participate in the management of educational material resources in the government secondary schools of East Hararge Zone?
14. What are the major problems that negatively affect educational material resources management and utilization in the government secondary schools of East Hararge Zone?

## **14.3. Objectives of the Study**

### **14.3.1. General objective**

The general objective of the study is to investigate the policy and practices of educational material resource management in the government secondary schools of East Hararge Zone.

### **14.3.2. Specific objectives**

The specific objectives of the study are to:

1. Assess the practice of educational material resource management function in secondary schools of East Hararge Zone.
2. Find out the extent to which school management use educational material management guideline and procedure in secondary schools of East Hararge zone.

3. Assess the extent to which different stakeholders (teaching and non-teaching staffs) participate in the management of educational material resources in secondary schools.
4. Investigate the main problems that negatively affect the proper utilization and management of educational material resource in secondary schools of East Hararge Zone.

#### **4.5. Significance of the Study**

Material resources have to get special attention of concerned body, as resources are scarce to address economic and social needs of the society. But from the experience there are problems in managing material resources in East Hararghe zone Government secondary school. Therefore, the significance of this study is to improve the proper utilization of material resources in Government secondary school of East Hararghe zone.

The findings of this research will:

- Help woreda education sector manager, PTA, school principals, supervisors and other responsible bodies to have better understanding about the implementation of policy and the existing problem to take common responsibility for the proper utilization and material management in secondary school.
- Give information to school principals how educational material management is carried out in the school.
- Indicate some solutions to be used by principals, teachers and supportive staffs to solve the problem under investigation.
- Serve as reference for other researchers to conduct similar research in the future.

#### **4.6. Delimitation of the Study**

This study was delimited to only East Hararghe Zone, due to huge area and population. To overcome shortage of budget and time the study was delimited to schools which have transport access. The Study was delimited to only government owned secondary schools in East Hararghe

Zone, Oromia Regional state. There are a number of issues to be raised in studying educational material resource management policy and practices in its broader sense in school. But the study was delimited to address the problem, policy and the current practices of educational material resource management function. There are a number of functions in the management of material resources. However, the study was delimited to the material resource management such as, planning, purchasing, storing and handling, inventory control and disposal of material resources and also the participation of stakeholders in these functions.

On the other hand, the study was delimited to some selected government owned secondary schools in East Hararge zone, Oromia regional state. Data for this study were gathered during the 2017 school year from respondents in 9 sampled schools have varying degrees of knowledge and experience. The research tools chosen for gathering data for this study were interview, observation, document analysis and questionnaire for principals, teachers, non teaching staffs and PTA members.

#### **4.7. Limitation of the Study**

The researcher faced the following problems while he was conducting this researcher. The first one was lack of recent published literature related with the issue under study. The second problem was lack of adequate time to conduct the research in smooth manner. Third, unwillingness of a few respondents to fill in the questionnaire and return back on time; and lack of transportation to some of the schools which are far from the zonal city was also a problem for the researcher. In spite of these problems, the study was completed successfully.

#### **4.8. Operational Definition of key Terms**

**East Hararge Zone:** it is one of the Zonal administrative levels in eastern Oromia Regional state with **19** woreda and **4** administrative towns that are found in eastern Oromia.

**Guideline:** it is rules or instructions that are given by an official organization telling how to manage material resources in schools.



**Management:** it is the art of getting things done by a group of people with the effective utilization of available resources.

**Management bodies:** refers to personnel those have direct relation with management of material resources in the school. These are principals, PTA members and non-teaching staffs.

**Material:** refers to equipment and tools with certain physical properties that are used as inputs to conduct teaching and learning process.

**Material resource management:** it is a coordinating function responsible for planning and controlling materials flow.

**Non-teaching staffs:** employees within an academic or vocational environment whose jobs do not involve teaching

**Policy:** It is a set of basic principles and associated guidelines formulated and enforced by the governing body to effectively manage material resource in the schools.

**Practice:** Refers to implementing the functions of material resource management (such as planning, purchasing, inventory control, storage and handling, utilization and disposal of material resources).

**Resource:** it is anything in the school or its environment that may be organized for use in the process of teaching learning in schools.

**Teaching staff:** refers to professional personnel directly involved in teaching students.

**Woreda:** it is the lower administrative structure next to the Zonal administrative level and above kebele.

#### **4.9. Organization of the Study**

This study was organized into five chapters. The first chapter deals with the background of the study, statement of the problem, objective of the study, significance of the study, delimitation of the study, limitation of the study, operational definition of key terms and organization of the

study. The second chapter consists of review of related literature. Chapter three deal with research design and methodology. Chapter four deal with result and discussion. Finally, chapter five covers summary, conclusion and recommendation.

## **2. REVIEW OF RELATED LITERATURE**

The study mainly focuses on the material resource management policy and practices in government secondary schools of East Hararge Zone. Hence, the review of the related literature attempted to indicate the main component of material resource management.

## **2.1. Concept of Educational Resource**

Resources are the vital ingredient for the existence of any organization. Because, without resources, there are hardly any type of human activity performed in any kind of organization. This means, any human activities depends on resources like, human, materials, financial, time and information resources. In connection to this, UNESCO (2006) in Alemtsehay (2015) indicate that anything in the school or its environment that may be organized for the use in the teaching learning in the school and that are understood as human resource, material resource, physical resource, financial resource and time resources are known as resources or educational resources. If there is to be change and improvement in education, there must be adequate resources.

Different writers categorized resources into various groups. For example, Ramasamy (2001) indicated that “the term resources include human, materials, money and machines.” In addition, Aggarwa (2003) noted that resource includes human resource, material resource, financial resources, information resources and time resources. These resources are so important that no school system can give qualitative learning without them. Since these resources are scarce, their effective utilization and management requires attention and skill

Negussie et.al (2007) also added that when identifying resources to support learning we must look at both human resource and material resources. Human resource in education is teaching staffs, non-teaching staffs (librarians, laboratory technician, storekeepers, gatekeepers, plasma technician, administrative head and etc.). Material resource includes textbooks, maps, and charts, instructional materials such as television, radio and tape recorder. The aim of school management is to make the most efficient use of the available resources such as teachers, buildings and equipment in order to achieve predetermined educational aims relating to the pupils, the community served by the school and the national systems of education (Farrant, 1980). As it has been discussed above, resources are among the key factors in the achievement of goals in any institution. Resources are the major inputs of educational system and they are the media of instruction used for teaching all subjects, equipment for teaching technology.

## **2.2. Educational Material Resources**

Material resources are essential components of educational resources to effectively conduct teaching learning process. Many experts define material resources in different ways. Bezabeh (1990) defines material resource as the whole range of goods and services which are purchased or otherwise procured from sources outside the organization and are used or processed or distributed in order to provide finished products of other products, which include energy and specialized services, raw materials and merchandise for resale. The material resources according to Ezenwa & Patrick, in Folasade (2015) are assets in form of material possessions or anything of material value or usefulness that is owned by a person, company or an organization. Mbamba (1992) puts educational materials and facilities as “any object or unit areas of space so designed and organized deliberately to support and use teaching and learning operation”. He goes on explaining that they are designed, modified and prepared to assist teaching and learning operation.

Materials are items acquired from the environment to enable the organization to carry out its function. However, different organizations utilize different types of materials depending on the objective they are established for. In education Material resource include all necessary supplies and equipment which are useful to maintain organizational production or service such as land, buildings (the classroom itself with its walls, windows, ventilators, together with their glass fittings, doors with their handles and hinges), furniture (desks, tables, chairs, chalkboards, etc.). Material resource may also include machines, computers, books, manuals, geographical maps and globes, educational media like radio, television sets, overhead projects, the audio visual aids and raw materials consisting organic and inorganic materials such as scientific apparatus or chemicals, material resources that every school must provide includes furniture’s for the classroom and the school office, storage cupboards, a cabinet for office records and correspondence, teaching materials for teacher and pupil use and the various kinds of tools and equipment needed for repairs, maintenance and general upkeep Farrant (1980).

Generally, though different writers defined and classified the concept of material resources in different ways on the bases of their understanding, material resources are the main inputs that assist the activities of teaching learning process.

### **2.3. Educational Material Resource Management**

Material resource management activities are frequently handled at the local or office level and involve regular communication with suppliers concerning requirements, such as order quantity and delivery dates. In connection to material resource management, Arnold et al. (2008) indicated that material resource management is a balancing act. This means, material resource management is a coordinating function responsible for planning and controlling material flow. The objective of material resource managements is to be able to provide what customers want, when and where they want it and to maximize the use of the organization's material resources. Moreover, Chase et al. (2005) pointed out that, material resource management covers all tasks within the supply chain, including planning, purchasing, inventory and warehousing management to manage stock until usage dictates the cycle should begin again.

Furthermore, Mbamba (1992) indicated that material resource management in relation to education may be defined as that aspect of managerial functions concerned with planning, purchasing, allocation, distribution and controlling the proper use as well as maintenance of educational materials and facilities in order to realize the objectives of the education system. Therefore, material management from its definition entails that the wise engagement in activities related to material beginning from material need assessment, purchasing necessary materials and ending with the proper disposal of unused, scrap and surplus materials for the efficient and effective attainment of the institutional mission and visions.

In concept of having one department responsible for the flow of materials, from supplier through production to consumer is relatively new. Although many organizations have adapted this type of organization system, there are still a number of organizations which do not have. Hence, if companies wish to minimize total costs in this area and provide a better level of customer service, they will have to move in this direction (Arnold et al., 2008). Material resource management as a discipline is the flow of a system with comprehensive and feasible controls from planning till the

final goods reaches at the hands of users. According to them, Material resource management can reduce costs by being sure that the right materials are in the right place at the right time and the resource of the organization are properly used. Therefore, these activities of management of material resources require the supportive participation of teachers, supportive staffs and the society.

In past time, the development of professionals in the area of material resource management was not given proper emphasis particularly in Ethiopia. The material resource management activities were considered as an ordinary activity and they were devoid of serious attention. However, currently material resource management is recognized as distinct area of organizations management and plays a vital role to achieve the intended goals of the organization (MOFED, 2007).

#### **2.4. Objectives of Material Resource Management**

As mentioned above, material management brings together the efforts of different departments whose responsibility is directly or indirectly related with material activities. Material management is a coordinating function responsible for planning and controlling material flow. Its objectives are maximizing the use of the organizations resources, providing the required level of customer service and improving the profits of the organization (Arnold et al. 2008).

Data, (2014) classified the objectives of material management into major categories: I. primary objective II. Secondary objective

I. The primary objective includes, provision, storing and minimizing of inventories. These include economic procurement, proper storage keeping and physical up keeping, issuance and timely distribution store accounting, record keeping and store control. Inventory control will keep close watch with an eye on high inventory turnover.

ii. The secondary objectives cover such functions as locating new sources of supply, vender development, variety reduction, standardization and quality control, value analysts, value

engineering and developing skills of human resources with a view to harmonizing and controlling all functions and activities for smooth flow of materials, to, through and out of the organization.

## **2.5. The main Functions of Educational Material Management**

### **2.5.1. Material resource planning**

Planning is the primary function of management that all manager engaging because it lays the foundation for all function. As pointed out by Siropolis (1998) planning is the most effective way to draw out the best in all of us, our best thinking, our best interests and aims and to enable us to develop the most efficient way of achieving our maximum growth. In the business world the organization should achieve the objectives, in order to achieve objectives, the organizations plan what is to be done, when it is to be done, how it is to be done and by whom it is to be done. It is also an intellectual process of thinking resorted to decide a course of action which helps achieve the pre-determined objectives of the organization in the future (Ramasamy, 2001).

Postponement of planning is very dangerous because failure to plan gives rise to ineffectiveness undirected action and waste of resources. Good plan is a precondition for better results. Planning is said to be pervasive and primary. Its pervasiveness originates from the fact that it is necessary for performing other key management functions – organizing, directing, staffing and controlling. Planning helps to identify the organization’s philosophy policies programmed procedures practices and problem (Ojo and Olaniyan, 2008).

Therefore, planning for material resources plays an important role for the attainment of overall goals of an organization. In connection to this, Chase et al., (2008) indicated that, material requirement planning is a logical, easily understandable approach to the problem of determining the number of parts, components, and material needed. It also provides the schedule specifying when each of these materials, parts, and components should be ordered or produced. According to Moustakis (2000) material requirement planning is a time phased priority planning technique that calculates material requirements and schedules supply to meet demand across all products and parts in one or more plants. Planning in relation to educational material is a sub system in the

overall planning activity and defined as a decision making mechanism for designing the best possible alternative strategy in the use of scarce material resources earmarked for the achievement of educational goals and objectives. It is obvious that educational institutions discharge their responsibilities under serious shortage of resources. It seems due to this that planning in education spotlight on the efficient use of resources. Thus educational institution has to plan for their materials resources and utilization for successful achievement of their goals.

Additionally, Mbamba (1992) indicated that, planning of educational material resource starts with the collection, compilation and analysis of data and information pertaining to the use of available resources. This enables to identify the strength and weakness and to forecast future courses of action. As indicated above, material resources are scarce. So, through planning managers identify problem areas and prioritize the problems according to their importance. Planning of educational materials is based on need identification of the required educational materials and budget allocation for the purpose.

A successful planning needs the participation of all concerned bodies. Regarding this, UNESCO (1992) indicated that, “planning needs participation in decision making at every stage, identification of problems, the study of feasibility, implementation and evaluation.” In secondary school context, principals, teachers, administrative staffs, students and community should participate in material resources planning to achieve the desired objectives of the school.

### **2.5.2. Purchasing of material resources**

Purchasing is the process of buying. As of any other terms, purchasing is defined by various experts. As explained by Chase et al. (2008) purchasing is the function served to obtain the right materials, in the right quantities, with the right delivery (time and place), from the right sources and at the right price. As of these writers, the main objectives of purchasing are obtaining goods and services of the required quantity and quality, obtaining goods and services at the lowest cost, ensuring the best possible service and prompt delivery by the supplier and determining purchasing specification: right quality, right quantity and right delivery.



Purchasing consists of all the activities involved in obtaining required materials, supplies and parts from organization. According to Siropolis (1998) purchasing involves: i. pinpointing the need for products and services, ii. Searching out and selecting suppliers, iii. Settling with suppliers such matters as price and payment terms, iv. Negotiating contracts and orders, v. Making sure suppliers live up to their end of agreement

Moreover, Broom et al. (1983) pointed out that purchasing is a process and therefore consists the activities of receipt of a purchase request, evaluation of the purchase request, issuance of the purchase order, maintenance of buying and warehousing records, follow up of purchase order and receipt of goods. The responsibility of purchasing may include receiving, inspection, storing, material handling and disposal.

In the schools, the primary function of planning for educational continuity is to avail all the support inputs at maximum efficiency. If educational institutions do not have the proper quantity and quality of educational supplies at the proper time, teaching and learning process will be jeopardized. Educational process has to be managed in such a way that it yields maximum output effectively and economically (Ray. 2001). According to this writer, purchasing function is elevated to involve the management of materials in flow from the establishment of sources and shipping through inventory and warehousing to the ultimate delivery of educational station. He is also added that it is the purchasing department's duty to avoid duplication, excessive stock and unnecessary rush orders that may procurement program and cause unnecessary expenses.

### **2.5.2.1. Objectives of purchasing**

As discussed in Siropolis (1998) the basic objectives of purchasing have been expressed on the five Rs (rights) that management expects the department to achieve. These are:

1. Right price: it is the primary concern of any organization to get an item at the right price. It must be considered in relation to quality and quantity.

2. Right quality: it implies that quality should be available, measurable and understandable as well as practicable. In order to determine the quality of the product, sampling schemes on incoming materials inspection would be useful.
3. Right time: since the objective of purchasing is to ensure continuity of supply to the user department, the time at which the material is provided to the user department assumes great importance. According to the above writers, to determine the right time, the purchaser should have lead time information for all products and analysis of its components.
4. Right source: the source from which the materials is procured should consider such factors as reliability, quality, delivery performance, reputation and continuity of supplies and all of these must be carefully researched and analyzed.
5. Right quantity: it is one the most critical issues that need due attention.

Purchasing is responsible for establishing the flow of materials in to the organization, following up with the supplier and expediting delivery. As of chase et al. (2008)the main objectives of purchasing are obtaining goods and services of the required quantity and quality, obtaining goods and services at the lowest cost, ensuring the best possible service and prompt delivery by the supplier and determining purchasing specification: right quality, right quantity and right delivery.

