

The Disposal Practice of Materials in the Public Sector (The Case of Selected Sub-Cities of Addis Ababa, Ethiopia)

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Abstract

This paper explores the disposal of unserviceable fixed assets and stock items of public organizations in Bole and Yeka sub-cities of Addis Ababa, Ethiopia. In line with this, questions have been designed to assess the practice of the system in place, availability of relevant and reliable information for making effective decision of disposal function, and gaps in carrying out disposal functions. The study focused to let management and legislative bodies gain knowledge about the advantage of having efficient and effective periodic disposal of obsolete, surplus, and scrap materials as an integral part of overall properties management. To investigate this, a case study was conducted and data were collected through questionnaires from 28 property management experts, a face-to-face interview with 13 property management unit process owners, observation, and reviewing official documents. The collected data were systematically arranged, organized, and analyzed using SPSS to generate descriptive statistics results (figures-numbers and percentages) presented in tables, and then thematically interpreted. As the survey results revealed, the Heads, Disposal Committee, and Property Management Units of public organizations as well as Regulatory Body have given less attention to disposal functions. As a result, ample long stayed no longer usable fixed assets and stock items have occupied store spaces and shelving equipments, and found under the custody of public organizations of the sub-cities. Shouldering strict responsibility with accountability and applying remedial measures for maintaining the system, carrying out timely efficient and effective disposal, and giving due attention to disposal duty are crucial to secure best value for money, avoid carrying costs, and keep up dedication to accomplish disposal functions in planned way and remove no longer usable materials on time in environmentally friendly and fiscally accountable ways.

Keywords: Disposal function, Unserviceable assets, Obsolete goods, Surplus items, Scrap materials, Carrying Cost

1. Introduction

Public services are evolving in a new context of rising public expectation, increasing focus on improving efficiency and value for money, and continuous emergence of new technologies (Lyons, 2004). Due to this dynamic and demanding situation, governments and their functional units are required to provide services at required level and quality in cost effective and efficient way. And, in addition, explore the living standards of the citizens and constituencies to enhance the well-being of their jurisdictions. This could be one of the foremost objectives of a government or its tiers that can be achieved through public organizations' mandates and operations.

To achieve the predetermined target, governments and their functional units need to carry out various operational functions that require supporting inputs to facilitate the execution of the operations. As an input, governments and their functional units are enforced to acquire and hold fixed assets and stocks items that support and facilitate production of essential services and products efficiently and effectively. The intention of owning such assets is not for furnishing an organization, or a government, or its unit but to enable the organization run its business in efficient and effective manner and without which it is impossible to achieve the intended goal of the organization (GASB, 2003; MOFED, 2009).

Due to such forcing condition, now days the rate of investment in fixed assets and stocks items by a government and its functional units has been increased. Therefore, to secure the expected benefits from such assets, effective and efficient overall asset management system that is in place is the paramount. The in place system and practice enables to dispose no longer usable fixed assets and stock items on time from organization's premises to free spaces and storing equipment for other uses, resources for new investment or use, and transfer ownership of the assets to other (s) for gaining benefits or transferring risks. Moreover, it enables to identify and capitalize on most valued assets, and increase value for money from retained assets (Lyons, 2004).

To properly execute disposal functions, the availability of in place executable disposal policy and procedure is crucial. However, this by itself is not enough for achieving the best value for money and conducting the disposal duty in an efficient, effective and transparent manner but dedication of the concerned bodies for undertaking disposal functions efficiently and effectively is essential. In addition, the following up of the execution function by the legislative body and taking corrective action on time is very important (New South Wales Treasury, 2006).

Moreover, to carry out disposal function efficiently and effectively, well prepared disposal plan and timely disposal of materials by employing appropriate disposal methods have great value to secure the required benefits (New South Wales Treasury, 2006 & Department of Treasury and Finance of the government of Western Australia,

2005). Well prepared disposal plan lets an organization utilizing scarce resource proficiently and successfully, and to aggregate disposal activities. On the other hand, timely disposal enable to gain the required benefit from the assets as required, and utilize places occupied and shelving equipment held for other purposes and thereby to make timely investment or replacement. In using disposal methods to remove unserviceable fixed assets and stock items properly, weighing and considering potential impacts of the disposal methods on return, human and natural environment and selecting the reasonable method in specific disposal have significant impact on maintaining efficiency and capability of disposal function.

Furthermore, identifying serviceable and unserviceable materials (fixed assets and stock items) and handling them separately have high benefit to facilitate disposal functions and take appropriate measures on unserviceable fixed assets and stock items. When materials are inefficient and unserviceable, or when they expire, or when they are surplus to requirements, or unfit for a purpose, it is better to remove them on time. Though the power and responsibility is legally given to public bodies of Ethiopia to dispose unserviceable materials on time, (MOFED, 2011), various unserviceable fixed assets and stock items that have to be removed from their premises are found under the custody of federal public organizations of Ethiopia (Office of Auditor General of Ethiopia, 2011).

The disposal of materials in Addis Ababa sub-cities obviously lacks efficiency and effectiveness as it was observed from various organization` activities and the exact reason behind this limitation has not yet been studied or identified. In addition, there is no pioneer research conducted regarding disposal of unusable materials in Ethiopia in general and specifically in study area that need due attention to make the asset management business sound and efficient. Therefore, this study tried to investigate problems that holdup disposal of no longer usable fixed assets and stock items in the sampled two Sub-Cities of Addis Ababa City Government.

The main objective of this study was to evaluate and examine the practice and challenges of disposing unusable fixed assets and stock items in sub-cities of Addis Ababa. In line with this objective, the following questions were raised: (1) How are the materials disposal policy and procedures complied with and implemented in sub-cities of Addis Ababa City Government? (2) How are the disposal functions of no longer usable materials carried out in Addis Ababa sub-cities? (3) What are the major challenges in disposing redundant materials?