#### **2.5.2.2. Purchasing policy**

A policy is a statement that is described in a very general term on intended course of action. Every organization has its own policies, whether they are put in to writing or not. Purchasing policy can significantly affect the cost of purchasing, but they may be even more important for the preservation of good relationships with suppliers. Whenever possible, purchasing policy should be written. Broom et al. (1983) identified and discussed the following purchasing policies:

- I. Reciprocal buying policy: this is to place an order with a seller who in your customer. It is based on the premise that one organization can secure additional orders by using its own purchasing requests as a bargaining weapon.

- II. Speculative buying policy: under speculative buying, buying substantially in excess of quantities needed to meet actual use requirements. Bulk purchase is made through large order at a time. This is done in the expectation that prices are going up.
- III. Conservative (hand to mouth) buying policy: under this policy purchases made through small and frequent order. For instance, the organization might buy just what it requires for one week's operation.
- IV. Diversified buying policy: under this policy buying is made from large number of sources.
- V. Concentrated buying policy: under concentrated purchasing the number of sources on which a wholesaler and retailer may depend for his/her supplies may be very few or limited.
- VI. Schedule budget buying policy: buying to meet anticipated requirements is planned buying. This policy involves the adjustment of purchase quantities to estimated production or sales needs.

In Ethiopia there is a written guideline of purchasing educational materials. However, purchasing activities made in the system which lack uniformity and create difficulty for the proper control and management of the resource available. Moreover, the major parts of purchasing made such as bulk of purchasing and most foreign purchase were only the responsibility of MOE. Now a day, woreda OFED has been given the mandate to make most of the purchases. Besides, schools are given the opportunity of small purchasing from school grant and their internal income.

### **2.5.2.3. Purchasing procedure**

Arnold et. al. (2008) pointed out that the function of purchasing is much broader and if it is to be carried out effectively, all concerned individuals in the organization are to be involved. Therefore, obtaining the right materials, in right quantities, with the right delivery time, from the right source and at the right price are all purchasing functions. Moreover, the act of purchasing consists of

these steps: receiving and analyzing purchase orders, following up to assure delivery dates are met, receiving and accepting materials and approving supplier's invoice for payment.

Additionally, (Dereje, 2006 as cited in Alemtsehay, 2015) pointed out that the purchasing process varies based on the rules and regulations of a nation. Its basic aim is to ensure that what is needed is made available when it is required. The materials to be bought should confirm to the established standards and more of instructions but the procedure for procurement of educational materials may vary according to the nature of education. The vital steps are listed below:

- Recognizing the need for material by using check up of available stock
- Determining the quality of materials which will be required, regarding to the level of available funds.
- Deciding on priority basis in relation to the available funds.
- Drawing detail specification of the required items.
- Preparing and publishing tender document.
- Analyzing the tender to determine the price, availability of materials etc.
- Based on the present proposal on the quality, quantity of items, prices, delivery date, ability of suppliers, etc; approving the tenders who should supply the materials.

### **2.5.3. Storage/handling of material resources**

Organization has to store their goods and raw materials until they are required for production, sell and consumption. Storage functions if necessary because production process has to continue without stoppage. According to Arnoled et al. (2008) material handling is the movement and storage of material resources inside the store. However, the type of material handling equipment used affects the efficiency and cost of operating the store. Therefore, the objective of warehousing is to minimize cost and minimize customer service. To do this, efficient and effective warehouse operations perform to provide timely customer service. Keep track of times so they can be found

readily and correctly, minimize total physical effort and provide communication link with customer.

Storage and handling of materials are responsible for proper storage of material and then issuing to respective department on proper requisition. According to Ray, (2001) the warehouse department is responsible for receiving incoming goods, reporting receipt to purchase inventory control and quality control personnel and making prompt disposition to the appropriate department. Saxena (2003) indicated that, various types of materials are stored in the warehouse. Each material has its own characteristics. Some of them are affected by environmental conditions, the methods of storage and the time of storage. Moreover, the various items such as raw materials, tools, work in process, spare parts, supplies, finished goods, scrap etc. are stored in the store room.

In the sum, to keep away materials from unnecessary wastage, the appropriate storing and handling mechanism should be available. Therefore, managers and storekeepers have to take care in the process of receiving materials, protecting them while in storage from damage and illegal taking away.

#### **2.5.4. Inventory control**

In the process of material management, organization should apply inventory to assure the effective and efficient use of material resources. Inventory is the stock of any item or resource used in an organization. Inventory system is a set of policies and controls that monitor levels of inventory and determine what levels should be maintained, when stock should be replenished and how large orders should be (chase et al. 2005). On the other hand, Siropolis (1998) indicated that, inventory control is the process of managing inventory in such a way as to minimize inventory costs, including both holding costs and potential stock out costs. Holding costs are the costs associated with storage of raw materials, work in process or finished products. Stock out costs is the costs associated with running of inventory.

Institutions system must strive for maximum utilization of material resources and prevent breakdowns from the lack of necessary material supply. The system is required to keep complete

and up-to-date records of the supplies. Inventories are kept in order to be certain that regularly used supplies equipment's are always on hand and that there is no over stocking or under stocking. Hence compartments for efficient storage facility are needed. Because, compartments enable managers to know at all times which this need to be replenished is and which already insufficient supply are. Now a day, inventory control is expedited through the utilization of a computer (Condolie et al, 1984).

As pointed out by Hughes and Ubben (1980) adequate inventories of educational materials and supplies that are unique to special aspects of the program can be maintained by the person who is responsible for that special aspect of the program. All equipment, irrespective of where it is housed, should be tagged or identified in some manner and listed in the inventory. Moreover, equipment must be kept in good repair and staff members made aware of the responsibility to report immediately any malfunction of equipment so that necessary repair can be made.

### **2.5.5. Maintenance of material resources**

In many organizations, including educational institutions there are material that is not functioning due to lack of maintenance. The maintenance function is much more important in the material resource management. Maintenance includes actions which are needed to allow for repair. Ray, (2001) define maintenance as the function of the school system associated with upkeep, repair, and replacement that ensures continues usability of the physical plant, equipment, and service facilities. The effective organization and management of the maintenance program is essential to the success of the day to day operation of school. As suggested by Broom et al. (1983) maintenance function is intended to correct malfunctions of equipment and as far as possible to prevent such breakdowns from occurring. As mentioned by them maintenance activities fall in to two categories:

- I. Corrective maintenance: which include both the major and minor repairs necessary to restore a facility to go and equipment to good condition.
- II. Preventive maintenance: which include inspections and other activities intended to prevent materials breakdowns and damage.

Consequently, maintenance management is an orderly and systematic approach to planning, organizing, monitoring and evaluating maintenance activities and their costs. Thus, maintenance is the work performed on material resources such as building, tools and materials and equipment to preserve it in as near to its original condition as is practical and to realize its normal life expectancy.

### **2.5.6. Disposing obsolete and surplus materials**

Now a day's disposal problems become more complex and important as companies have become larger more diversified in product lines and more decentralized in management. Therefore, the management of these materials is important. As defined by Gopalakrishnan and Sundaresan (2008) obsolete items are those materials and equipment which are not damaged and which have economic worth but which are no longer useful for the company's operation owing to many reasons such as changes in product line, process, materials, and so on. Furthermore, surplus items are those materials and equipment which have an immediate use but have accumulated due to faulty planning, forecasting and purchasing.

Disposal of obsolete and surplus materials is one of the challenging problems in school material management. In school disposal of obsolete and surplus materials is one of the activities that are not given due attention. This implies that attention should be given by school leaders in collaboration with stakeholders to remove or discussed on how to reuse these resources in their respective schools.

## **II.6. Proper Utilization of Educational Material Resources**

The utilization is the-degree or extent to which material resource in school setting has been put into effective use to effect teaching of the school children. It is necessary that educational material resources be in good working condition at all times for their effective and efficient use. Resources are scarce to employ them in unpromising undertaking or to permit capacity to be impaired by efficient methods of operation. As a result, to content with the shortage of educational materials, the available ones should be used properly. Sundareson (1998) defines material resource

utilization as the function responsible for the coordination of planning, sourcing, purchasing, moving, storing, inventory and controlling at a minimum cost.

Good material resource utilization can act as a source of information from which learner may acquire knowledge and skill. In support of this UNESCO (1984) indicated that, all material resource may be used in center establishment. Hence, the resource should be used on appropriate occasion. Optimum use of materials resources implies that problem of maintenance; training, follow-up and evaluation have been solved. Various degrees of utilization include non-utilization, under-utilization, maximum utilization, optimum utilization and over-utilization. Non-utilization occurs when a material resource is not put into use all. When a material is not used in its full capacity, underutilization occurs. There is over-utilization when a material resource in the school is used more than its capacity. These degrees of utilization constitute a waste of resources and are counter-productive. On the other hand, maximum utilization occurs when materials in school are put into effective usage in line with primary objectives (Adeboyeje, as cited in Folasade, 2015)

A school will often invest in very expensive equipment only to find that it is not being used or is being underused by instructional staff. Many times the reason for this is that the staff is not trained in the use of certain equipment or does not understand the instructional possibilities which exist. Thus, care should be taken that the instructional and staff support services personal receive training in the use and function of the equipment available in the school. Many principals take extensive advantage of the expertise of the sales personnel and technicians of the various suppliers, having these individuals available at in-service workshops to work with staff in putting the equipment to best use (Hughes and Ubben, 1980)

If material resource is utilized properly, then it will guarantee the attainment of planned goal. For this reason, in order to progress the suitable use of material resources, one has to manage and make use of certain approaches. The major approaches are to available the necessary information of what is made available at the school and what is expected of teachers, non-teaching staff, society and learners in the use and concern of the materials and facilities.



## **II.7. Challenges in the Management and Utilization of Educational Material.**

- i. Provision and maintenance of funds and facilities:** School business administration is one of the most crucial roles of the school administrator. Though, most educational administrator has limited control over the source of funds for the schools. The school Administrators must ensure that the funds and facilities are effectively used and well maintained to achieve a desired goals and objectives (Ojo and Olaniyan, 2008).
- ii. Capacity of personnel's to manage and use educational materials:** most personnel's, principals and teachers are unable to update their knowledge, through training, workshops and conferences. Absence of professional to manage and use educational materials. This is negatively affects the wise utilization of educational materials (MoE, 2006, in Alemtsehay, 2014)
- iii. Poor maintenance culture:** Facilities and educational materials are not adequately maintained. Administrators prefer building new classrooms instead of maintaining the old ones. materials are no identified, arranged, recorded, and coded properly(Tafesse, 2007)

## **iii.8. Policy for Material Resource Management**

Policy is generally used to refer to general guides to actions and decisions within the organization. A policy is often referred to as a standing decision made in advance to cover a prescribed set of conditions, thus setting the limitation or guidelines for making decision or taking action (Harvey, 1982). A clearly defined material management policy enables the spelling out of authority and responsibility. According to Gopalakrishanan and Sundaresan (2008) policy should be spelled out in the following area:

- a. Organization:** Acceptance of integrated material resource management itself is a major policy decision. The internal structure, delegation of authority, interface relation, coordination of the entire material management function, identifying training needs, and developing a policy manual are some of the important areas which came under this category.

b. **Purchasing policy:** policy must be clearly laid down with regard to source development, quotations, receiving salesman, price, quality, plant visit, personal buying, reciprocity, capital equipment buying and make or buy decision.

c. **Stores:** procedures must be established for receipt, inspection, handling, storing, issue, stock verification, surplus and obsolete material disposal, etc.

d. **Policy manual:** in view of the complex nature of the material management function and its important contribution to the overall organization objectives, many organizations have found it desirable to compile a policy manual covering all aspects of materials management.

The above policy and guidelines are also important for the school to avoid confusion that may rise interdepartmental activities and also facilitate uniform and consistent action in various activities.

As indicated in MOE (1994) the administration of educational institution has been decentralized. As a result, there are different policy/guideline by which various school level activities are managed. Furthermore, the policy document pointed out that, “Clear guidelines, stating the right and duties of all involved in education, are issued to ensure participatory and proper professional relations in their activities”. Hence, in order to manage its different resource each school has to have policy or guideline. School resources management policies or Guideline for school is a quick reference or document that allows managers and other stakeholders to access critical school resource information and forms. However, the scarcity of material resource and lack of clear school level policy of material resources management and direction are the major educational problem in Ethiopia.

On the basis of the policy/ guideline material resource management, the school principals, vice principals, PTA members, teachers and non-teaching staffs have to play their roles for the effective and efficient utilization of material resource. Regarding to the responsibility MOE 2013, as cited in Alemstehay (2015) stated the responsibility of principals and teachers as follows:

- I. Principal's responsibilities: Compliance with guideline that all staff is familiar with the substance of this guidelines, that all staff are familiar with school specific procedure for selecting appropriate teaching learning resources.
- II. Teacher's responsibilities: Teachers are responsible for using their professional judgments in selecting appropriate resources in accordance with any school specific procedure and guideline.

## **II.9. Stakeholders in the Material Resource Management**

Elmore et al. (2007) stakeholders are people and groups inside and outside the organization who have a legitimate interest in the schools and can influence the success of the district strategy. These include teachers' unions, parents, students, school boards, community and advocacy groups, local politicians and policy makers. Conducting and managing stakeholder's relationships in a way that is coherent with the strategy is especially challenging because stakeholders often disagree about what success looks like or how to achieve. However, effective strategies are informed by the views and priorities of such groups.

Ojo and Olaniyan (2008) stated that, the school principals must work with the staff to determine which supplies and facilities are needed for the attainment of educational objectives. He also plans with the staff for effective use and maintenance of existing supplies and facilities. The principal must be able to define duties responsibilities power and authority in a manner that best realizes the purpose of the institution. He must develop an internal staff organization with clear lines of authority and responsibility. Hence, the vice principals and the heads of department of each department should support the principal in accomplishing these duties for effective teaching and learning.

According to Farrant (1980) if the staff of a school are to work well together, there must be an understanding and fair allocation of the extra duties that have to be done in schools by teachers. The principal should make every effort before the beginning of the session to find out the interest and temperament of his teachers. The principals in collaboration with teachers and non-teaching

staffs of the school should ensure the appropriate registration, utilization, maintenance and management of school resource even though each actor has a specific role in the school system.

Educational organization undertakes the management function in collaborative structure, consisting of various partners. In connection to this, FDRE (1994) pointed out that, “Educational institution will be autonomous in their internal administration and in the designing and implementing of education and training programmers, with overall coordination and democratic leadership by boards or committees, consisting of members from the community (society), teachers and students”. This implies that the school as institution as well as its material resource properly managed and utilized through the coordination management of the school principal, vice principals, PTA members, teachers, non-teaching staffs and students.

## **II.10. Experience of Material Resource Management in different Countries**

Folasade (2015) conducted the research on the material resource management in pre- schools. The main objectives of his study were to investigate material resource management skills needed by pre-school teachers in Ondo state in Nigeria. In order to attain the objective of the study, a descriptive survey method was employed. The sample for the study was 197 respondents. This include 90 Headmasters/Headmistress (school management), 90 Preschool teachers and the entire 17 Home Economics lecturers in tertiary institutions in Ondo State. Multistage and random sampling technique was employed in selecting the 90, Headmasters/mistress and 90 preschool teachers. He used questionnaire for gathering data for the study. In his study he identified the skill that needed by preschool teachers to manage material resource in the school. The main findings of his study pointed out that, the acquisition of the identified skills in planning, organizing, controlling and evaluating the use of material resources in classroom in preschools in the state will enhance the achievement of the stated objectives of preschool education in the state.

## **II.11. Material Resource Management in the Ethiopian Context**

Compared to its importance scholars did not report enough research’s on management of materials resource in Ethiopia. No researchers have been done on the management and utilization of material resource in higher learning institution in Ethiopia here before. However, there are

some works on the TVET schools of Ethiopia on the material resource management and availability and use of instructional materials.

For instance, Asmelash (2014) studied the availability and utilization of instructional materials on some selected TVET colleges of Addis Ababa city administration. In order to attain the objective of the study, a descriptive survey method was employed. There are three TVET colleges were selected to the study. The total number of trainers of Kefteguna 20, Tegbareed, and Entoto were 57, 123, and 225 respectively and the total number of trainee of the Kefteguna 20, Tegbareed, and Entoto were 601, 1143, and 3605 on 2005/06 academic year. According to his finding, the availability of basic needed in each department is insufficient in the requirement of quantity or non-existents. The workshop centers were not more functional due to lack of budget allocation, absence of maintenance and lack of supervision. This indicates as training material management in the area under study was poorly practiced.