The findings of this study are supposed to alert public bodies of the sub-cities as well as public organizations for giving due attention to disposal business as one of the core business of the whole life asset management. Moreover, it is very important for changing the attitude of managers and concerned bodies of sub-cities as well as City Government in disposal functions, without which the asset management functions cannot be complete, efficient and effective; and is impossible to ensure value for money.

2. Review of Related Literature

2.1. Disposal of Unserviceable Materials

Materials refer to resources that contribute to economic activity that have physical existence and used directly or indirectly in producing a product or a service and owned by an organization needed to do a particular economic activity (Tunbull et al, 2010; Oxford University Press, 2007; John Black, 2002). Moreover, Robert et al (2010), they represent everything that an organization needs for its operation that are acquired by the organization and are diverse mix of things an organization needs to perform its operations. Thus, in public sector, fixed assets and inventory items are one of the materials which are acquired to carry out public sector`s business. In order to secure expected benefits from these assets, life-time asset management approach that includes prudent management of excess of need, obsolete, surplus, and scrap assets that have no economic value is required from public bodies (MOFED, 2009).

Obsolete materials have economic worth and are no longer useful for the organization`s operation mainly due to technological change but they are not damaged (Gopalkrishnar & Sundaresan, 1997). These items are not required at all due to changes in technology. Owning an item without adequate preparation to use will result in dormant or slow moving stock whose usage is infrequent and holding items as safety stock will contribute to obsolescence. Though complete avoidance of obsolescence is impossible, it is necessary to avoid accumulation of huge obsolete items which result from faulty forecast and buying in bulk (Sharma, 2006). On the other hand, surplus materials, Gopalkrishnar (1994) and Nair (2005), contribute to the quantity of obsolescence and become dormant stock and stored over a period of time. The surplus items are in excess of what is needed and have no immediate use but have accumulated due to faulty planning, forecasting and purchasing; however, they have usage value in the future (University of Sydney, 2010).

Unserviceable materials are of no use that are not performing a function for an organization and require disposing from a location; typically they could be scrap, surplus, excess, obsolete, and waste items that should be removed from organization's premises. Disposal refers "Putting something into proper or suitable place, or putting something in the place where it is kept since using it is ceased, or to be free of something that is not needed" (Tunbull et al, 2010; Oxford University Press, 2007; John Black, 2002). In addition, it refers to transferring items to another person (natural or judicial) by sale, or other means, or it is the act of getting a ride of unwanted materials by discarding (burning or burying), (Thai 2009), for gaining benefit. Therefore, unserviceable materials, which

are unusable to organization need timely disposal from premises of an organization. Moreover, when the benefit of an old asset compared to the new asset is less, and owning the new asset that can be exchanged saves time of service provision and has highest efficiency, a government or its functional unit, or an organization can exchange an old asset for a new similar or dissimilar asset (Warren et al, 2005; Granof, 2001).

Public organizations can own materials by using their own funds or through other means and use them in the course of running their businesses (Razek et al, 2000; Fess and Niswoger, 1981), and thus they are accountable for performance of these assets under their control. These materials including materials identified as unserviceable need to be managed by government or its functional units in most efficient and effective manner. Lastly, they must be removed in economic, legal and transparent manner when they are absolutely unserviceable. Unless this task is performed, the materials` management task becomes complex, of no use, and ineffective and uneconomical (Office of Government Commerce of UK, 2005). Thus, when an organization has no longer usable materials under its custody, it should consider how to dispose them in a way that gives best available overall value for money, that is, in a way that optimizes net social costs and benefits (Lowe, 2008).

Whole life asset management is a system of effective management and control of fixed assets and stock items that takes into account planning, acquisition, receipt, use, maintenance, consumption or disposal or deletion (NSW Government Asset Management Committee, 2003; MOFED, 2009). Fixed Assets are tangible assets that are in operational use and has a useful economic life of more than one year, such as furniture, computers, heavy equipment, vehicles, ships and aircraft, buildings, roads, sewers, bridges, irrigation systems, dam and the like, which are the properties of the government of Ethiopia or its functional units. Whereas, stocks items are supplies and materials that are purchased or produced or donated and are not immediately consumed, which are temporally kept in a storehouse until needed for use and can be consumed within one year. They constitute uniform, clothing bedding, office supplies, printing, medical supplies, educational supplies, food items, fuel and lubricants, agricultural, forestry, and marine input, veterinary supplies and drug, research and development supplies, ammunition and explosives, building and construction materials, spare parts, raw materials stocks, work in progress stocks, finished goods stocks, and the like (MOFED, 2007; 2010; 2011).

2.2. Disposal Policy and Procedure

Properly enacted and in place asset disposal policy provides clear guidance, and systematic and accountable method for disposal business (Department of Treasury and Finance of the Government of Western Australia, 2005). It enables an organization or a government and/or its functional units to guarantee transparent, efficient, effective and economical disposal of material that are no longer needed to the organization. Procedures for disposal of assets have to achieve best value for money and must be conducted in efficient, effective and transparent manner ((Lowe, 2008); University of Sydney, 2010). Thus, the presence of policy maintains transparency, fairness, effectiveness and efficiency, and economy in disposal; and clarifies the process, facilitates the removal, promotes alternative internal uses, and reduces the organization`s storage burden (University of Vermont, 2012).

2.3. Disposal Reasons and Methods

Obsolescence, or wear and tear, or surplus to needs, or technologically outdated or unwanted for the provision of services can be the causes for disposal of materials (Gopalkrishnar & Sundaresan, 1997; Commonwealth of Virginia Office of the Comptroller, 2009). By considering potential benefits, the unserviceable materials can be removed from the premises of an organization or a government and/or its tiers either through sale/lease, or discarding, or transfer, or donation/gift, or cannibalization, or recycling, or trading-in, or scrapping, or lending, or use of any two or more of these methods which are considered as appropriate depending up on the type and nature of unserviceable material (s) available (Warren and Reeve, 2005; University of Sydney, 2010; Texas University system, 2013; BOFED, 2011).

When unserviceable assets can be exchanged with new similar assets, public organizations can trade-in these assets with better valued new assets by allowing bidder to submit trade-in value as well as the new asset prices at the same time (Thai, 2009; Federal Republic of Nigeria; Bureau of Public Procurement, 2008). In order to do this business, before an asset is traded-in, it is important to gain sound knowledge of the disposal marketplace. To gain better knowledge, third party or other means` that enable to obtain equivalent proceeds from disposal of assets can be used. For this, if it is possible and available, specialists that can assist with property disposition to create a competitive environment for getting the best possible price can be employed unless other means, which have been considered as appropriate will be employed (Brandy, 2001).

On the other hand, materials that are unserviceable to an organization and can be able to serve other sister organizations or governmental departments or agencies can be transferred to those which are in need through internal and/or external transfer (Thai, 2009; Office of Government Commerce, 2005). However, in all cases the disposal of materials need to be undertaken based on the efficient and effective removal of materials, and in view of cultural and environmental conveniences unless decided to be retained based on predetermined reasons such as cultural and heritage (Queensland Government Chief Procurement Office, 2010).

Even though disposal is the final and important phase of materials' whole life-cycle management (NIGP, 1996 cited in Thai, 2009), most of the time, it is unattained and unrealized phase of the materials management in the public sector. But, if whole-life materials' management system is properly set up, and applicable disposal policy and procedures with the adequate provisions including specific disposal methods are in place, and regulatory body follow ups and taking corrective action when it is needed are ready, a government and/or its functional unit (s) can employ either of the disposal methods to remove unwanted materials. The unserviceable materials' disposal duty need to be done through consideration of specific situations, nature of the particular material, and cost-benefit analysis, the cost of repairing the assets and the after repair benefit to gain social and economic benefits (Thai, 2009; South Africa National Treasury, n.d; MOFED, 2007).

In general, to determine the most cost-effective method of disposal of no longer functional assets, an analysis of net disposal return should be conducted (Queensland Government Chief Procurement Office Department of Public Works, 2010). In assessing costs, both economic and environmental costs and impacts have to be considered, and minimizing disposal costs and/or maximizing disposal return should be sought. These will contribute to a reduced overall whole-of-life cost of an asset.

2.4. Materials Disposal Plan

The structured and systematic process that comprises identifying assets that are unserviceable to an organization, assessing benefits of disposal against retention, maximizing value, determining disposal method, and then after preparing and implementing disposal plan, and monitoring performance are requisite in disposal business (New South Wales Treasury, 2006; Department of Treasury and Finance of the government of Western Australia, 2005). The well prepared disposal plan establishes rationale for, and timing of asset disposals, and considers the optimal strategy for disposal (AAMCoG, 2011; Federal Republic of Nigeria; Bureau of Public Procurement, 2008).

The presence of well prepared disposal plan, also, enables to ensure that an organization's, or a government's, and/or its tier's asset portfolio contains only those assets that effectively meet its/their service delivery requirements at the lowest long term cost. It, in addition, enables to prioritize and optimize the removal of unserviceable assets identified as being no longer usable to organization's requirements (Queensland Department of Housing and Public Works, 2010; University of Sydney, 2010). Disposing unserviceable material assets, in accordance with asset disposal plan ensures that they do not become an occupant and/or financial burden; and may also free up funds required for other works, influence decision-making and support the forward estimates, and budget processes by enabling reinvestment of disposal revenue (Office of Government Commerce of UK, 2005; University of Leeds, 2006).

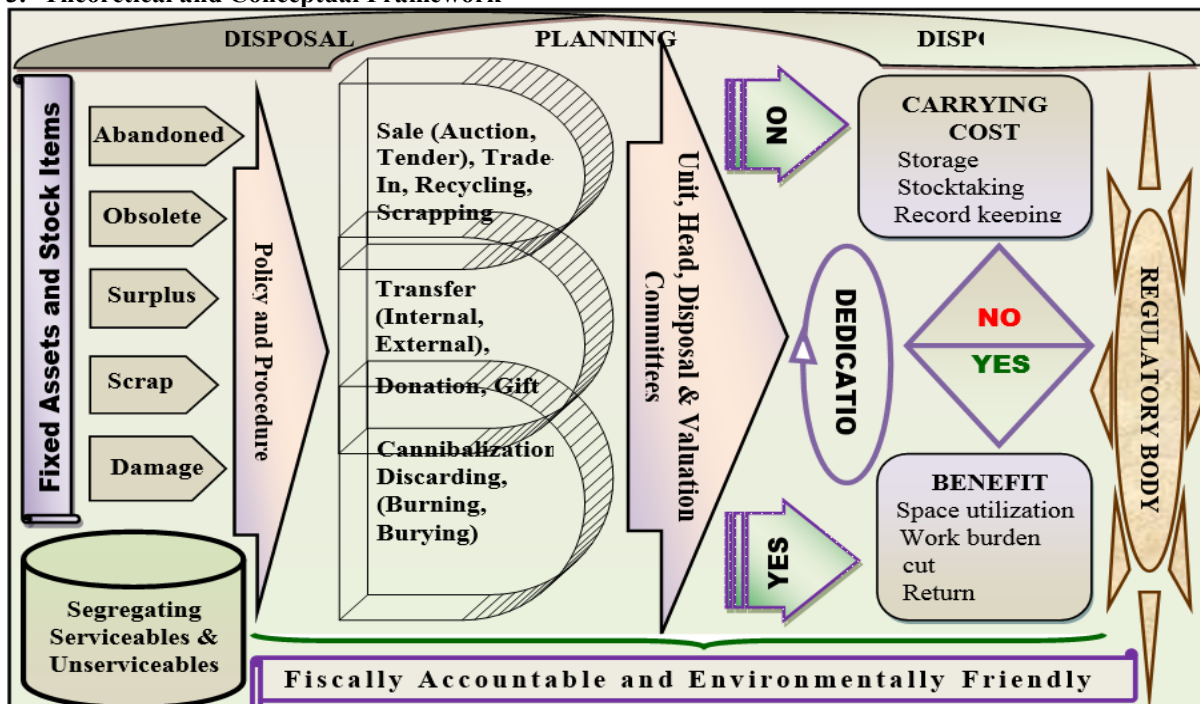
2.5. Benefits of Disposing Unserviceable Materials