In addition, Tafesse (2007) conducted research on the materials resource management in preparatory schools of Arsi Zone of Oromia regional state. The major findings of his study indicated that, in those preparatory school's materials were no identified, arranged, recorded, and coded properly, most of the principals and administrative staffs in the schools did not have the necessary training and experience in relation to their position. Lack of material guideline by the users, appropriate number of manpower was not assigned to the stores of the sample schools, and poor conditions among the concerned bodies to implement managerial function in the system. This research has more relation than the previous to my research entitled material resource management in secondary schools of East Hararge Zone. The above research indicated that in Ethiopia materials management practice and utilization of material resource needs to be well studied and seeks improvement.

### **3. RESEARCH DESIGN AND METHODOLOGY**

This part of the study includes description of the study area, research design, and sources of data, sample of population and sampling techniques, instruments of data gathering and methods of data analyses.

#### **3.1. Description of the Study Area**

The main purpose of this study is to assess material resource management policy and practices in government secondary schools of East Hararge Zone. East Haraghe Zone is one of the eighteen zones of Oromia Regional State, and it is about 524km away from Addis Ababa. East Hararge takes its name from the former province of Hararghe. East Hararge is bordered in the southwest by Shebelle River which separates it from Bale, in the West by West Hararge, in the north by Dire Dawa and in the north and east by the Somali Region. Its highest point is Gara Muleta. The zone has highlands or plain lands for agricultural uses, and low lands that are desert where most pastoralists live. The economy of the zone depends on agriculture especially coffee and ‘chat’ although there is cereal crop production and animal rearing. All woredas and town administrations in the zone have at least one secondary school. There are 56 government secondary schools in the zone and there are 2 public schools and there is no private secondary school in the area (Aman Dadefo, personal communication).

Based on the 2007 census conducted by the Central Statistics Agency of Ethiopia (CSA), this zone has a total population of 2,723,850, an increase of 48.79% over the 1994 census, of whom 1,383,198 are men and 1,340,652 women: with an area of 17,935.40 square kilometers, East Hararge has a population density of 151.87. While 216,943 or 8.27% are urban inhabitants, a further 30,215 or 1.11% are pastoralists.

### **3.2. Research Design**

The purpose of this study is to assess material resource management practices in government owned secondary schools of East Hararge Zone. For this study, descriptive survey design was employed. This design is selected for the reason that it enables the researcher to obtain the current detailed and a variety of information concerning the issue under study. Creswell (2003) states that descriptive survey method use to generate views and opinions of relatively large number of respondents and to indicate a clear picture of the situation. Similarly, Krishnaswami and Ranganatham (2007) indicated that, descriptive survey method is a method of research involving collection of data directly from a population or a sample thereof at particular time. Furthermore, the study was employed mixed research method. The method enables the researcher to see the issue under study from quantitative and qualitative aspects.

### **3.3. Source of Data for the Study**

The researcher used both primary and secondary data to get adequate information about material resource management policy and practices in government secondary school of East Hararge Zone.

#### **3.3.1. Primary Sources of Data**

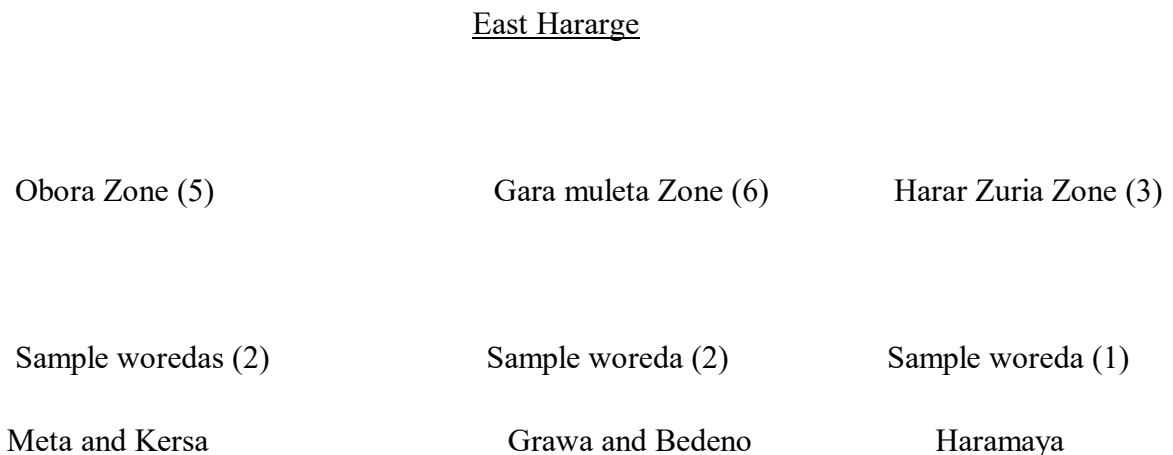
Primary sources are original sources from which the researcher directly collect data that have not been previously collected. For this study the primary data was obtained from school principals, PTSA (parent teacher student association), teachers, woreda and Administrative town educational office heads and non-teaching staff (finance and administrative heads, store keepers, librarians, plasma technician) of selected secondary schools.

### 3.3.1. Secondary Sources of Data

Secondary data was obtained from document. Documents related to the areas of the study were assessed at the selected secondary schools and woredas and administrative towns educational office. These documents include the material resource related research, the material resource records (models), minutes, inventory reports and other important document.

### 3.4. Population, Sample size and Sampling Techniques

This study was conducted in some selected secondary schools found in 19 woredas and four administrative towns of Eastern Hararge Zone. Out of the nineteen Woredas, five Woredas were selected using stratified random sampling technique based on the four sub zone existed in Eastern Hararge Zones such as Gare Muleta zone, Obora zone, zone around Harar and Eastern zone. There are woredas in each zone. So the strata are made on the bases of the sub zone. However, eastern zone is excluded from the study because of political instability in the area. Therefore, all woredas were subjected to stratify sampling. The stratification procedures followed were briefly sketched in the flow chart below. Woredas from stratified zone were selected by using simple random sampling technique.



**Figure 1:** Flow chart showing stratified random sampling of Woredas



Out of four administrative towns; two administrative towns were selected using simple random sampling techniques because they have equal chance for all to be selected. There are seven secondary schools in the five woredas and three secondary schools in the two administrative towns. Therefore, seven secondary schools from the five woredas were selected and two secondary schools from the two Administrative towns were selected for the study by using simple random sampling because they have equal chance for all to be selected.

Thus, from Meta Woreda, kulubi secondary school and Chelenko secondary school, from Haramaya Woreda, Adele Secondary school, from Kersa Woreda, Kersa Secondary school and lange secondary school, from Grawa Woreda, Grawa Secondary School, from Bedeno Woreda, Bedeno Secondary school; from Haramaya Administrative Town Haramaya Secondary school and from Aweday Administrative Town, Aweday secondary school were taken for the study.

The population of the study includes principals, teachers, PTAs members, non-teaching staffs, and woreda and Administrative town educational office head. There are 320 teachers in the nine (9) secondary schools and 94 teachers were taken for the study. The sample teachers were selected using simple random sampling methods because they have equal chance for all to be selected. Moreover, 22 principals of whom 13 were vice principals, 36 non-teaching staffs, 45 PTA members, and 9 woreda and administrative towns' educational office heads were included in the study using available sampling technique because they were few in number. Generally, the population for this study is 432 and the sample will be 206.

**Table: 1. Summary of population, sample size and sampling techniques**

No	Schools	Teachers			principals			No of Non teaching staffs			No of PTA members			W/AD/T/E/O head			Total		
		Pop	Sam.	%	Pop	Sam	%	Pop	Sam	%	Pop	Sam	%	Pop	Sam	%	Pop	Sam	%
1	Haramay a s.s	51	15	30	3	3	100	4	4	100	5	5	100	1	1	100	64	28	43.7
2	Aweday s.s	32	10	30	3	3	100	4	4	100	5	5	100	1	1	100	45	23	51.1
3	Adele s.s	25	7	30	2	2	100	4	4	100	5	5	100	1	1	100	37	19	51.3
4	Kulubi s.s	27	8	30	2	2	100	4	4	100	5	5	100	1	1	100	39	20	51.3
5	Chelenk o s.s	45	13	30	3	3	100	4	4	100	5	5	100	1	1	100	58	26	44.8
6	Kersa s.s	31	9	30	2	2	100	4	4	100	5	5	100	1	1	100	43	21	48.8
7	Grawa s.s	52	15	30	3	3	100	4	4	100	5	5	100	1	1	100	65	28	43.1
8	Bedeno s.s	35	10	30	2	2	100	4	4	100	5	5	100	1	1	100	47	22	46.8
9	Lange s.s	22	7	30	2	2	100	4	4	100	5	5	100	1	1	100	34	19	55.8
<b>Total</b>		320	94	30	22	22	100	36	36	100	45	45	100	9	9	100	432	206	47.6
<b>Sampling techniques</b>		Simple random sampling			Availability			Availability			Availability			Availability					

W/AD/T/EO=woreda and Administrative Town's Educational office

### **3.5. Data Gathering Instruments**

Both quantitative and qualitative data were collected by using different data collecting instruments like questionnaire, interview, documents review and observation to collect primary and secondary data that help the researcher to get reliable and valid data. Information gathered through these instruments is expected to provide descriptions of characteristics of individuals, institutions and other phenomena under study (Krishnaswami and rangathanam, 2007)

#### **3.5.1. Questionnaire**

For this study, questionnaire was the main data collecting tool which helps to save time, encourages objectivity, provide rapid analysis and feed back for the researcher. It is also useful to collect data from a relatively larger size of the population under study. For this reasons both 5 open-ended and 44 close-ended questions were developed for teachers, PTAs and non-teaching staffs (storekeepers, librarians, finance and administrative head, plasma technician and). Questions were presented by grouping in to vital theme and identify the respondents view via the use of likert scale. The needed data for this study collected by distributing questionnaire to selected samples which enable the researcher to get the relevant information because the respondents will have full freedom to write any information.

The questionnaire items were prepared in English and translated in to Afan Oromo as the researcher believes that the respondents can understand the items. To make necessary correction and modification on the questionnaire, pilot test was conducted before the final study. The pilot study conducted in Bate secondary school, which is out of the sampled schools. The questionnaire was distributed to 2 principals, 15 teachers, 4 non-teaching staffs and 3 PTAs members and then certain adjustment was done and corrected to see its measurability. Finally, the questionnaire was distributed systematically to the teacher, principals, PTAs (parent teacher association) and non-teaching staffs.

#### **3.5.2. Observation**

This is a tool by which observation of a phenomenon are recorded. An observation was made to obtain data that focused on handling and functionality of educational material and its management

as well as availability and proper implementation of policy and guidelines. The observation included observing school store, library, pedagogical center, classrooms, laboratory, and school compound. Observation is systematically recorded, using observation check list. Observation overcomes one of the key disadvantages of interview and questionnaires, i.e. the responses provided may not be accurate.

### **3.5.3. Interview guide**

The other instrument used for the collection of primary data for the study was an interview. It is a process of communication or interaction with the subject or interviewee who provides the needed information verbally in face-to-face situation. It is helpful to complement the information gathered through other instruments and for the clarification of some unforeseen information. Semi structured interviews were prepared for 9 woreda and Administrative town educational office head. The number of item was 6.

The process of interview was conducted in Afan Oromo in order to avoid communication problem that may face respondents to reply what they want to say. Face to face interview was conducted with the interviewee and information is recorded by writing the response of each interviewee.

### **3.5.4. Documents analysis**

The researcher was used the related documents at schools and administrative towns' education offices. Material procurement guideline, inventory report, plans for material resources, a guideline to dispose unused textbooks, a manual of material supply and other relevant documents in reference to material management policy.

## **3.6. Procedures of Data Collection**

First, review of related literature was made to get information on what will be done in relation to the problem as well as to develop instruments of data collection. Accordingly, through exhaustive exploration of various literatures in the area under study, data collection instrument was developed. All instruments were edited and modified with the help of Advisor. Second, the researcher was made discussion with the school principals and representative of the education

office to get permission and describe the objectives and importance of the research questions, and arrange a time. Then, the researcher prepared the necessary materials, checklist and time table to complete the questionnaire and interview. Thirdly, the researcher in cooperate with the school principal gave orientation for respondents about the objectives of research data collection tools as well as fix time and place. Finally, the researcher distributed the questionnaire paper for teachers, PTAs and non-teaching staffs' and collects the paper. The researcher was conducted interview with principals and woreda and Administrative town educational office head.

### **3.7. Validity and Reliability of Research Instrument**

The data through questionnaires, observation, and interview are used to look things from different angles. Collecting varied types of information through different sources can also enhance the reliability of the data and the results.

Interview and observation were carefully designed and conducted in the most rigorous way in order to ensure reliability and validity. Questionnaires were carefully designed to yield valid information. Respondents were requested to indicate rate, ranging from 1 to 5 (where 1 = very low, 2 =low; 3 = moderate; 4=high; 5= very high). Meticulous attention was paid to ensure that individual questions are relevant, appropriate, intelligible, precise, and unbiased. The order of the questions was carefully arranged, and the layout of the questionnaires was made clear.

Questionnaire was piloted and evaluated before the actual survey. So, before distributing the questionnaires to the respondents or participants, the appropriateness of the items (validity; that is, how good a test is to measure a particular situation) and consistency of the items (reliability; that is, how trustworthy a score on the test was confirmed) as indicated below.

A sample of 2 principals, 15 teachers, 4 non-teaching staffs and 3 PTAs were randomly selected from Bate secondary school which was out of the sample schools to respond on items of the questionnaire. The data obtained from respondents was put into SPSS software to analyze for the reliability of the items. Cronbach's alpha was the most common measure of internal consistency (reliability). According to Nunnally (1978), a reliability coefficient of 0.7 or higher is considered acceptable. So, when the alpha was calculated by the software the result was 0.82 and this indicate that the items were reliable because alpha value greater than 0.7 means reliable. On the

other hand, validity was done through advisor, experienced school leaders and teachers comments. In light of the advisors' and experts opinion, the items were improved in terms of language, format/style/ and content.

### **3.8. Methods of Data Analysis**

Both quantitative and qualitative data analysis methods were used in the study. Quantitative data which were collected through questionnaire from teachers and management bodies (principals, PTA members and non-teaching staffs) was organized, tabulated and described quantitatively by using descriptive and inferential statistics such as frequency, percentage, mean, SD and t-test by using SPSS version 16.0. Mean and SD were used to measure rating scale type items and to determine the average value and also t-test was used to determine significant difference between mean response for groups of teachers and management bodies. Besides, the existing difference was tested for statistical significance at 0.05 levels. While, qualitative data collected through interview, observation and from open-ended questions were analyzed through narration.

On the other hand the function of material resource management were analyzed based on the responses of respondents within a mean value  $\leq 1.49$  were very low, 1.5 to 2.49 were low, from 2.5 to 3.49 were moderate, from 3.50 to 4.49 were high and from 4.50 to 5.00 were very high. Result from open ended items, interview questions and observation and document analyses were also analyzed to supplement the findings as necessary.

### **3.9. Ethical Considerations**

Ethical consideration was given in the study. At the beginning cooperation letter was received from Department of Educational Planning and Management at Haramaya University. The consent of school principals of the respective schools was secured first by explaining objectives of the study through submitting letter of contact. Similarly, willingness of teachers, non teaching staffs and PTA was asked before interview by explaining the purpose of the study. Rapports were created with respondents and are encouraged to feel free. Moreover,

participation in the study was volunteer base. Considerable efforts were made to keep participants anonymous and maintain the maximum confidentiality.

## **4. RESULTS AND DISCUSSION**

This chapter deals with presentation, analysis and interpretation of the data gathered from the respondents through questionnaire, interview, observation and document analysis. The questionnaire was distributed to teachers and management bodies and the interview were conducted with woreda and administrative town educational office head. For more information observation checklist was used and documents were analyzed. The chapter consists of two major parts. The first part deals with the characteristics of all those who took part in the study. The second part deals with the analysis and interpretation of the main data.

### **4.1. Characteristics of Respondents**

A total of 206 respondents were participated in the study. Out of these 197 respondents filled the questionnaire and 9 participants were interviewed. More specifically, 197 questionnaires were distributed to the group of respondents. Out of these questionnaires, 94 questionnaires were distributed to teachers, 103 questionnaires to management bodies. Finally, a response rate of 100% was achieved in all the groups. Interview was conducted with 9 woreda and administrative town educational office head. Thus, the major characteristics of the respondents are presented in the following table.

Table 2: Sex, Age, Qualification and years of service distribution of respondents

No	Variables	Category	Teachers		Management bodies		Education Office Head		Total	
			F	%	F	%	F	%	N	%
1	Sex	Male	68	72.3	82	79.6	7	77.8	157	76.2
		Female	26	27.3	21	20.4	2	22.2	49	23.8
		Total	94	100	103	100	9	100	206	100
2	Age	≤ 25	3	3.19	8	7.8	-	-	11	5.3
		26-30	36	38.3	22	21.4	2	22.2	60	29.1
		31-35	25	26.6	25	24.3	2	22.2	52	25.4
		36-40	17	18.1	24	23.2	3	33.3	44	21.4
		41-45	12	12.8	14	13.6	1	11.1	27	13.1
		Above 45	1	1.06	10	9.2	1	11.1	12	5.8
3	Qualification	Others	-	-	9	8.7	-	-	9	8.7
		Certificate	-	-	8	7.8	-	-	8	7.8
		College diploma	-	-	28	27.2	-	-	28	27.2
		TVET Diploma	-	-	16	15.5	-	-	16	15.5
		BA/BSC	94	100	40	38.8	9	100	143	69.4
4	Years of service	MA/MSC	-	-	2	1.9	-	-	2	1.9
		≤ 5	5	5.32	9	8.7	-	-	14	6.8
		6-15	35	37.2	60	58.3	5	55.6	100	48.5
		16-25	44	46.8	31	30.1	3	33.3	78	37.9
		26 and above	10	10.6	3	2.9	1	11.1	14	6.8



As it has shown in the table 2 the characteristics of respondents were analyzed by using variables Sex, Age, Qualification and years of service. Regarding sex, 76.2% of the respondents were male and the rest (23.8%) were female. This shows that the majority of the respondents were males. Hence, this indicated that, female's participation in the education system seemed to be low. Regarding respondents Age, 82.97% of teachers were between the ages of 26-40years. Concerning the management bodies, (76.7%) of them were between the ages 26-40 years. On the other hand (77.7%) of educational office head were between 26-40 years old. This suggests that most of the respondents are more matured enough to provide data needed for the study.

With respect to qualification of respondents, 100% of teachers were BA/BSC holder. On the other hand, 100% of educational office head was BA/BSC holders. Regarding management bodies, 38.8% and 27.2% were BA/BSC and college diploma holders, respectively. 1.9% of management bodies were MA holders. Regarding to respondents years of service, 84% of teachers and 88.9% of educational office head were served between 6-25 years. Most management bodies (88.3%) were served between 6-25 years. From these data, we can suggest that most of the respondents were well experienced in the education sector. Such long years of service would assist them to provide relatively reliable and relevant information which would be important for the study.

#### **4.2. Functions of Material Resource Management**

In this part the practice of material management functions in the secondary schools of east hararghe Zone was analyzed. These functions include planning, purchasing, storing, inventory and disposal of material resources.

**Table 3: Response on Planning Material Resource**

No	Item	R	Scale										Me an	SD	T- val ue	p-v alu e		
			Very high		High		Moderate		Low		Very low						Total	
			F	%	F	%	F	%	F	%	F	%					N	%
1	Extent of educational materials planning based on the right information	MB	3	2.9	8	7.8	53	51.5	34	33.0	5	4.9	103	100	2.71	0,8	0.8	0.4
		T	-	-	7	7.4	51	54.3	29	30.9	7	7.4	94	100	2.62	0.7		
2	Extent of conducting need assessment during planning process	MB	-	-	9	8.7	39	37.9	42	40.8	13	12.6	103	100	2.43	0.8	1.3	0.1
		T	-	-	3	3.2	34	36.2	43	45.7	14	14.9	94	100	2.28	0.7		
3	Extent of involvement of teachers and non-teaching staffs during planning process	MB	2	1.0	4	3.9	29	28.2	52	50.5	16	15.5	103	100	2.26	0.8	0.6	0.5
		T	1	1.1	3	3.2	24	25.5	50	53.2	16	17.0	94	100	2.18	0.7		
4	Extent of effectiveness of planning for educational material resource	MB	5	4.9	9	8.7	46	44.7	35	34.0	8	7.8	103	100	2.69	0.9	0.3	0.6
		T	4	4.3	6	6.4	43	45.7	34	36.2	7	7.4	94	100	2.64	0.8		
5	The level of similarity between planned and purchased items	MB	3	2.9	7	6.8	46	44.7	41	39.8	6	5.8	103	100	2.61	0.8	2.6	0.0 1
		T	-	-	8	8.5	28	29.8	45	47.9	14	14.9	94	100	2.30	0.8		
6	The extent to which the current planning process of educational materials satisfying the demands of school society	MB	3	2.9	8	7.8	42	40.8	43	41.7	7	6.8	103	100	2.60	0.8	1.1	0.2
		T	2	2.1	7	7.4	40	42.6	36	38.3	9	9.6	94	100	2.54	0.8		
7	Extent of timely review of plan prepared for educational material management	MB	-	-	8	7.8	35	34.0	47	45.6	13	12.6	103	100	2.37	0.8	0.6	0.5
		T	-	-	11	11.7	20	21.1	48	43.6	15	16.0	94	100	2.29	0.8		

F=frequency N=number T=Teachers MB=management bodies

As indicated in table 3, item 1, respondents were requested to rate the extent of educational material planning based on the right information. Regarding this, majority, 53(51.5%) of management bodies and 51(54.3%) of teachers reported the extent of educational materials planning based on right information as moderate. Similarly, 34(33%) of management bodies and 29 (30.9%) of teachers were rated as low. In contrary, 8 (7.8%) of management bodies and 7(7.4%) of teachers rated the extent of educational materials planning based on right information as high. The mean score is 2.71 for management bodies and 2.62 for teachers which found at moderate level. The t-test result (p-value 0.40) indicated that there was no statistically significant difference among the responses of the two groups of respondents on the extent of material resource planning based on right information. This indicated that most of the respondents had relatively the same knowhow regarding extent of educational material resources planning based on the right information.

One of the interviewed administrative town education office head stated that:

There is a plan in the school; it was prepared in collaboration with other activities in Annual plan rather than prepared independently. As his response the plan was not prepared based on the right information. It prepared without conducting need assessment and the principals do the activity of planning alone without the participation of the users.

Moreover, according to the observation of the researcher and document analysis, the material resource plan was made with the annual plan without fully incorporating right information. In relation to this, Mbamba (1992) indicated that, planning of educational material resource starts with the collection, compilation and analysis of data and information pertaining to the use of available resources.

Item 2 in the table 3 asked the respondent to rate the extent of need assessment is conducted for planning process of material resources. As responses reported by the respondents, 42(40.8%) of management bodies, 43(45.7%) of teachers were rated low. On the other hand 39(37.9%) of management bodies, 34(36.2%) of teachers were rated moderate only 9(8.7%) of management bodies, 3(3.2%) of teachers were rated high. The mean score is 2.43 for management bodies and 2.28 teachers respectively which are found at low range. The data found from interview also

showed the same results. The t-test result shows (p-value 0.1) there is no significant difference among the responses of groups in relation to extent of need assessment for planning process for material resources.

One of the interviewed woreda educational office head indicated that:

Most of the time it was the principals, without assessing the needs of teaching staffs and non-teaching staffs in the school, who decided the requirement of materials for the school.

With regard to this, Arnold et al (2008) pointed out that material needs assessment helps organizations in determining their material requirement.

Regarding item 3 of table 3, respondents were requested to rate the extent of involvement of teacher and non- teaching staffs during planning process. From the response obtained, the majority, 52(50.5%) of management bodies, 50(53.2%) of teachers reported that the involvement of teachers and non teaching staffs in the process of planning for material resources was low. In connection, 29(28.2%) of management bodies and 24(25.5%) of teachers were rated the participation of teachers and non teaching staffs in the process of planning for material resource at moderate level. The mean score is 2.26 for management bodies and 2.18 teachers which are found at low range. This indicates that even though the plan for material resource were being prepared by the schools, the involvement of teachers and non teaching staffs in the activities of planning for material resource was low. The t-test result (p-value 0.54) indicated that there was no statistically significance difference among the responses of the two groups of respondents on the participation of teachers and non teaching staffs in the process of planning for material resources. This indicates that most of the respondents had relatively the same knowhow regarding participation of teachers and non teaching staffs in the process of planning for material resources.

Regarding this, one of the interviewed administrative town education office head pointed out that:

The plan for material resources is prepared in the school. However, teachers and non-teaching staff are not participating in the planning process. They are not asked materials

they need to support their activity of teaching. Most of the time principals do the activity of planning alone without Participation of teachers and non teaching staffs.

According to researcher observation and document analyses there were no any minutes that show the participation of teachers and non teaching staffs. This shows that teachers and non-teaching staffs are not contributing for the plan for material resources in the schools under study. In line with this, UNESCO (1992) pointed out that, the success of plan requires the involvement of all concerned bodies. In the context of secondary schools, principals, teachers, non teaching staffs, students and community should participate in the material resource planning to achieve the intended educational objective of school.

In item 4 table 3, the respondents were asked to rate the extent of effectiveness of planning for material resources. As indicated by respondents, 46(44.7%) of management bodies and 43(45.7%) of teachers reported as moderate whereas 35(34.0%) of management bodies and 34(36.2%) of teachers reports as low. In connection, only 9(8.7%) of management bodies and 6(6.4%) of teachers were rated as high. The mean score is 2.69 for management bodies and 2.64 for teacher which are found at average range. Based on the result of the responses, one can conclude that, the schools were not fully effective in planning for material resources. This affects the type; the quantity and the time material resource are needed for the proper implementation of the teaching learning process. Richard, (1994) as cited in Dereje, (2013) pointed out that an effective planning for material resources reveal what is needed, how many are needed, when they are needed and when they should be ordered. The t-test result (p-value 0.6) indicated that there was no statistically significance difference among the responses of the two groups of respondents on the effectiveness of planning for material resources. This shows that most of the respondents had relatively the same idea on the ineffectiveness of planning for material resources in their school.

Regarding item 5 in the same table, respondents were requested the level of similarity between planned and purchased items. The response of 7(6.8%) of management bodies and 8(8.5%) teachers shows that the level of similarity between planned and purchased items are high. On the other hand, 46(44.7%) of management bodies and 28(29.8%) of teachers were rated as moderate. Similarly, 35(34%) of management bodies and 45(47.9%) of teachers reported that the similarity

between planned and purchased items are low. The mean scores of the management bodies and teachers are 2.61 and 2.30 respectively. This shows that material resources are not being purchased as they had been planned. The t-test result (p-value 0.02) indicated that there was statistically significance difference among the responses of the two groups of respondents on the level of similarity between planned and purchased items. This pointed out that, most of the respondents had almost different idea on the level of similarity between planned and purchased materials.

In connection to this, one of woreda educational office head indicated that:

Most of the time, what are planned is different from the purchased materials. Materials are not purchased based on the required quality and quantity. As a result, there is condition in which schools returned the purchased materials to the finance and economic development offices because the materials were not the required quality.

In connection, Arnold et al (2008) indicated that it is important to have the right materials in the right quantities to meet the demands of the organization.

Item 6 in the table 3, the respondents were requested to determine the extent to which the current planning process for material resources satisfying the demands of school society. In this regard, 8(7.8%) of management bodies and 7(7.4%) of teachers reported that the extent of current planning process as high in satisfying the demands of school society whereas 42(40.8%) of management bodies and 32(34%) of teachers indicated that the extent of current planning process in satisfying the demands of school society was at average level. Similarly, 43(41.7%) of management bodies and 44(46.8%) of teachers were reported as the extent was low in satisfying the demands of school society. In connection the least or 7(6.8%) of the management bodies and 9(9.6%) of teachers were rated as very low. The mean scores of the management bodies and teachers are 2.60 and 2.54 respectively. This shows that the current planning process for material resources moderately satisfying the demand of school society. The t-test result (p-value 0.2) indicated that there was no statistically significant difference among the responses of the two groups of respondents on the issue.

According to item 7, in the table 3, the respondents were asked to respond on the extent of timely review of plan prepared for educational material management. In relation to this, 8(7.8%) of management bodies and 11(11.7%) of teachers were rated high regarding the extent of timely review of plan prepared for educational material management. In addition, 35(34%) of management bodies and 20(21.1%) of teachers were reported as moderate. Whereas, the majority, 47(45.6%) of management bodies and 48(51.1%) of teachers rated as low regarding the extent of timely review of plan prepared for educational material management. This indicates that the timely review of plan prepared for educational material management in the school is low. The mean score is 2.37 for management bodies and 2.29 for teachers which found at low level. The t-test result (p-value 0.54) indicated that there was no statistically significance difference among the responses of the two groups of respondents on the extent of timely review of plan prepared for educational material management. On the other hand, the researcher conducted interview with woreda and administrative town education office heads. They responded that, most of the time, the principals make minor modifications to the preceding years plan in the process of the plan without conducting any review.

**Table 4: Purchasing of Educational Materials**

No	Item	R	Scale										Mea n	SD	T- val ue	p-va lue		
			Excel F %		Very good F %		Good F %		Fair F %		Poor F %						Total N %	
1	Preparation of specification for material resource to be purchased	MB	2	1.9	17	16.5	43	41.7	36	35.0	5	4.9	103	100	2.76	0.8	1.8	0.05
		T	3	3.2	8	8.5	41	43.6	39	41.5	6	6.4	94	100	2.54	0.7		
2	Fair and genuine utilization of purchasing procedures	MB	4	3.9	11	10.7	42	40.8	43	41.7	3	2.9	103	100	2.71	0.8	3.2	0.02
		T	-	-	6	6.4	33	35.1	41	43.6	14	14.9	94	100	2.33	0.8		
3	Transparency of purchasing system of the educational materials	MB	-	-	6	5.8	39	37.9	46	44.7	12	11.7	103	100	2.38	0.7	0.3	0.7
		T	-	-	8	8.5	31	33.0	40	42.6	15	16.0	94	100	2.34	0.8		
4	Appropriateness of purchased materials for learning teaching process	MB	-	-	7	6.8	49	47.6	41	39.8	6	5.8	103	100	2.55	0.7	0.1	0.8
		T	3	3.2	10	10.6	31	33.0	40	42.6	10	10.6	94	100	2.53	0.9		
5	The Quality of material resources purchased for your school	MB	2	1.9	6	5.8	36	35.0	50	48.5	8	7.8	103	100	2.48	0.8	0.9	0.3
		T	-	-	5	5.3	34	36.2	46	48.9	9	9.6	94	100	2.37	0.7		
6	Continuous follow up of the purchasing process on the side of concerned body	MB	3	2.9	8	7.8	35	34.0	42	40.8	15	14.6	103	100	2.44	0.9	0.2	0.7
		T	-	-	9	9.6	30	31.9	45	47.9	10	10.6	94	100	2.40	0.8		
7	The time line of purchasing	MB	-	-	9	8.7	36	35.0	46	44.7	12	11.7	103	100	2.41	0.8	0.6	0.5
		T	-	-	9	9.6	25	26.6	48	51.1	12	12.8	94	100	2.33	0.8		

MB=Management bodies T=Teachers R=Respondents SD=Standard deviation Excel=Excellent



As it is indicated in the table 4, item 1, the respondents asked to respond on the preparation of specification for material resource to be purchased. With this respect, 17 (16.5%) of management bodies and 8(8.5%) of teachers reported that preparation of specification for material resource to be purchased is very good. In addition, the majority, 43(41.7%) of management bodies and 41(43.6%) of teachers confirmed that the preparation of specification for material resource is good. In connection 36(35%) of management bodies and 39(41.5%) replied as fair. The minority, 5(4.9%) of management bodies and 6(6.4%) of teachers were reported as poor. The mean score is 2.76 and 2.54 which found at moderate level. The t-test result (p-value 0.06) indicated that there was no statistically significance difference among the responses of the two groups of respondents on the preparation of specification for material resources to be purchased.

On the other hand, as the researcher made observation, interview and document analyses there was activities of preparation of specification for the material purchased through woreda finance and economic development offices while there were no tangible evidence showing the preparation of specification for the material that purchased by internal revenue which might lead to inappropriate type of Purchas of materials in the school. (Dereje, 2006 as cited in Alemtsehay, 2015) pointed out that the preparation of specification is a necessary criterion for effective purchasing of materials. This shows that the school should prepare specifications for materials to be purchased to ensure effective and efficient purchasing in the schools.