Effectively managing and taking prompt measures on the growing quantity of no longer serviceable materials reduces challenges to materials management officials and officers, and makes possible to keep safety and security of human beings as well as environment (Macaulay et al, 2001). In addition, removing unusable items in environmentally friendly and fiscally accountable way on time reduces work burden, and safety and security problems; and enables to gain return and economically utilize spaces (MOFED, 2011; BOFED, 2011).

When materials out of the service are held by an organization for a long period of time and if timely measure is not taken, they will be exposed to damage and even they may bring hazard on human beings as well as environment. Especially, those surplus fixed assets on which huge amount of money was invested will lose their value and become depreciated. This in turn reduces return expected from these assets if they are not disposed on time (Warren and Reeve, 2005, Queensland Government Chief Procurement Office Department of Public Works, 2010). On the other hand, if wellbeing sensitive materials like chemicals, medicines and food items that are out of use and should be removed on time are not disposed promptly, they may cause health problems on storehouse or warehouse workers, environment as well as living things.

Moreover, the accumulation and unnecessarily owning unserviceable materials leads to inefficient utilization of warehouse or storehouse spaces and shelving equipments because they have been occupied and additional cost may be incurred to avail new spaces or equipment for handling serviceable materials (Jones and White, 2008).

3. Theoretical and Conceptual Framework



The presence of unserviceable physical assets under the custody of a government and/or its functional units or an organization is inherent due to obsolescence, surplusness, damage, scrapness, and/or abandonedness of materials owned. This might be due to dynamic technological and environmental changes, and/or operational causes or carelessness in holding, or preserving, or utilizing the assets. Thus, such assets should be kept separately from serviceable assets and they should be properly protected and overseen.

Since unserviceable assets are no longer usable to an organization or a government, they must be disposed from the premises on time in fiscally accountable and environmentally friendly way. The disposal business has to be executed in line with policies and procedures set down legally in a way that benefit an organization, a government as well as society using appropriate disposal methods in planned way. To carry out disposal functions, commitment is required from all parties who are responsible to take part in disposal functions. In addition, playing significant role in follow up and taking corrective action(s) for upholding disposal function corresponding to what is stated in the law, and executing disposal in right way timely without creating any harm to physical and natural beings is required from regulatory body. Properly carrying out disposal function on time in right and legally way without creating any harm to the environment has various benefits. These might maximize space utilization, return, investment, and reduce work burden related to stocktaking, preservation, and record keeping and follow up. On the whole, disposing unserviceable assets on time economically enable to make the whole life asset management function efficient, effective, and complete. But, throwing such assets away here and there, and putting in any place for a long period of time without responsibility and accountability, using such actions as a means of removing unwanted materials, will affect the environment as a whole.

4. Methodology

4.1. Research Design

A case study and descriptive research design were employed to conduct in-depth analysis of disposal of unserviceable assets. The study was supposed to present the facts related to the disposal of unserviceable assets at Yeka and Bole Sub-Cities of Addis Ababa, Ethiopia. More specifically, the status of unserviceable fixed assets, the trends of disposal practices of public organizations, government attentions in disposing of unserviceable fixed assets and stock items, and the problems resulting from poor management of these assets are the major facts described in this study.

4.2. Data Sources and Collection Method

The data were gathered both from primary and secondary sources. The primary data were collected purposively from Bole and Yeka sub-cities districts' property management unit experts and process owners. The objective of considering the experts and process owners was to acquire reliable, relevant, and useful information for adequate discussion and presentation in a manner that helps to understand more about problems and challenges related to disposal function and effects. Regarding secondary data, various articles written by different scholars, shelf

materials, and annual reports of the sub-cities of Addis Ababa were considered. However, there was gap in well availability of organized, properly produced, and documented material about disposal functions in organizations under the study.

Primary data were acquired from respondents through questionnaires, face-to-face interview, and observation. On the other hand, secondary data identification and location of the documents were made by reviewing various articles, shelf materials, and annual reports of the sub-cities of Addis Ababa under the study.

4.3. Population and Sampling

Addis Ababa City Government is one of autonomous functional tiers of Ethiopia, currently, with 10 sub-cities and 116 districts. To be manageable and come up with concrete generalization and conclusion, the sample has been taken from sub-cities with districts. The sample was considered since the sub-cities as well as their districts work within the same property management system and bureaucracy, and use, for guidance, the same property management legal documents and procedural manual to manage the whole properties management processes. Based on this, the researcher took 2 sub-cities (Bole and Yeka) with their 27 districts and 54 property management officers and 27 property administration process owners. Then after, to have better representation and obtain accurate information, from targeted districts property management workers, the researcher used only employees with better knowledge of property management duties and who have experience in property management. They comprised 13 property administration process owners and 28 property management officers, which were purposively selected for the study.