Item 2, in the same table, respondents requested fair and genuine utilization of purchasing procedure. Regarding to this, 11(10.7%) of management bodies and 6(6.4%) of teachers are reported that, fair and genuine utilization of purchasing procedure in the secondary school as very good whereas 42(40.8%) of management bodies and 33(35.1%) of teachers reported that fair and genuine utilization of purchasing procedure in the secondary school was good. On the other hand 43(41.7%) of management bodies and 41(43.6%) of teachers were confirmed as fair. The t-test result (p-value 0.02) indicated that there was statistically significance difference among the responses of the two groups of respondents on the fair and genuine utilization of purchasing procedure. The data collected through interview indicated that there were times when the formal purchasing system is violated.

One of the interviewed woreda educational head stated that:

Most of the time purchasing activities for material resources are made through a decision passed by the school committee. When the school is in need of purchasing of material resources, the school principal presents the requirement of material resources to the school committee. After discussion the committee approves the purchase and the activity of purchase for material resource carried out through a person represented by the committee.

As it is indicated in the table 4, item 3 asked the respondents the transparency of purchasing system of educational materials. Accordingly, 39(37.9%) of management bodies and 31(33.0%) of teachers confirmed the transparency of purchasing system of educational materials as good. In connection, the majority, 46(44.7) of management bodies and 40(42.6%) of teachers were reported the transparency of purchasing system of educational material is fair. The minority, 12(11.7%) of management bodies and 15(16%) of teachers were rated as poor. The mean score is 2.38 and 2.34 which found at low level. The result found from interviews and open ended questions confirms this lack of transparency and accountability is the problem of purchasing educational materials. The t-test result (p-value 0.74) indicated that there was no statistically significance difference among the responses of the two groups of respondents on the transparency of purchasing systems of educational materials.

As displayed in the above table, item 4 the respondents requested the appropriateness of purchased materials for learning teaching process. Regarding this, 49(47.6%) of management bodies and 31(33%) of teachers confirmed that the appropriateness of purchased materials are good. On the other hand, 41(39.8%) of management bodies and 40(42.6%) of teachers were rated the appropriateness of purchased materials as fair. The mean score is 2.55 and 2.53 which found at the moderate level. The t-test result (p-value 0.85) indicated that there was no statistically significance difference among the responses of the two groups of respondents on the appropriateness of purchased materials.

According to table 4, item 5, the respondents asked the quality of material resource purchased for the school. The result from the table indicated that the majority, 50(48.5%) of management bodies

and 46(48.9%) of teachers reported that the degree of the quality of material resources purchased for secondary schools was fair whereas 36(35%) of management bodies and 34(36.2%) of teachers confirmed that the degree of quality of material resources purchased for secondary schools was good. In the contrary, 6 (5.8%) of management bodies and 5(5.3%) of teachers responded as the quality of purchased materials was high whereas 8(7.8%) of management bodies and 9(9.6%) of teachers rated the quality of purchased materials as very low. The mean score is 2.48 for management bodies and 2.37 for teachers which found at the low level. The t-test result (p-value 0.36) indicated that there was no statistically significance difference among the responses of the two groups of respondents on the quality of purchased materials. The result indicated there was no difference in the opinion of the respondents regarding the degree of the quality of materials purchased for the schools.

One of the interviewed administrative town educational office head stated that:

Most of the time, the material that purchased has not quality. Because, purchases of material resources made at school level are conducted through inappropriate personnel without the involvement of all concerned bodies.

In line with this, Arnold et al (2008) pointed out that to carry out effective purchasing of materials; all concerned individuals in the organization are to be involved.

As it is indicated in the table 4 item 6, the respondents asked to respond on the continuous follow up of the purchasing process on the side of concerned body. Regarding to this 8(7.8%) of management bodies and 9(9.6%) of teachers reported that the continuous follow up of the purchasing process on the side of concerned body was very good whereas 35(34%) of management bodies and 30(31.9%) of teachers were rated as good. On the other hand majority 42(40.8%) of management bodies and 45(47.9%) of teachers were confirmed as fair. The mean score is 2.44 for management bodies and 2.40 for teachers which found at the low level. The t-test result (p-value 0.7) indicated that there was no statistically significance difference among the responses of the two groups of respondents on the continuous follow up of the purchasing process on the side of concerned bodies.

The interview conducted with one of the administrative town educational office head revealed that:

The extent of the follow up made by responsible bodies for the purchasing process is low. The absence of the proper responsible body for purchasing process and lack of proper personnel in the school is negatively affecting the quality of materials purchased for the school. Most of the real activities of follow up and check have been affected by corruption.

As depicted in item 7 of table 4, respondents were requested on the timeline of purchasing. Regarding this, 46(44.7%) of management bodies and 48(51.1%) of teachers reported that the time line of purchasing was fair. In this connection, 12(11.7%) of management bodies and 12(12.8%) of teachers were rated the timeline of purchasing as poor. On the other hand, 36(35%) of management bodies and 25(26.6%) of teachers reported that the timeline of purchasing in secondary school was good. The mean score is 2.41 and 2.33 which found at low level. This indicated that the material resources were not purchased on time in the secondary schools. The t-test result (p-value 0.36) indicated that there was no statistically significance difference among the responses of the two groups of respondents on the time line of purchasing. The result indicated there was no difference in the opinion of the respondents regarding the time line of purchasing. This shows that most of the respondents were well aware of the purchase of material in terms of time. Hence, the delay of materials in turn might influence the process of learning teaching of the school.

One of the interviewed woreda educational office head pointed out that:

Most of the purchases were not taking place on time. Purchases were affected by the time taken to collect the internal income and the time taken for the release of the funds. Because most of the internal income is collected after three months and the funds release after the school begun its regular work. Most of the purchase also made through woreda finance and economic development office along with the purchases of materials for other sectors. It requires the approval, process for release and inviting tender. Because of these what are required at the beginning of the semesters are purchased late in the semester.

In this connection Siropolis (1998) reported that since the objective of purchasing is to insure continuity of supply to the user department, the time at which the material is provided to the user department assumes great importance. Therefore, educational institutions need to have the appropriate quantity and quality of materials on proper time; otherwise the accomplishment of educational objectives will be hampered. This shows that the purchasing of material resources required for schools should be carried out on appropriate time.

**Table 5: Items Related to Storage of Educational Material Resources**

No	Item	R	Scale												Me an	SD	T-v alu e	p-va lue
			Excell ent		Very good		Good		Fair		Poor		Total					
			F	%	F	%	F	%	F	%	F	%	N	%				
1	The status of Storage facility for materials	MB	4	3.9	9	8.7	29	28.2	46	44.7	15	14.6	103	100	2.43	0.9	1.2	0.2
		T	4	4.3	5	5.3	15	15.9	58	61.7	12	12.8	94	100	2.27	0.9		
2	Classification and codification practice	MB	-	-	8	7.8	17	16.5	43	41.7	35	34.0	103	100	1.98	0.9	0.9	0.3
		T	-	-	8	8.5	12	12.8	33	35.1	41	43.6	94	100	1.86	0.9		
3	Arrangement and recording practice	MB	-	-	7	6.8	43	41.7	41	39.8	12	11.7	103	100	2.44	0.7	.6	0.5
		T	-	-	9	9.6	31	30.1	39	41.5	15	16.0	94	100	2.38	0.8		
4	Immediate supply of materials from store	MB	4	3.9	15	14.6	42	40.8	37	35.9	5	4.9	103	100	2.77	0.8	1.2	0.2
		T	5	5.3	6	6.4	38	40.4	37	39.4	8	8.5	94	100	2.61	0.9		
5	Usage of legal model to register the coming in and going out materials in the store	MB	4	3.9	33	32	48	46.6	18	17.5	-	-	103	100	3.22	0.7	0.6	0.00
		T	4	4.3	9	9.4	38	40.4	39	41.5	4	4.3	94	100	2.68	0.8		

MB= management bodies

T= Teachers

R= Respondents

SD= standard deviation



As can be seen from table 5, item 1 the respondents were requested to rate the status of storage facility for materials in the school. Regarding to this, the majority, 46(44.7%) of management bodies and 58(61.7%) of teachers confirmed that the storage facility for materials was fair where as 15(14.6%) of management bodies and 12(12.8%) of teachers were rated the storage facility in the school as poor. In contrary, 9(8.7%), 29(28.2%) Of management bodies and 5(5.3%), 15(15.9%) of teachers respectively says the storage facility in the school are very good and good. The mean score for the two groups is 2.43 and 2.27 which found at low level. The t-test result (p-value 0.23) indicated that there was no statistically significance difference among the responses of the two groups of respondents on the storage facility for materials in the school. The result indicated there was no difference in the opinion of the respondents regarding the storage facility for materials.

One of interviewed woreda educational office head stated that:

The schools have partially (more or less) store room, and it was built by wood and tinc around it is also not constructed or built as standard. Hence, the properties of schools without store room became exposed to damage, loss and mismanagement.

As the researcher made observation in sample secondary schools and observed the status of storage facility for materials, most of them were poor in storing. Materials were stored in small store room. Some schools are using classroom for store room and also some of secondary schools are dependants on preparatory schools with many things and using store room together. In all secondary school observed by the researcher, a store room is small and inconvenient for materials due to its smallness and unfulfilment of materials handling equipment.

In item 2, of table 5, the respondents were requested to share how materials were classified and coded in the store. As a result 43(41.7%) of management bodies and 33(35.1%) of teachers were reported that the classification and codification practice was fair. Whereas 35(34%) of management bodies and 41(43.6%) of teachers reported poor for codification and classification practice in the store. In contrary 17(16.5%) of management bodies and 12(12.8%) of teachers replied as the rate of classification and codification was good. The mean score of the two groups is 1.98 for management bodies and 1.86 for teachers which found at low level. The t-test result



(p-value 0.3) indicated that there was no statistically significance difference among the responses of the two groups of respondents on the classification and codification of materials in the store. As indicated in response of the respondents the rate of codification and classification was more of low. There is no variation between the groups of responses.

In the same table of item 3, respondents were asked, to rate the arrangement and recording practice of materials in the store. In this regard, 7(6.8%) of management bodies and 9(9.6%) of teachers were reported the arrangement and recording practice as very good where as 43(38.8%) of management bodies and 31(26.6%) of teachers were replied as good. On the other hand 41(39.8%) of management bodies and 39(41.5%) of teachers were confirmed that the arrangement and recording practice of materials in the store was fair whereas 12(11.7%) of management bodies and 15(16%) of teachers were rated as poor. The mean score of the two groups is 2.44 for management bodies and 2.36 for teachers which found at low level. The responses obtained from the respondents indicated that materials are not arranged and recorded properly in the secondary schools under study. The t-test result (p-value 0.52) indicated that there was no statistically significance difference among the responses of the two groups of respondents on the arrangement and recording of materials in the store. The result indicated there was no difference in the opinion of the respondents regarding the arrangement and recording materials in the store.

One of the interviewed Administrative town educational head asserted that:

As I have seen the store rooms in the schools properties are not totally recorded and codified. Technology support systems were not implemented easily to know what is in the store and out of store.

In item 4 in the same table, the respondents asked on the practice of immediate supply of materials from store. Accordingly, 15(14.6%) of management bodies and 6(6.4%) of teachers confirmed that the activities of immediate supply of materials from store was very good whereas 42(40.8%) of management bodies and 38(40.4%) of teachers reported that the practice of immediate supply of materials from store was good. Similarly, 37(35.7%) of management bodies and 37(39.4%) of teachers were reported as fair. In connection, 5(4.9%) of management bodies

and 8(8.5%) of teachers were rated as poor. The mean score of the two groups is 2.77 for management bodies and 2.61 for teachers which found at moderate level. The t-test result (p-value 0.21) indicated that there was no statistically significance difference among the responses of the two groups of respondents on the practice of immediate supply of materials from store.

In the same table item 5, the respondents were requested to reflect their opinion on the usage of legal model to register the coming in and going out materials in the store. In this regard 33(32%) of management bodies and 9(9.6%) of teachers reported that the usage of legal model to register the coming in and going out materials in the store was very good whereas 48(46.6%) of management bodies and 38(40.4%) of teachers confirmed as good. On the other hand 18(17.5%) of management bodies and 39(41.5%) of teachers were reported as fair. The mean score for the two groups is 3.22 for management bodies and 2.68 for teachers which found at moderate level. The t-test result (p-value 0.00) indicated that there was statistically significance difference among the responses of the two groups of respondents on the usage of legal model to register the coming in and going out materials in the store. The difference may result from lack of awareness of some of teachers due to their position to know the detail information on the case.

As the researcher made observation of stores and document analysis when most of the school receives an item including the newly purchased one, model 19 was used. Whereas, model 22 was used to outgoing materials from the stores and utilize for learning teaching activities. Both model 19 and 22 are legal models used in the schools to in and out materials of the stores. However, as observed by researcher there were the school that did not use legal model instead they use locally made format to in and out materials of the store.

Regarding storage of educational materials, one of the interviewed woreda education office head pointed out that:

The storage management system is not at good condition in the school. Materials are damaged because of improper storage. The storerooms are very tight which is impossible to get the materials easily and arrange the materials. Store keepers are try to record materials but technology support system were not implemented easily to know what is in the store and out of the store.

Tesfaye (2007) in his study stated that materials are not identified, recorded and coded properly. This shows that there is a problem in the storage management in the schools.

**Table 6: Item Related to Inventory Control System**

No	Item	R	Scale												Me an	SD	T-v alu e	p-val ue
			Excellen t		Very good		Good		Fair		Poor		Total					
			F	%	F	%	F	%	F	%	F	%	N	%				
1	Usage of inventory control system	MB	-	-	6	5.8	19	18.4	48	46.6	30	29.1	103	100	2.01	0.8	0.4	0.6
		T	-	-	5	5.3	16	17.0	43	45.7	30	31.9	94	100	1.96	0.8		
2	Frequency of inventory conducted	MB	-	-	7	6.8	21	20.4	49	47.6	26	25.2	103	100	2.09	0.8	0.8	0.4
		T	-	-	5	5.3	17	18.1	44	46.8	28	29.8	94	100	1.99	0.8		
3	Presentation of report after inventory	MB	3	2.9	8	7.8	41	39.8	38	36.9	13	12.6	103	100	2.51	0.9	0.6	0.5
		T	-	-	8	8.5	35	37.2	39	41.5	12	12.8	94	100	2.41	0.8		
4	Process of updating inventory records	MB	-	-	7	6.8	18	17.5	52	50.5	26	25.2	103	100	2.06	0.8	0.6	0.5
		T	-	-	5	5.3	19	20.2	39	41.5	31	33.0	94	100	1.98	0.867		

MB = Management bodies      T=Teachers      SD= standard deviation      R= Respondents

In item 1 of table 6, respondents were requested to give their opinion on the usage of inventory control system. In this regard, 19(18.4%) of management bodies and 16(17%) of teachers were reported that the usage of inventory control system in the school was good whereas 48(46.6%) of management bodies and 43(45.7%) of teachers confirmed the usage of inventory system was fair. On the other hand 30(29.1%) of management bodies and 30(31.9%) of teachers were reported as poor. The mean score for the two groups is 2.01 for management bodies and 1.96 for teachers which found at low level. T-test result (p-value 0.6) indicated that there was no statistically significance difference among the responses of the two groups of respondents on the usage of inventory control system. The respondents had similar opinion about the usage of inventory system in the school.

In the same table item 2, respondents were requested to reflect on the frequency of inventory conducted in the school. In this respect, 7(6.8%) of management bodies and 5(5.3%) of teachers reported that the frequency of inventory conducted was very good whereas 21(20.4%) of management bodies and 17(18.1%) of teachers confirmed as good. In connection, 49(47.6%) of management bodies and 44(46.8%) of teachers reported the frequency of inventory as fair whereas 26(25.2%) of management bodies and 28(29.8%) of teachers replied the frequency of inventory in the school was poor. The mean score for the two groups was 2.09 for management bodies and 1.99 for teachers which found at low level. T-test result (p-value 0.4) indicated that there was no statistically significance difference among the responses of the two groups of respondents on the frequency of inventory conducted.

In item 3 of table 6, respondents were asked to respond on the presentation of report after inventory. In this regard, 8(7.8%) of management bodies and 8(8.5%) of teachers confirmed that the level of presentation of report after inventory was very good whereas 44(42.7%) of management bodies and 35(37.2%) of teachers reported that presentation of reported after inventory was good. On the other hand, 38(36.9%) of management bodies and 39(41.5%) of teachers were confirmed as fair. The mean score of the two groups was 2.48 for management bodies and 2.41 for teachers which found at low level.

In item 4 of the same table, respondents were requested to respond the process of updating inventory records. Regarding to this, 18(17.5%) of management bodies and 19(20.2%) of

teachers were reported that the process of updating inventory records was good whereas 52(50.5%) of management bodies and 39(41.5%) of teachers confirmed as the process was fair. On the other hand, 26(25.2%) of management bodies and 31(33%) of teachers were reported as poor. The mean score for the two groups was 2.06 for management bodies and 1.98 for teachers which found at low level. T-test result (p-value 0.5) indicated that there was no statistically significance difference among the responses of the two groups of respondents on the process of updating inventory records.

In general, the responses obtained from open-ended items and most of interviews pointed out that inventory in school carried out when principals transferred from one school to another. This also indicated that it was not conducted in planned manner.



**Table 7: Item Related to Disposal of Material Resources**

No	Item	R	Scale												Me an	SD	T-v alu e	p-val ue
			Very high		High		Moderate		Low		Very low		Total					
			F	%	F	%	F	%	F	%	F	%	N	%				
1	Number of disposable and surplus educational material resources in your school	MB	7	6.8	41	39.8	49	47.6	6	5.8	-	-	103	100	3.48	0.7	1.0	0.2
		T	4	4.3	40	42.6	36	38.3	14	14.9	-	-	94	100	3.73	0.7		
2	Extent of effectiveness of guidelines to dispose unused materials	MB	3	2.9	6	5.8	36	35.0	40	38.8	18	17.5	103	100	2.38	0.9	0.8	0.4
		T	-	-	6	6.4	27	28.7	48	51.1	13	13.8	94	100	2.28	0.7		
3	The practice in disposal of unused materials	MB	-	-	8	7.8	34	33.0	51	49.5	10	9.7	103	100	2.39	0.7	1.2	0.2
		T	-	-	5	5.3	29	30.9	44	46.8	16	17.0	94	100	2.24	0.7		
4	Ability of responsible body to dispose unused materials	MB	3	2.9	5	4.9	40	38.8	46	44.7	9	8.7	103	100	2.49	0.8	0.8	0.4
		T	2	2.1	6	6.4	28	29.8	46	48.9	12	12.8	94	100	2.36	0.8		

MB= management bodies    T=Teachers    SD= Standard deviation    R= Respondents



As indicated in table 7 item 1, respondents were requested to give their opinion on the extent of disposable and surplus educational material resources in the school. Regarding to this 41(39.8%) of management bodies and 40(42.6%) of teachers were reported that the extent of disposable and surplus material resources were high in number where as 49(47.6%) of management bodies and 36(38.3%) of teachers confirmed that disposable and surplus material resources are moderately existed in the school. Small number of respondents that means 6(5.8%) of management bodies and 14(14.9%) of teachers reported as low. The mean score for the two groups is 3.48 for management bodies and 3.36 for teachers which found at moderate level. Based on the result of the analysis, one can conclude that there were disposable and unused materials in their schools. The t-test result (p-value 0.2) indicated that there was no statistically significant difference among the responses of the two groups of respondents on the extent of disposable and surplus educational material resources.

One of interviewed administrative town educational head asserted that:

In school there are many materials which were not used in secondary schools were compiled at one class idle. There are machines and supplementary books which are not used in secondary schools.

As the researcher conduct observation and document analysis unused materials such as computers, text books, type writer, chemicals and chalk boards are mostly accumulated in the storerooms, laboratory, library, pedagogical center and sport departments. In all schools under study obsolete, surplus and scrap materials are found. This affected the proper functioning of the store. Hence, because of not disposing surplus, obsolete and scrap materials in time the store is not functioning properly.

In item 2 of the same table, the respondents were requested the extent to which the guideline was effective to dispose unused materials. In this regard, 36(35%) of management bodies and 27(28.7%) of teachers reported as the extent of effectiveness of the guideline was moderate whereas 40(38.8%) of management bodies and 48(51.1%) of teachers replied as low. On the other hand, 18(17.5%) of management bodies and 13(13.8%) of teachers were confirmed as very low. The mean score for the two groups is 2.38 for management bodies and 2.28 for teachers

which found at low level. The t-test result (p-value 0.4) indicated that there was no statistically significant difference among the responses of the two groups of respondents on the extent of disposable and surplus educational material resources. As researcher conduct document analyses the guideline to dispose unused textbooks allows only the disposal of unused textbooks and not incorporated other materials to dispose.

As indicated in item 3 of table 7, respondents were asked to give their opinion on the practice of disposal of unused materials in the school. Accordingly, the majority 51(49.5%) of management bodies and 44(46.8%) of teachers confirmed that the practice in disposal of unused materials was low whereas 34(33%) of management bodies and 29(30.9%) of teachers reported as the practice in disposal of unused materials moderate. Small number 8(7.8%) of management bodies and 5(5.3%) reported as high. The mean score for the two groups is 2.39 for management bodies and 2.24 for teachers which found at low level. The t-test result (p-value 0.2) indicated that there was no statistically significant difference among the responses of the two groups of respondents on the practice of disposable of unused material.

One of interviewed Administrative town educational office head pointed out that:

Un used materials are not disposed in time because of lack of knowledge and skills on how to dispose, fear if taking a risk about materials disposed, non existence of a clear guideline on disposing of unused educational materials except that of text books.

When the researcher made observation he noticed that unused disposable materials were accumulated in stores and pedagogical center and even these materials were not arranged properly and not counted. Specially, obsolete chemicals are accumulated in Haramaya and Kersa secondary schools. This indicates that the performance of disposal of materials in secondary school was poor. Therefore, it is possible to say that the disposing activity of unused educational materials is not carried out in time in secondary schools.

In item 4 of table 7, the respondents were asked the extent of ability of responsible bodies to dispose unused materials. Regarding to this, 5(4.9%) of management bodies and 6(6.4%) of teachers reported as the ability of responsible body to dispose unused materials was high. Whereas 40(38.8%) of management bodies and 28(29.8%) of teachers were confirmed as

moderate. On the other hand 46(44.7%) of management bodies and 46(48.9%) of teachers were reported as the ability of responsible body to dispose unused materials was low. The mean score for the two groups is 2.49 for management bodies and 2.36 for teachers which is found at low level. The t-test result (p-value 0.4) indicates that there was no statistically significant difference among the responses of the two groups of respondents on the ability of responsibly body to dispose unused material. From the result, one can conclude that obsolete and surplus materials were not disposed, this confirms with the fact cited above as lack of knowledge and experience in disposal of surplus materials.

### 4.3. Usage of Guideline for Educational Material Resources

**Table 8: Item Related to the Usage of Guideline for Educational Material Management**

No	Item	R	Scale												Mean	SD	T-value	p-value
			SA		Agree		Undecided		Disagree		SDA		Total					
			f	%	F	%	F	%	F	%	F	%	N	%				
1	The existing educational material management policy and guidelines are easily accessible for the user	MB	-	-	9	8.7	33	32.0	49	47.6	12	11.6	103	100	2.38	0.8	0.2	0.8
		T	-	-	4	4.3	36	38.3	43	45.7	11	11.7	94	100	2.35	0.7		
2	Stakeholders have proper awareness about educational material management policy and guidelines	MB	-	-	9	8.7	27	26.2	50	48.5	17	16.5	103	100	2.27	0.8	0.6	0.5
		T	-	-	3	3.2	29	30.9	46	48.9	16	17.0	94	100	2.20	0.7		
3	There is high commitment of school management to make school guideline based on the government guideline.	MB	2	1.9	7	6.8	37	34.9	49	47.6	8	7.8	103	100	2.48	0.8	1.7	.08
		T	-	-	6	6.4	26	27.7	50	53.2	12	12.8	94	100	2.29	0.7		
4	There is high commitment of the school management in using educational material management policy and guideline	MB	3	2.9	16	15.5	42	40.8	38	36.9	4	3.9	103	100	2.77	0.8	2.1	.03
		T	2	2.1	7	7.4	35	37.2	33	35.1	7	7.4	94	100	2.51	0.8		
5	Educational material resources purchased by using the existing guideline and procedure	MB	3	2.9	17	16.5	40	38.8	40	38.8	3	2.9	103	100	2.78	0.8	2.0	.04
		T	-	-	6	6.4	43	45.7	41	43.6	4	4.3	94	100	2.54	0.6		

**NB:** MB=management bodies    T= teachers    SA= strongly agree    SDA=strongly disagree    Mean $\leq$  1.49 was strongly disagree  
mean 1.5 to 2.49 was low    mean 2.5 to 3.49 undecided    mean 3.50 to 4.49.was agree    mean 4.50 to 5.00 was strongly agree

As indicated in table 8 item 1, the two groups of respondents were requested to rate the accessibility of the existing policy and guideline for the user. Regarding to this the majority 49(47.6%) of management bodies and 43(45.7%) of teachers were reported as disagree of the accessibility of educational material management guideline for the user where as 33(32%) of management bodies and 36(38.3%) of teachers were undecided to agree on the accessibility of educational material management policy and guideline for the user. In contrary, 9(8.7%) of management bodies and 4(4.3%) of teachers were agree. The mean score for the two groups were 2.38 for management bodies and 2.35 for teachers that indicate as the majority of the respondents from the two groups replied disagree. The result of t-test values shows that there is no significant difference between the means of the two groups as obtained p-value 0.8.

One of interviewed Administrative town educational office head asserted that:

There are different guidelines and policy in the school, but they were not accessible to school community, which are assumed to help principals and others to implement them on their daily activities regarding educational materials.

Worku (2007) in his study pointed out that the necessary guidelines to manage material resources are not disseminated to the users. In connection to this, (MoE 2013, as cited in Alemtsehay, 2015) stated that principals are responsible to make all staffs familiar with the substance of guideline and school specific procedure for selecting appropriate teaching learning resources.

As depicted in table 8 item 2, respondents were requested to reflect their degree of agreement whether the school communities have proper awareness about educational material management policy and guidelines or not. Accordingly, the majority 50(48.5%) of management bodies and 46(48.9%) of teachers were claimed disagree on school communities awareness about educational material management guideline whereas 27(26.2%) of management bodies and 29(30.9%) of teachers were undecided to agree. On the other hand small number 9(8.7%) of management bodies and 3(3.2%) of teachers were claimed agree on the school communities awareness about the educational material management policy and guideline. The mean score for the two groups were 2.27 for management bodies and 2.20 for teachers that indicate as the majority of the respondents from the two groups replied disagree. From the responses of respondents, one can

conclude that school communities' awareness about educational material policy and guideline was poor. The result of t-test values shows that there is no significant difference between the means of the two groups as obtained p-value 0.5.

One of interviewed woreda educational office head stated that:

There are different guideline and policy in the schools but made training or awareness and available to the school community were the problem. When the school principals leave the school the guidelines are not transferred to the new one.

As indicated in table 8 item 3, respondents were requested to give their opinion on the commitment of the school management to make school guideline based on the government guideline. Regarding to this 7(6.8%) of management bodies and 6(6.4%) of teachers were reported as they agree on the commitment of school management to make school guideline based on the government guideline. Whereas 37(34.9%) of management bodies and 26(27.7%) of teachers confirmed undecided to agree. In connection majority 49(47.6%) of management bodies and 50(53.2%) of teachers were disagree on the commitment of school management to make school guideline based on the government guideline. The mean score for the two groups were 2.48 for management bodies and 2.28 for teachers that indicate as the majority of the respondents from the two groups replied disagree. From the responses of respondents, one can conclude that there is no commitment of school management to make school guideline based on the government guideline. The result of t-test values shows that there is no significant difference between the means of the two groups as obtained p-value 0.08.

In table 8 item 4, respondents were requested to reflect their idea whether there is high commitment of the school management in using educational material management policy and guideline. Accordingly, 16(15.5%) of management bodies and 7(7.4%) of teachers responded agree on the commitment of school management in using educational material management policy and guideline whereas 42(40.8%) of management bodies and 35(37.2%) of teachers responded undecided to agree on their commitment. On the other hand 38(37%) of management bodies and 33(35.1%) of teachers were disagree on the issue. The mean score for the two groups were 2.77 for management bodies and 2.51 for teachers that indicate as the majority of the respondents from

the two groups were responded undecided to agree. The result of t-test values shows that there was significant difference between the means of the two groups as obtained p-value 0.03.

In item 5 in the same table respondents were requested to give their opinion whether educational material resources purchased by using the existing guideline and procedure or not. Regarding to this 17(16.5%) of management bodies and 6(6.4%) of teachers were agree whereas 40(38.8%) of management bodies and 43(45.7%) of teachers were undecided to agree. On the other hand 40(38.8%) of management bodies and 41(43.6%) of teachers replied disagree. The mean score for the two groups was 2.78 for management bodies and 2.54 for teachers that indicate the majority of the respondents from the two groups responded undecided to agree. The result of t-test values shows that there was significant difference between the means of the two groups as obtained p-value 0.04.



**a. Participation of Teachers and Non-teaching Staffs in Material Resource Management**

Table 9: Item Related to Participation of Teachers and Non-teaching Staffs in Material Resource Management

No	Item	R	Scale												Me an	SD	T-v alu e	p-va lue
			Very high		High		Moderate		Low		Very low		Total					
			F	%	F	%	F	%	F	%	F	%	N	%				
1	The extent of their Participation in the process of planning	MB	2	1.9	4	3.9	29	28.2	52	50.5	16	15.5	103	100	2.26	0.8	0.6	0.4
		T	1	1.1	3	3.2	24	25.5	50	53.2	16	17.0	94	100	2.18	0.7		
2	The extent of their Participation in the need assessment activities	MB	3	2.9	6	5.8	31	30.1	44	42.7	19	18.4	103	100	2.32	0.9	0.4	0.6
		T	-	-	7	7.4	29	30.9	40	42.6	18	19.1	94	100	2.27	0.8		
3	The extent of their Participation in the process of purchasing	MB	-	-	7	6.8	38	36.9	43	41.7	21	20.4	103	100	2.24	0.8	1.0 2	0.3
		T	-	-	9	9.6	22	23.4	42	44.7	21	22.3	94	100	2.20	0.8		
4	The extent of their Participation in the activity of maintenance	MB	4	3.9	9	8.7	30	29.1	50	48.5	10	9.7	103	100	2.49	0.9	0.7	0.4
		T	2	2.1	4	4.3	34	36.2	43	45.7	11	11.7	94	100	2.39	0.8		
5	The extent of their Participation in realizing the proper utilization of material resources	MB	5	4.9	15	14.6	47	45.6	31	30.1	5	4.9	103	100	2.84	0.9	2.6	.00
		T	2	2.1	4	4.3	43	45.7	38	40.4	7	7.4	94	100	2.53	0.7		
6	The extent of their Participation in the process of disposal	MB	-	-	8	7.8	32	31.1	44	42.7	19	18.4	103	100	2.28	0.8	0.3	0.6
		T	-	-	7	7.4	27	28.7	41	43.6	19	20.2	94	100	2.23	0.8		

NB: MB= management bodies T= teachers f= frequency N= number R= respondents

As depicted in table 9 item 1, respondents were asked to rate the extent of participation of teachers and non-teaching staffs in the planning process. In this regard the majority 52(50.5%) of management bodies and 50(53.2%) of teachers replied that the participation of teachers and non-teaching staffs was low in the process of planning for material resources whereas 29(28.2%) of management bodies and 24(25.5%) of teachers were reported as moderate. In contrary 4(3.9%) of management bodies and 3(3.2%) of teachers were confirmed as high. The mean score for the two groups were 2.26 for management bodies and 2.18 for teachers which found at low level. The t-test result (p-value 0.4) indicated that there was no statistically significant difference among the responses of the two groups of respondent on the participation of teachers and non-teaching staffs in the process of planning.

In item 2 of the same table, respondents were asked to reflect their opinion on the extent of participation of teachers and non-teaching staffs in the need assessment activities. Accordingly, 6(5.8%) of management bodies and 7(7.4%) of teachers rated as high whereas 31(30.3%) of management bodies and 29(30.9%) of teachers were confirmed their participation as moderate. On the other hand 44(42.7%) of management bodies and 40(42.6%) of teachers reported that the participation of teachers and non-teaching staffs in the need assessment activities was low. In connection, 19(18.4%) of management bodies and 18(19.1%) of teachers were replied as very low. The mean score for the two groups were 2.32 for management bodies and 2.27 for teachers which found at low level. The t-test result (p-value 0.6) indicated that there was no statistically significant difference among the responses of the two groups of respondent on the participation of teachers and non-teaching staffs in the need assessment activities.