4.4. Data Analysis and Presentation

The questionnaires forwarded to property management unit experts were collected, organized, and qualitatively and quantitatively analyzed. Following the arrangement, the data were tabulated, coded and analyzed through SPSS to generate descriptive statistics using figures - numbers and percentages, and presented by means of tables. In addition to questionnaires results, the results of the interview held with process owners and observation results were used for the analysis and presentation. The analysis and presentation of the data were made to reveal trends, reach conclusions, and come up with recommendations.

5. Results and Discussions

The questionnaires prepared on featuring issues of disposal of unserviceable fixed assets and stock items were distributed to 28 property management officers of Bole and Yeka sub-cities and collected. In addition, key informants interviews were held with 13 property management process owners of both sub-cities by using guiding interview questions that were designed to gain knowledge about disposal of properties. Moreover, the researcher observed the overall conditions of the properties disposal business in both sub-cities' public organizations. Subsequently, the analyzed data were presented, and the results were interpreted against what is theoretically and legally stated regarding properties disposal.

5.1. Profile of Respondents

The background of respondents who involved in this study in terms of sex, age, work experience and education were presented in Table 5.1 as shown below.

Table 5.1: Respondents' Background Information with Sub-Cities

Sub-City	Frequency	Percent	Sex	Frequency	Percent
Bole	13	46.4	M	12	42.9
Yeka	15	53.6	F	16	57.1
Age	Frequency	Percent	Work experience	Frequency	Percent
18-25 years	9	32.1	< 2 years	13	46.4
25-35 years	7	25.0	2-5 years	6	21.4
35-45 years	7	25.0	5-10 years	2	7.2
> 45 years	5	17.9	>10 years	7	25.0
Education	Frequency	Percent	Qualification	Frequency	Percent
12 th grade	3	10.7	Management	11	39.3
Certificate	1	3.6	Accounting	9	32.1
Diploma	14	50.0	Economics	2	7.1
1 st degree	9	32.1	Proc. & Prop. Mgt	5	17.9
2 nd degree	1	3.6	Marketing	1	3.6

Source: Field Survey, 2015

Though experienced expertise is expected in the area of property management unit of each public organization, 46.4% of the respondents who are working in property management unit have less than 2 years work experience,

and 21.4% are in between 2-5 service years experience (Table 5.1). Not only this but also in educational background about 64% of the respondents working in property administration unit of the sub-cities have less than first degree and more than 82% of the respondents have no qualification in the area of property management. Besides, as it was ascertained from the interview held with 13 property management process owners of the both sub-cities, the major problem in the area that hold back from properly executing property administration duties is having low work experience and high employee turnover. This is, as the interviewees' replied, because of low payment and absence of recognition and other related benefits that attract individuals to work in this position.

This insignificant work experience has exposed employees to challenge of knowledge and skill gap that resulted in executing property management functions in an inefficient and ineffective manner. In addition, the problem of employees' turnover has also adversely affected the efficiency and effectiveness of property management including disposal functions.

5.2. Requirements and Methods of Disposal

The presence of properly enacted policy and procedure that clearly explain methods for disposing no longer usable properties; and duties and responsibilities of individuals who take part in disposal functions are very crucial. Although 46.4% of the respondents disagreed on the presence of clear policy and procedure (Table 5.2), as it was proved by the researcher, there is legal framework for disposal function. Besides, legally endorsed documents are available in hands of city government and higher officials even if they were not properly distributed to users and lately endorsed.

The reason that the key informants disagreed on the presence of the legal documents that guide property management are: *first*, some of them have knowledge gap on the presence of the legal documents; *second*, as all of the respondents replied, they faced with challenges in valuing old properties for disposal, that is, how the valuation will be carried out based on the nature of each property was not clearly specified in the documents of Addis Ababa City Government as well as Federal Government of Ethiopia; and *third*, the attention of higher bodies to Property Management Unit in capacitating was less and thus the disposal work has been lagged behind.

Table 5.2: Policy, Procedure, Responsibility, and Methods for Disposal

In place policy and procedure for disposal	Frequency	Percent
Strongly disagree	4	14.3
Disagree	9	32.1
Strongly agree	1	3.6
Agree	14	50
Clearly set duty and responsibility for disposal	Frequency	Percent
Strongly disagree	-	-
Disagree	17	60.7
Strongly agree	-	-
Agree	13	39.3
Availability of legally approved disposal methods: (Sale - auction, tender, scrap; Transfer; Donation; Discarding; Cannibalization; Gift; Recycling; Trade-In)	Frequency	Percent
Strongly disagree	10	35.7
Disagree	1	3.6
Strongly agree	15	53.5
Agree	2	7.2

Source: Field Survey, 2015

Table 5.2 indicates that, 60.7% of the respondents disagreed on the presence of clearly set duty and responsibility for undertaking disposal function. To substantiate this response, the researcher cross-checked and proved by reviewing legal documents, and the duties and responsibilities have been defined in the documents as provisions though they are not in detail. The main reason that the respondents disagreed for the presence of clearly set duties and responsibilities in legal documents is that they don't have sufficient knowledge and do their assignments referring to what have been done before, the absence of comprehensive definition of their duties and responsibilities considering the nature of properties and their disposal mechanisms. It is also observed that there is no clearly defined duty and responsibility for disposal of some specialized items such as chemicals and pesticides that are found under the custody of public organizations.

More than 60% of the respondents reported the presence of legally approved disposal methods (Table 5.2). But, they clarified the absence of exchanging old asset with the new most valued assets and recycling as the methods of disposal. On the other hand, about 39% of the respondents were reported the lacking of legally approved disposal methods. As it was proved by the researcher, there are clearly defined approved disposal methods that were stated in legal document except trade-in and recycling, but the disagreed respondents reported

as a deficient due to lack of knowledge.

Though, currently, Trade-In and recycling are not considered as a legally approved disposal methods by City Government, if they are regarded as one of the disposal methods legally, they may be valuable methods respectively to exchange old fixed assets with new similar or dissimilar items, and disposing recyclable stock items in an efficient manner.

Generally, the major limitation in the sub cities is not the problem of presence or absence of disposal methods and policy gaps. But, the unserviceable property assets under the custody of sub cities have not been properly disposed on time and the available approved methods have not been properly employed due to knowledge and skill gap, lack of commitment, and fear of liability as the key informants clarified.

5.3. The Role of Concerned Bodies for Disposing Unserviceable Assets

The presence and functionality of disposal committee, commitment of concerned bodies that take part in disposal tasks, and carrying out disposal functions were presented in Table 5.3 as shown below.

Well enacted and issued law for carrying out disposal function has no value by its own unless the knowledgeable and experienced concerned bodies are available and/or functional. As it is stated in the property management law of the City Government, the establishment of disposal committees is critical for disposing unserviceable assets on time (BOFED, 2011). But, as all respondent reported (100%), almost all committees throughout the sub-cities are non-functional (Table 5.3). In some public organizations, the committees have not been properly established (as the 25% of the respondents replied). Even, in organizations in which the committees have been established they are non-functional (as the 75% of the respondents replied) and dedicated to carry out the duty. And, no one follows up them for their functionality. In addition, 71.4% of the respondents confirmed that not only the committees are ineffective but also the heads of each public organization have not taken corrective measures such as facilitating and enforcing the duty, and the property management units in properly identifying the unserviceable items within the sub-cities. Moreover, as the researcher cross checked through interview held with 13 property management process owners, the respondents' response is valid.

Table 5.3: Responsibility and Disposing Unserviceable Fixed Assets and Stock Items

Presence and functionality of disposal committee	Frequency	Percent
Established but not functional	21	75
Not established	7	25
I don't know	-	-
Attention and dedication for disposing unserviceable materials	Frequency	Percent
Only the heads and disposal committee are uncommitted to disposal	3	10.7
Heads, disposal committee, and units are uncommitted for disposal	10	71.4
Units and disposal committees are trying to dispose	5	17.9
Punctuality of disposal function	Frequency	Percent
There is delay in disposal of unneeded assets	6	21.4
At all, there is no disposal of unwanted assets	2	7.2
There is too much delay in disposing unwanted materials	20	70.4
Efficacy, legality and non-discriminate of disposal of unserviceable assets	Frequency	Percent
Undertaken in legal, efficacy, transparent, non-discriminate way	1	3.6
Undertaken totally in illegal, non-efficacy, non-transparent, discriminate way	7	25
Undertaken sometimes in illegal, inefficacy, non-transparent, discriminate way	18	64.3
I don't know	2	7.1

Source: Field Survey, 2015

Furthermore, efficiency, effectiveness, legality, and non-discrimination of disposal have been considered as critical issues that have to be maintained for any disposal function by each public organization (MOFED, 2009; 2011). However, even in those infrequent and delayed disposals of materials in sub cities, public confidence hasn't been maintained, about 89.3% of the respondents reported, due to occasional legitimacy, efficacy, transparency, and fairness problems related to disposal.

5.4. Reasons for Disposal and Duties

The reasons for disposal, annual disposal plan, identifying properties as unserviceable and serviceable and handling them separately; and reporting them promptly to concerned body were presented in Table 5.4 as shown below.

Various factors cause properties disposal, which might be carelessness in holding, utilizing and preserving properties that result in properties' damage, or obsolescence, or surplusness, or scrapness, abandonedness, or all or some of them. The Ethiopian government or its functional units' property management laws require considering

each cause of disposal and deterring those causes that can be mitigated. If the prevention of the causes is impossible and due to that reason unserviceable materials are resulted, the materials should be disposed (MOFED, 2009). To effectively carry out disposal duty without any complexity, properties owned by an organization need to be identified as serviceable and unserviceable and handled separately. But, about 96% of the respondents reported, properties under the ownership of the public organizations within the sub-cities of the Addis Ababa City Government are not properly separated as serviceable and unserviceable. Even in few organizations in which they were segregated and known as unserviceable, they haven't been handled separately (Table 5.4). This, the presence of such mingled properties found under the custody of public organizations of the sub-cities was also proved by the researcher through observation and interviewees response.

As the 64.3% of the respondents reported (Table 5.4), the unserviceable properties that should be reported to concerned bodies for taking measure have not been properly reported on time. Thus, the accumulation of such assets accrues from time to time.

Table 5.4: Reasons, Plan, Identifying Unserviceable Properties, and Reporting

Reasons for disposal of materials	Frequency	Percent
Only Surplus	1	3.6
Surplus, Obsolete and Damage	23	82.1
Scrapness and Abandonedness	4	14.3
Presence of disposal plan	Frequency	Percent
No strategic or annual disposal plan	23	82.1
There is annual disposal plan but no strategic disposal plan	4	14.3
I don't know	1	3.6
Identification of serviceable and unserviceable assets	Frequency	Percent
Not Identified	20	71.4
Identified but not handled separately	4	14.3
I don't know	4	14.3
Reporting unserviceable properties to concerned body on time	Frequency	Percent
Strongly disagree	8	28.6
Disagree	10	35.7
Strongly agree	-	-
Agree	10	35.7

Source: Field Survey, 2015

Having effective strategic and operational disposal plan enables to aggregate disposal activities and benefit from economies of scale, and establishes the rationale, timing of, and for selecting appropriate strategy for disposal. Even though this is the case, when the actuality of sub-cities public organizations are considered (about 96% of the respondents confirmed and proved by the researcher), the sub-cities lack well prepared strategic as well as annual disposal plans that specify each unserviceable asset with rationale, timing and methods for disposal (Table 5.4).