As depicted in table 9 item 3, respondents were responded to rate the extent of participation of teachers and non-teaching staffs in the process of purchasing. Regarding to this 38(36.9%) of management bodies and 22(23.4%) of teachers were reported that teacher and non-teaching staffs was moderately participate in the process of purchasing. Whereas 39(37.9%) of management bodies and 42(44.7%) of teachers were confirmed as low. In connection, 19(18.4%) of management bodies and 21(22.3%) of teachers were reported that the participation of teachers and non-teaching staffs was very low. The mean score for the two groups were 2.32 for management bodies and 2.20 for teachers which found at low level. The t-test result (p-value 0.3)

indicated that there was no statistically significant difference among the responses of the two groups of respondent on the participation of teachers and non-teaching staffs in the process of purchasing.

In item 4 in the same table, respondents requested to respond on the extent of participation of teachers and non-teaching staffs in the activity of maintenance. In this regard 30(29.1%) of management bodies and 34(36.2%) of teachers were confirmed that their participation in the activities of maintenance was moderate. Whereas 50(48.5%) of management bodies and 43(45.7%) of teachers were reported that their participation was low. On the other hand 9(8.7%) of management bodies and 4(4.3%) of teachers were replied as high. The mean score for the two groups were 2.49 for management bodies and 2.39 for teachers which are found at low level. The t-test result (p-value 0.467) indicated that there was no statistically significant difference among the responses of the two groups of respondent on the participation of teachers and non-teaching staffs in the activities of maintenance.

As indicated in table 9 item 5, respondents were requested to rate the extent of the participation teachers and non-teaching staffs in realizing the proper utilization of material resources. Regarding to this, 15(14.6%) of management bodies and 4(4.3%) of teachers reported as their participation was high in realizing the proper utilization of material resources. Whereas 47(45.6%) of management bodies and 43(45.7%) of teachers were replied as their participation was moderate. In connection, 31(30.1%) of management bodies and 38(40.4%) of teachers were confirmed as their participation was low. The mean score for the two groups were 2.84 for management bodies and 2.53 for teachers which found at low level. The t-test result (p-value 0.00) indicated that there was statistically significant difference among the responses of the two groups of respondent on the participation of teachers and non-teaching staffs in realizing the proper utilization of material resources.

In item 6 in the same table, respondents were asked to rate the extent of the participation of teachers and non-teaching staffs in the process of disposal. Accordingly, 32(31.1%) of management bodies and 27(28.7%) of teachers were reported that the participation of teachers and non-teaching staffs in the process of disposal was moderate. Whereas 44(42.7%) of management bodies and 41(43.6%) of teachers were replied as their participation was low. In

connection 19(18.4%) of management bodies and 19(20.2%) of teachers were confirmed as very low. The mean score for the two groups were 2.28 for management bodies and 2.23 for teachers which found at low level. The t-test result (p-value 0.6) indicated that there was no statistically significant difference among the responses of the two groups of respondent on the participation of teachers and non-teaching staffs in realizing the proper utilization of material resources.

Regarding participation of teachers and non-teaching staff, one of the interviewed educational office head stated that:

Most of the teachers and non-teaching staffs do not take part in the management of material resources. There is less support from the school principals to increase their involvement in the management of material resources. There is no the act of empowering them through developing their awareness regarding the functions of material resources management. The school principals are not encouraging them to develop the sense of ownership among the staffs.

From responses of the respondents, one can conclude that the material resource management functions in secondary schools lacked full contribution of teachers and non teaching staffs. Worku (2007) in his study indicated that most of the concerned bodies seldom participate in material resource management. Regarding to the involvement of stakeholders in education, FDRE (1994) pointed out through the policy document that clear guidelines are issued to ensure participatory and proper professional relations for all concerned bodies involved in the educational activities. Additionally, Ojo and Olaniyan (2008) suggested that the school principals must work with the staff to determine which materials and facilities are needed for the attainment of educational objectives. This indicated that the contributions teachers and non-teaching staffs made in the management of material resources have a great value for the success of teaching learning process.

**b. The Major Problems that Affect Material Resource Management in the Schools**

There are many problems that negatively affect the management of materials in secondary schools. Regarding to this management bodies which includes principals, non-teaching staffs and PTA members were requested to reflect their opinion based on the item indicated in the table below.

Table 10: Item Related to the Problems that Affect Material Resource Management

No	Item		Respondent		Grand mean	T-value	p-value
			Managem ent bodies N=103	Teachers N=94			
1	Absence skilled personnel	Mean	3.79	3.74	3.77	.387	.699
		SD	.800	.702			
2	Poor maintenance culture	Mean	3.10	2.94	3.02	1.192	.235
		SD	.955	.937			
3	Capacity of personnel to manage and use educational material	Mean	2.99	3.15	3.07	-1.232	.219
		SD	.869	.939			
4	The absence of participation of stakeholders in the management of material resources	Mean	3.75	3.82	3.78	-.664	.507
		SD	.776	.733			
5	Lack of proper stores in secondary schools	Mean	2.89	2.74	2.82	1.205	.230
		SD	.862	.867			
6	Shortage of budget	Mean	3.63	3.53	3.58	.945	.346
		SD	.792	.839			

NB: SD= standard deviation      N= number

Mean  $\leq$  1.49 were not serious      mean 1.5 to 2.49 were less serious      mean 2.5 to 3.49 were moderately serious      mean 3.50 to 4.49 were serious      mean 4.50 to 5.00 were most serious

As depicted in the table 10, respondents were requested to give their opinion on the major problems that affect material resource management. Regarding to this respondents were reported that absence of skilled personnel (grand mean= 3.77), absence of participation of stakeholders

(grand mean=3.78) and shortage of budget (grand mean= 3.58) are seriously affect the management of material resource management in the secondary schools of east hararge zone. On the other hand, the respondents confirmed that poor maintenance culture (grand mean=3.02), capacity of personnel to manage and use educational materials (grand mean= 3.07), lack of proper stores (grand mean= 2.82) are moderately serious problem that affect material resource management. From the response of respondents, one can conclude that the problem that indicated in the table 10 is the major problems that affect the management of material resource in the schools.

One of the interviewed administrative town education office head indicated that:

Less coordination between school communities left material management activities to be only the responsibility of principals and storekeepers. In the schools even in the administrative town there is no organized supervision and controlling material management systems. Even materials distributed from education bureau did not have controlling and evaluation mechanism.

From the data gathered through interview and open-ended items concerning the major problem that affect material resource management in the school. Most the respondents indicated that, lack of appropriate man- power for respective functions of material resource management, the absence of participation of teachers and non-teaching staffs in the management of material resource, absence of sense of belongingness on the side of school community, lack of proper stores and lack of specific responsible body for the management of material resource were the major problems that hampered the management of material resources. Moreover, lack of organized supervision and controlling mechanisms were also other problems.

Regarding the solution for the major problem that affects the management of material resources, the respondents suggested that there should be skilled man power for respective function of material resource management and training for school communities on the management of material resources. Moreover, the school principals should ensure the participation of teachers and non-teaching staffs in the management function of material resources.

## **15. SUMMARY, CONCLUSION AND RECOMMENDATIONS**

This chapter includes summary, conclusion and recommendations. Firstly, it presents summary of the findings. Next, it outlines the conclusions drawn from the findings, and finally, it provides recommendations on the bases of the conclusion and findings.

### **15.4. Summary**

The study was intended to investigate educational material management policy and practices in the secondary schools of East Hararge zone, Oromia regional state. In order to achieve the purpose of this study, the following basic questions were formulated.

1. What is the practice in educational material management function in the government secondary schools of East Hararge Zone?
2. How do educational material management guideline and procedures are used by the school management in the government secondary school of East Hararge Zone?
3. To what extent do stakeholders participate in the management of Educational material resources in the government secondary schools of East Hararge Zone?
4. What are the major problems that negatively affect Educational material resources management and utilization in the government secondary schools of East Hararge Zone?

The research design employed in this study was descriptive survey. The study was conducted using questioners, interview, and observation and document analyses as data gathering instruments. The study was conducted in nine selected secondary schools of East Hararge Zone

namely: Haramaya, Aweday, Adele, Chelenko, Kulubi, Kersa, Grawa, Bedeno and Lange. A total of 197 questionnaires were distributed to management bodies (Principals, Non-teaching staffs and PTA members) and teachers. The respondents who completed the questionnaires were 103 management bodies and 94 teachers. Moreover, 9 woreda and administrative town educational office heads were interviewed. The data obtained were analyzed using frequency, percentage, mean, standard deviation and t-test. After the data were analyzed and interpreted the following findings were identified.

Regarding to the practices in educational material management function in the government secondary school of East Hararge Zone

- In respect to the extent of planning for material resource based on right information, the majority of respondents replied that the activity was moderate. The schools prepared the plan for requirement of material resources by aggregate with the annual plan of the school rather than prepared it solely. As indicated by the respondents' material planning is prepared without gathering and analyzing data regarding the present status of the already existing materials. Need assessment is poorly exercised activity in the school under study.
- The absence of participation of teachers and non teaching staffs, differences between materials in the plan and that of purchased, dissatisfaction of the users in the activity of planning for material resources and absence of timely review of the plan were the problem that shown by this study.
- In relation to preparation of specification for material resource to be purchased, majority of groups of respondents reported that the activity was moderate. As they responded specially the school did not prepare specification for the material purchased by internal revenue.
- Regarding to fair and genuine utilization of purchasing procedure and transparency of purchasing system of the educational materials, majority of respondents confirmed that the activity was moderate and low respectively. Therefore, one can conclude that there is a gap in transparency of purchasing system and usage of purchasing procedure.



- Inappropriateness of purchased materials for teaching and learning process, the quality of material resources purchased for schools, ineffective follow-up from concerned body and timeline of purchasing were revealed to be major problems observed by the study.
- With regard to the extent of storage facility, classification and codification practice and arrangement and recording practice, the majority responded as low. Hence, one can conclude that there is a problem in the storage functions.
- Concerning the immediate supply of materials from store and usage of model to register the coming in and going out materials in the store, the majority responded as moderate.
- The result on inventory control system was found to be unsatisfactory. In relation to frequency of inventory conducted, presentation of report after inventory and process of updating inventory records, the majority responded as low. As interviewees responded inventories carried out in secondary schools only when needed or during the transfer of principals. This also realize as it was not carried out in planned manner.
- Concerning the disposal of material resources, the highest number of the groups of respondents rated as low. The rated result indicated that disposal of unused materials in secondary schools are not well done.

Regarding to the usage of guideline for educational material management

- Though it is found out that there are policy and guideline in these sampled schools, efforts made to make accessible to the school community and creating awareness and training on the issue is poor.
- Regarding to the commitment of school management in using educational material management guideline and purchasing educational material resources by using the existing guideline, the majority responded as moderate.

Regarding the extent of teaching and non teaching staffs participation in the material resource management

- School principal did not involve the teachers and non teaching staffs in the management of material resources. There was a gap in their involvement in the process of planning, need assessment, purchasing, maintenance, in realizing the proper utilization of material resources and disposal.

Regarding to the problem that negatively affect material resource management

- As most of respondents reported absence of skilled personnel, the absence of participation of teachers and non-teaching staffs and shortage of budget were serious problem that negatively affect material resource management. On the other hand poor maintenance culture, capacity of personnel to manage and use educational material and lack of proper stores were moderately serious problem that affect material resource management. Furthermore, the data obtained from interview and open-ended questions indicated that lack of appropriate man- power for respective functions of material resource management, lack of proper stores and lack of specific responsible body for the management of material resource were the major problems that hampered the management of material resources. Moreover, lack of organized supervision and controlling mechanisms were also other problems.

#### **4.5. Conclusion**

From the findings obtained the following conclusions were drawn.

- The secondary schools understudy was ineffective in practicing the functions of material resource management. The plan for material resource management was prepared without conducting needs assessment and involvement of teachers and non-teaching staffs. The material resources purchased for schools were of low quality and the purchases were not carried out at the appropriate time. Storage of educational material is not properly classified, coded, arranged and recorded. Moreover, the process of updating inventory in these schools was poorly implemented and the schools were ineffective in disposing unused materials.

- There are guidelines and policies regarding to educational material management and utilization in schools. But there was huge gap in accessibility of these guidelines and policy to the school community. The concerned bodies such as school leaders lack commitment to create awareness or give training in the area.
- The extent to which the teachers and non-teaching staffs participated in material resource management was low. From this one can conclude that functions of material resource management were being implemented without significant contribution of teachers and non-teaching staffs.
- Regarding to the problem that negatively affect material resources management, lack of appropriate man- power for respective functions of material resource management, the absence of participation of teachers and non-teaching staffs in the management of material resource, lack of proper stores and lack of specific responsible body for the management of material resource were the major problems that hampered the management of material resources. Moreover, lack of organized supervision and controlling mechanisms were also other problems.

#### **4.6. Recommendation**

Based on the summary of findings and conclusion drawn the following possible recommendation are forwarded

1. Before planning the principals should gather (collect) and analyze data regarding the present status of the already existing materials to identify the needs and approve the needs by the school community.
2. The principals should prepare Material resource plan independently based on the right information after conducting need assessment with the involvement of stakeholders (teachers, non teaching staffs, PTA members and community). This can contribute a lot for the effectiveness of the planning for material resources.

3. The principals should prepare specification for the material resources to be purchased with the active involvement of school communities to ensure the proper purchases of the material resources appropriate for learning teaching process.
4. Secondary school principals should prepare appropriate and enough storage space. Regional educational office, Zonal educational office, Woreda/administrative town educational office and secondary school principals should plan and conduct training for storekeepers, prepare schedule for experience sharing and learn good lesson from best practice.
5. Secondary school principals should plan for regular inventories of educational material resource and should be taken by the school at least once a year. This helps the school to clearly identify the educational material resources that are properly functioning or that are damaged within in a year.
6. The guideline to dispose unused textbooks allows only the disposal of unused textbooks and not incorporated other materials to dispose. MoE of the country should provide clear guideline to dispose unused material resources in the school. Moreover, skilled responsible body to dispose unused material should be assigned in secondary schools.
7. Principals should make guideline and policies accessible and available enough to all empower the entire staff with the knowledge and skills on the issue. The school management should also properly apply the guideline to insure the proper utilization of material resources in their schools.
8. The woreda/ administrative town educational office should monitor and support the activities of school principals to make sure that educational material are properly and timely utilized.
9. Moreover, the school community (teachers, non-teaching staffs and students) should develop sense of belongingness on the utilization of educational materials.

10. Finally, the researcher suggested that since there are problems in purchasing function in secondary schools under study further investigation to be made in order to solve this problem.

## **6.**

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## **Appendix 1**

**HARAMAYA UNIVERSITY**  
**POSTGRADUATE PROGRAM DIRECTORATE**  
**COLLEGE OF EDUCATION AND BEHAVIORAL SCIENCE**  
**DEPARTMENT OF EDUCATIONAL PLANNING AND MANAGEMENT**

Questionnaire to be filled by, teachers, administrative staff and parent teacher association (PTA) members

Dear respondents,

The purpose of this questionnaire is to collect data for the study entitled “Educational material resource management practice and policy in the selected Government secondary schools of East Hararge Zone, Oromia regional state.” Outcomes of the study will be expected to throw light on the prevailing conditions and provide insight in to directions to be followed in the future. Thus, your genuine, frank and timely responses are vital to determine the success of the study. Therefore, realizing the information you provide will be kept confidential and used only for the purpose of the study. You are kindly requested to contribute to the successful accomplishment of the study by filling the questionnaire honestly and responsibly.

**Thank you in advance!**

### **General Directions:**

1. No need of writing your name on any page.
2. Give answer by putting “√” mark in the box given in front of each alternative
3. Write your responses on the space provided for open ended questions.
4. For any additional opinion or explanation, you are kindly requested to write briefly on the any empty space.