5.5. Owning Unserviceable Fixed Assets and Inventory Items and Effects

The presence of unserviceable properties in storehouse as well as the premises of the sub-cities and how long they lasted under the custody of the sub-cities were presented in Table 5.5 as shown below.

When unserviceable properties are available under the ownership of public organizations, they have to be disposed of in environmentally friendly, fiscally accountable, and efficient and effective way on time since retaining them has opportunity cost, i.e., holding cost (MOFED 2007). With regard to this issue, when the sub-cities case is considered (as it was confirmed by all respondents), there were various unserviceable properties under the custody of public organizations that can be disposed through any legally approved method.

Table 5.5: Presence of Unserviceable Assets under the Ownership of Sub – cities

Unserviceable are assets are found in storehouse or compound of sub - cities	Frequency	Percent
Strongly disagree	-	-
Disagree	-	-
Strongly agree	12	42.9
Agree	16	57.1
There are unserviceable assets found under the custody of the sub - cities that can be	Frequency	Percent
Sold or Transferred	12	42.9
Discarded or Cannibalized	7	25
Donated or Traded-In	9	32.1
Lasting period of unserviceable assets found under the custody of public organizations	Frequency	Percent
Up to 10 years	15	53.6
11-20 years	12	42.8
21-30 years	1	3.6
No long lasted unserviceable assets found under the public organizations' custody	-	-
Presence of unwanted heritage and cultural related assets under the ownership of the sub-cities	Frequency	Percent
Strongly disagree	-	-
Disagree	-	-
Strongly agree	6	21.4
Agree	12	42.9
I don't know	10	35.7

Source: Field Survey, 2015

In addition, respectively as the 53.6% and 42.9% of the respondents reported, up to 10 years and 11-20 years lasted various unserviceable properties found under the custody of various public organizations of sub-cities. In addition, 3.6% of the respondents reported that there are some unserviceable properties that lasted for 21-30 years which are found under the custody of public organizations of the sub-cities. This is also valid, though the rate is low, since the respondent are experienced expert of property management unit. These cases were triangulated by the researcher through interview held with 13 property management process owners of the sub-cities at various districts of various public organizations. The interviewees were confirmed the presence of various unserviceable properties under the custody of various public organizations of sub-cities that lasted for 5-20 years, such as office furniture, printers, photocopy machines, computers, typewriter, chemicals, and vehicles.

Furthermore, though the legal guidelines of the Ethiopian government as well as the Addis Ababa City Government permits the transfer of heritage as well as cultural assets to the respective concerned bodies, as the 64.3% of the respondents reported, there are such assets under the custody of some public organizations of sub-cities for longer period.

5.6. Maintenance Costs and Effects of Owning Unserviceable Assets

The comparison of cost of maintenance of old aged properties and the benefits generated from the maintained assets, and the negative side effects of not disposing unserviceable assets on time were presented in Table 5.6 as shown below.

When the maintenance cost of unserviceable fixed assets expected to be exceed from the benefits expected to be gained, it is rational to dispose of the assets (MOFED 2007; 2010). To consider this condition, organizations need to undertake assessment of asset condition and maintenance cost to be incurred through various ways using expertise. When the sub-cities case is considered with regard to this issue (Table 5.6), based on their experience and exposure, 71.4% of the respondents proved the presence of unserviceable fixed assets whose maintenance costs exceeded the service they provided to organizations in past five year within sub-cities, especially vehicles. This was also proved by interview discussion held with 13 property management process owners of the sub-cities.

Table 5.6: Maintenance Cost of & Effects of Owning Unserviceable Assets

Maintenance cost of out-of service assets exceeds benefits of the maintained assets	Frequency	Percent
Strongly disagree	-	-
Disagree	8	28.6
Strongly agree	9	32.1
Agree	11	39.3
Effects of not-disposing unserviceable assets	Frequency	Percent
Overcrowding stores, and Loosing value and benefit	4	14.3
Overcrowding stores and Creating work burden	6	21.4
Overcrowding stores, Loosing value and benefit, Creating work burden, Posing to safety and health problem	18	64.3

Source: Field Survey, 2015

In theory and practice, keeping unserviceable assets under the custody of an organization has a lot of negative side effects. That is, cost of carrying that should be considered and sought the way at least to minimize it. In line with this, as it can be seen from Table 5.6, 100% of the respondents reported negative effects that faced public organizations within the Sub-Cities.

In general, as the researcher observed and cross-checked the disposal functions and it was proved from the results of the study, the gaps observed in all public organizations of the Yeka and Bole sub-cities in disposal of unserviceable properties have also been reflected in all other sub-cities of Addis Ababa City Government. This could be valid because all sub-cities of the Addis Ababa City Government are under the same property management system, governed by the same laws, and have similar capabilities.

6. Conclusions and Recommendations

6.1. Conclusions

Acquiring fixed assets and stock items that are needed for producing products and/or rendering services is usual for public organizations. Also, they own them through gifts, donation, or transfer to support service provision or carry out a particular activity. These assets require efficient and effective management throughout their life, including disposal of no longer usable assets, to drive the benefit expected from them. For undertaking the task of the assets management in efficient and effective way, dedication of all concerned bodies to whole-life property management is crucial. Without having effective and efficient disposal of obsolete, surplus, and scrap materials that are unserviceable to an organization, it is not viable to say that whole-life asset management function of an organization or a governmental unit is complete, efficient and effective, which is required by property management law.