### **Part one: Biographical information**



1. Rate the following purchasing points regarding to educational material resources in your school by putting “√” mark in the box corresponding to your choice. The number indicated 5= Excellent 4= Very good 3= good 2= fair 1=poor

No	Item	Scale				
		5	4	3	2	1
1	Preparation of specification for material resource to be purchased					
2	Fair and genuine utilization of purchasing procedures					
3	Transparency of purchasing system of the educational materials					
4	Appropriateness of purchased materials for learning teaching process					
5	The Quality of material resources purchased for your school					
6	Continuous follow up of the purchasing process on the side of concerned body					
7	The time line of purchasing					

2. What problem do you observe in purchasing materials and equipment? /Please specify/ \_\_\_\_\_

### 2.3. Managing Storage of Educational material resources

1. Items related to storage of educational material resources. Please, indicate your response by putting “√” mark in the box. (The numbers indicate: 5=excellent 4= very good 3=good 2=Fair 1=poor

No	Item	Scale				
		5	4	3	2	1
1	Availability of Storage facility for materials					
2	Classification and codification practice					
3	Arrangement and recording practice					
4	Immediate supply of materials from store					
5	Usage of legal model to register the coming in and going out material in store					

2. What problem you observed in storage management of educational materials? If any problem, please specify \_\_\_\_\_

### 2.4. Inventory and control system of material resource

1. Items related to inventory and control system of educational material resources. Please, indicate your response by putting “√” mark in the box. (The number indicate 5=excellent 4= very good 3=good 2=Fair 1=poor

No	Item	Scale				
		5	4	3	2	1
1	Usage of inventory control system					
2	Frequency of inventory conducted					
3	Presentation of report after inventory					
4	Process of updating inventory records					

2. Please list the problems associated with inventory and control system of educational material management \_\_\_\_\_

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## 2.5. Disposal of material resources

1. Items related to disposal of educational material resources. Please, indicate your response by putting “√” mark in the box. (The numbers indicate: 5= very high 4= high 3= moderate 2=low 1= very low

No	Item	Scale				
		5	4	3	2	1
1	Number of disposable and surplus educational material resources in your school					
2	Extent of effectiveness of guideline to dispose unused materials					
3	The practice in disposal of unused materials					
4	Ability of responsible body to dispose unused materials					

## Part III. Question related to the usage of guideline for educational material management

3.1. The question below seeks information regarding to educational materials resources management guideline in your school. Rate the level of your agreement by putting “√” mark. (The number indicate 5= strongly agree 4= Agree 3= undecided 2= disagree 1=strongly disagree

No	Item	Scale				
		5	4	3	2	1
1	The existing educational material management policy and guidelines are easily accessible for the user					
2	Stakeholders have proper awareness about educational material management policy and guidelines					
3	There is high commitment of school management to make school guideline based on the government guideline.					
4	There is high commitment of the school management in using educational material management policy and guideline					
5	Educational material resources purchased by using the existing guideline and procedure					

#### Part IV. Participation of Academic and non-Academic staffs in material resource management

- Rate the extent of participation of Academic and non-academic staffs in the following activities by putting “√” mark. (The number indicate 5= very high 4= high 3= moderate 2=low 1= very low)

No	Item	Scale				
		5	4	3	2	1
1	The extent of the Participation of teachers and non-teaching staffs in the process of planning					
2	The extent of the Participation of teachers and non-teaching staffs in the need assessment activities					
3	The extent of the Participation of teachers and non-teaching staffs in the process of purchasing					
4	The extent of the Participation of teachers and non-teaching staffs in the activity of maintenance					
5	The extent of the Participation of teachers and non-teaching staffs in realizing the proper utilization of material resources					
6	The extent of the Participation of teachers and non-teaching staffs in the process of disposal					

#### Part V. Questions related to major problems in the school that affect material resource management

- Rate the following issues that identified as major problem in the material resources **management** and utilization by putting “√” mark.

No	Item	Most	Serious	Moderately	Less	Not
----	------	------	---------	------------	------	-----

		serious		serious	serious	serious
1	Absence of skilled personnel					
2	Poor maintenance culture					
3	Capacity of personnel to manage and use educational material					
4	The absence of participation of stakeholders in the management of material resources					
5	Lack of proper stores in secondary schools					
6	Shortage of budget					
7	If others please specify _____					

1. What are the major problems that are observed in your school regarding to educational material resource management and utilization? Please specify \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

2. What major solutions do you suggest in solving some of the problems in educational material resource management? \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

## Appendix II

**HARAMAYA UNIVERSITY**

**POSTGRADUATE PROGRAM DIRECTORATE**

**COLLEGE OF EDUCATION AND BEHAVIORAL SCIENCE**

**DEPARTMENT OF EDUCATIONAL PLANNING AND MANAGEMENT**

Interview question

Dear respondents,

This interview is part of the study designed to collect data on the title, “Educational material resource management practices and policy in the selected Government secondary schools of East Hararge Zone, Oromia regional State.” So your responses for all parts of the interview would be kept confidential.

#### Part I. General Information

1. Sex \_\_\_\_\_
2. Age \_\_\_\_\_
3. Qualification \_\_\_\_\_
4. Current position \_\_\_\_\_

#### Part II. Question items

1. How do you evaluate your school in relation to the implementation of educational material management function (such as planning, purchasing, handling and storage, inventory and disposal)? What problem do you observe in the implementation?
2. How do you evaluate the effective use of policy and guideline of material resource management in your school?
3. How do you evaluate the commitment of school management in the proper implementation of policy and guideline of material resource management?
4. To what extent do the stakeholders participate in the management of material resources?
5. What are the major problems that negatively affect the management of educational materials in schools? What possible measures should be taken to avoid such problems?
6. What do you suggest to improve the functions of educational material resource management?

### **Appendix III**

Check list for observation and document analyses



1. The existence of Material resource management function and availability of policy and guideline in the school

No	Item	Scale	
		Yes	No
1	Material resource management plan		
2	Inventory report		
3	Different models		
4	Purchasing guideline		
5	Inventory guideline		
6	Disposal guideline		
7	Store procedure		

2. Material resource handling in different parts of the school

Scale 5=excellent 4=very 3=good 2=satisfactory 1=poor

No	Item	Scale				
		5	4	3	2	1
1	Handling of materials in the store					
2	Handling of materials in the library					
3	Handling of materials in the laboratory					
4	Handling of materials in the class					
5	Handling of materials in the school compound					

3. Observation through document analysis

- Availability of different meeting document and minutes
- Purchasing committee document

## Appendix VI

### YUNIVARSITII HARAMAYAA BARNOOTA DIGRII LAMMAFFAA

#### Sagantaa: Hoggansa Barnootaa

Kaayyoon gaafannoo kanaa odeeffannowwan qo'anaa mata duree "Hojira olmaa fi Imaammata Bulchinsa Qabanya Mashaalee Barnootaa Manneen Barnootaa Motummaa sadarkaa lamaffaa Godina Harargee Bahaa" irrattii dura bu'oota, barsiisoota, hojjatoota bulchinsa fi gamtaa maatii fi barsiisota (GMB) irraa funaanuudha. Bu'aan qo'anichaa rakkoolee jiraniif furmaata kan agarsisuufi kalattiiwwan garafulduraatti hordofamuu qaban kan muldhisudha. Kanaafuu, deeggarsi isiin odeeffannoo barbaachisaa kennuudhaan gotan barbaachisaa dha. Ragaaleen funaanaman dhimma qo'annoo qofaaf fayyadu. Icitummaan odeeffannoo fi yaadoota isin kennitanii haalaan eegamaadha. Kanaafuu, odeeffannoowwan dhuggaa ta'an akka kennitaniin kabajaan isin gaafadha.

#### Deeggarsa keessaniif galatoomaa!

#### Ajaja waligalaa

1. Maqaa keessan bareessuun hin barbaachisuu
2. Gaafilee filanoo qabanif sanduqa keessattii mallattoo "√" kaa'un deebii keessan agarsiisaa.
3. Deebii gaafilee barreefamaa iddoo duwwaa isinii kennamee irrattii barreesaa.
4. Yaada dabalataa yoo qabaatan iddoo duwwaa argatan kamiratu bareesuu dandeesuu.

#### Kutaa tokkoffaa: Odeeffannowwan dhuunfaa

1. Maqaa mana barumsaa
2. Saala      A. dhira                      B. dubara
3. Umrii      A.  $\leq 25$      B. 26-30     C. 31-35     D. 36-40     E. 41-45     F. 46 fi ol
4. Sadrkaa barnootaa    A. waraqaa ragaa    B. dippilomaa kolleejjii    C. digrii jalqabaa  
D. digrii lammafaa

5. Muxxannoo hojii ≤ 5 years  6-15 years  16-25 years  26 and above

**Kutaa lammaffaa: gaaffanoowwan gochoota bulchinsa meeshaalee waliin wal qabatan**

2.1. Yaadota armaan gadii karoora qabeeny meeshaalee waliin walqabataniif deebii keessan mallattoo “√” sanduuqa keessattii barreessuun agarsiisaa. (lakkooffsii kan muldhisuu: 5= baay’ee olaanaa 4= olaanaa 3= giddugaleessa 2=gadanaa 1= baay’ee gadanaa

lakk	Himoota	Maddaalii				
		5	4	3	2	1
1	Karoora qabeenya meeshaalee oddeffannoo sirri irratti hundaa’ee					
2	Karoorsuuf feedhii adda baasuu					
3	Karoorsuu keessattii hirmaanaa barsiisaa fi hojataoota bulchinsaa					
4	Bulchinsa meeshaalee barnootaatiif bu’a qabeesumaa karoora					
5	Walsiminsa karoora fi bittaa meeshaalee keessattuu sa’aa waliin walqabatee					
6	Addeemsii karoora meeshaalee barnootaa yeroo ammaa hawaasa mana barumsaa qubsuu irratti					
7	Karoori bulchinsa qabeenya meeshaalee yeroo isaa egatee maddaalamuu irrattii					

1. Qabxilee armaan gadii bittaa meeshaalee barnootaa waliin walqabataniif deebii keessan mallattoo “√” sanduuqa keessattii bareessuun agarsiisaa. Lakkooffsii kan muldhisuu: 5= daran gaaridha 4= baay’ee gaaridha 3= gaaridha 2= qubsaadha 1=dadhabaa

No	Himoota	Scale				
		5	4	3	2	1
1	Qoophii ajaja meeshaalee bitamanii					
2	Itti fayyadama addeemsa bitaa					
3	Iftoomina bitaa					
4	Meeshaaleen bitaman haala baru barsiisuutiif mijatoo ta’uu					
5	Qulqullina meeshaalee bitamanii					
6	Addeemsa bittaa irraatii hordofii fi to’anaan qaama ilaalatun					

	godhamee					
7	Yeroo bitaa meeshalee					

2.

### 2.3. kununsaa fi kusaa meeshaalee barnootaa ilaalchisee

1. Yaadoota armaan gadiitiif deebii keessan mallattoo “√” sanduuqa keessattii barreessuun agarsiisaa. (Lakkooofsii kan muldhisuu: 5= daran gaariidha 4= baay’ee gaaridha 3= gaaridha 2= qubsaadha 1=dadhabaa

No	Himoota	Maddaali				
		5	4	3	2	1
1	Tajjaajila kusaa meeshaaleetif haalii mijaa’an jiru					
2	Meeshaalee gosa gosaan ramaduu fi koodiin qindaa’uu					
3	Meeshaalee sirnaan ramaduu fi galmeesuu					
4	Safisa dhiyeesii meeshalee iddoo kusaattii					
5	Meeshaalee bitaman mana kusaattii bahii gochuu fi galii gochuuf itti fayyadama modela seera qabeesa					

### 2.4. Inveentarii meeshaalee barnootaa ilaalchiisee

1. Mana barumsaa keessan keessattii qabinsa meeshaalee barnootaatiif gochoota inveentarii armaan gadii akkamitti maddaaltuu? (Lakkooofsii kan mildhisuu: 5= daran gaariidha 4= baay’ee gaaridha 3= gaaridha 2= qubsaadha 1=dadhabaa

Lakk	Himoota	Maddaali				
		5	4	3	2	1
1	Addeemsa hoggansa inveentarii					
2	Waliittii fufiinsa inveentarii					
3	Inveentariin booda gabaasa dhiyeesuu					
4	Addeemsa haaromsa galmee inveentarii					

### 2.5. Maqsuu meeshaalee barnootaa tajjaajilaan alaa ilaalchiisee

1. Gaaffanoo maqsuu meeshaalee barnootaa tajjaajilaan ala ta’an waliin walqabatuu. Malattoo “√” agarsiisuun deebii keessan keenndaa. (Lakkooofsii kan mildhisuu: 5= baay’ee olaanaa 4= olaanaa 3= giddugaleessa 2=gadanaa 1= baay’ee gadanaa

Lakk	Himoota	Maddaali				
		5	4	3	2	1
1	Baayiina meeshaalee tajjaajila hin keeninee					
2	Meeshaalee tajjaajila hin keenninee maqsuuf bu’aa qabeesumaa					

	qajeelfamaa jiru					
3	Raawwii meeshaalee tajjaajila hin keennin meqsuu					
4	Meeshaalee tajjaajila hin keennin maqsuuf dandeettii qaamoota dhimmi ilaalatuu					

### Kuta III. Gaaffannoowwan ittii fayyadama qajeelfama bulchinsa meeshaalee barnootaa

3.1. qabxiilee arman gadii qajeelfama bulchinsa meeshaalee barnootaa waliin walqabataniif deebii keessan mallattoo “√” sanduuqa keessatti barreessuun agarsiisaa. (lakoofsii kan muldhisuu 5= siritti waligala 4=waligala 3= hin murtoofnee 2= walihingaluu 1=gonkuumaa walihingaluu

lakk	Himoota	Scale				
		5	4	3	2	1
1	Fayyadamtoonii imaammataa fi qajeelfama bulchinsa meeshallee salphattii argatuu					
2	Qodafudhatoonii imaammataa fi qajeelfama bulchinsa meeshaalee barnootaa irratti hubannoo ni qabu.					
3	Bulchinsii mana barumsaa qajeelfama gadii bu'eera dhaabachuuf kan mana barumsaa qopheesuuf kutannoo qabu.					
4	Bulchinsii mana barumsaa imaammataa fi qajeelfamoota fayyadamudhaaf kutannoo fi murannoo qaba					
5	Meeshaaleen barnootaa kan bitaman qajeelfamattii fayyadamudhaani					

### Kuta IV. Bulchinsa meeshaalee barnoota keessatti hirmaanaa qooda fudhatootaa ilaalchisee

1. Yaadoota armaan gaddiittif debii keessan mallattoo “√” sanduuqa keessattii barreessuun agarsiisaa. (Lakkooofsii kan mildhisuu: 5= Daran gaaridha 4= baay'ee gaaridha 3= gaaridha 2= qubsaadha 1=dadhabaa

Lakk	Himoota	Maddalii				
		5	4	3	2	1
1	Hirmaanaa isaani adeemsaa karoora keessatti					
2	Hirmaanaa isaanii fedhii adda baasuu irrattii					
3	Hirmaanaa isaani adeemsaa bittaa keessatti					
4	Hirmaanaa isaani soochii suphaa keessatti					

5	Itti fayyadama meeshalee barnootaa mirkanefachuuf hirmaanaa isaanii					
6	Hirmaanaa isaani adeemsa meeshalee maqsuu keessatti					

### Kutaa V. Gaaffannoowwan rakkoollee gurguddoo bulchinsa meeshalee ilaalchisee

1. Rakkoollee gurguddoo armaan gadii bulchinsa fi itti fayyadama meeshaalee barnootaa waliin wal qabataniif deebii keessan mallattoo “√” barreessuun aggarssiisaa.

la kk	Himoota	Baay’ee yaachisaa	Yaachis aa dha	gidug aleesa	Yaachisumaan isaa xiqaa dha	Hin yaachisuu
1	Jiraachuu dhabuu oggeesaa					
2	Addaan suphaa meeshalee jiraachu dhabuu					
3	Humna bulchuu fi it fayyadama meeshaalee barnootaa					
4	Jiraachu dhabu hirmaanaa barsiisaa fi hojataota bulchinsaa					
5	Hanqina kusaa meeshaalee mijatoo					
6	Hanqina baajataa					

2. Rakkoolleen gudguddoon bulchinsa qabeenya meeshalee barnootaatiin wal qabatee mana barumsaa keessan keessattii muldhatee tarreessaa \_\_\_\_\_

\_\_\_\_\_

3. Mala furmaataa rakkoollee bulchinsa qabeenya meeshalee barnootaa maqsuuf fudhatamuu qaban tarreessaa \_\_\_\_\_

\_\_\_\_\_