The presence of short or long lasted unserviceable assets under the custody of an organization and/or a government is not the only problem but also has negative effects. The harmful effects of having unusable materials include: occupying space that can be used for other purpose, imposing work burden on property management unit workers as well the organization, creating safety and health problems, loosing value and benefit, and polluting and overshadowing the good looks of the environment.

Under the custody of Addis Ababa sub-cities' public organizations, there are long lasted unserviceable assets. As per the mandate given to sub-cities' public organizations, they can dispose unwanted properties based on aggregated monetary value threshold permitted to them and, even, the threshold value is beyond the permitted amount, they have responsibility to report the assets for disposal to Bureau of Finance and Economic Development of Addis Ababa. But, the sub-cities' public organizations under the study are not working well in disposing unserviceable materials from their custody. In addition, all the concerned bodies of the sub-cities' public organizations are not given due attention to the task of disposal, and enforce and manage the disposal functions as required by the law.

To dispose unserviceable materials from their premises, public organizations, from disposal methods that have to be used by any public organization when required clearly stated and specified legally, can employ any appropriate method. However, these methods do not include exchanging the old unserviceable asset with the similar new valued asset in considering boots. In addition, recycling of recyclable materials is not considered, which is also vital.

The regulatory body, moreover, is not in a strong position to follow up and monitor, and facilitate the accomplishment of duty, and thereby take corrective action on proper executing of disposal functions.

6.2. Recommendation

A variety of fixed assets and stock items are owned by the public organizations to carry out service provision smoothly and realize the objectives of the organizations. These assets should be managed efficiently and

effectively throughout their life cycle including disposal of unserviceable assets. In light of this, the following recommendations have been forwarded:

- There is a significant knowledge and skill gap in Addis Ababa sub-cities in property management policies and procedures. Therefore, sub-cities as well as City Government should train and capacitate employees on property disposal policy and procedures, and enforce and follow up the execution of property management law.
- Having effective strategic and operational annual plans enables to identify unserviceable assets, schedule for disposal, allocate resources properly, and aggregate disposal activities to benefit from economies of scale. The disposal plan should be prepared by sub-cities' public organizations as well as the city government properly.
- The fixed assets and stock items have not been properly identified as serviceable and unserviceable by Property Management Unit, and handled separately in sub-cities' as well as Addis Ababa City Government. This task should be done properly by the Unit to facilitate disposal function, and reported to higher bodies on time for making decisions. In addition, the head of each public organization should support and follow up the accomplishment of the duty.
- There is gap in maintaining public confidence and securing expected benefits even in infrequent disposal tasks that have been undertaken. Therefore, the disposal function should always be conducted in legal, transparent, efficient, environmentally friendly, and fiscally accountable way.
- The attention of Heads of the public organizations, Disposal Committees, Property Management Units, and regulatory body in sub-cities is less for disposal function. This limitation should be replaced by strong dedication, and the higher officials as well as the regulatory body should find the way to make it sustainable.
- Long lasted unserviceable assets overcrowd and occupy spaces, create work burden to employees of the property management unit, loose value, pose safety problems to health, and affect the aesthetic value of the compound and/or the environment. The sub-cities, public organizations as well as the city government should consider this problem and find the way to dispose such assets on time when they become unserviceable.
- Corrective maintenance of assets that are no longer functioning is required to preserve assets value provided that the maintenance cost does not exceed the benefit expected from the assets after their maintenance. The sub-cities as well as the city government should correct such problems and dispose the assets rather than retaining them and incurring unnecessary maintenance cost.
- Trade-In and Recycling are not considered as disposal methods by city government and included in property management laws. Therefore, the law making body (regulatory body) should consider them in designing and revising property management laws.

References

- Australian Asset Management Collaborative Group (AAMCoG, 2011): A Guide to Integrated Strategic Asset BOFED 2011. The Addis Ababa City Administration Finance and Economic Development Bureau Public Property Administration Directive No. 10//2011: Public Property Disposal, Birhan & Selam Printing Enterprise, Addis Ababa, Ethiopia
- Bureau of Public Procurement, Federal Republic of Nigeria 2008. Procurement Procedures Manual for Public Procurement: Disposal of Public Property
- Brandy William D.2001. Managing fixed assets in the public sector: Managing for service excellence: Disposition of fixed assets, [http - //www.bookpump.com/upb/pdf-b/1126840b.pdf](http://www.bookpump.com/upb/pdf-b/1126840b.pdf) (Accessed on 15 June 2015).City of Los Alamitos n.d. Disposal of Surplus Equipment - http://www.ci.los-alamitos.ca.us/city_council/ (Accessed on 15 May 2015).
- Commonwealth of Virginia Office of the Comptroller (2009): Policies and Procedures, Capital Asset Accounting: Disposal Management
- Department of Treasury and Finance of the Government of Western Australia 2005. Asset Disposal Policy <https://www.treasury.wa.gov.au/.../Treasury/...Asset.../> (Accessed on 15 August 2015).
- Federal Government of Ethiopia Office of Auditor General 2011. Audit Report on Public bodies' property administration, 2010/11
- Fess P.E. & Niswonger C.R.1981. Accounting Principle: Disposal of Plant Assets 13th Ed South Western Publishing Co, USAGASB (2003): Governmental Accounting Standards Series; Statement Number 42 of the Governmental Accounting Standards Board, <http://www.gasb.org/cs/> (Accessed on 25 April 2015).
- GASB, 2003: Accounting and Financial reporting for impairment of capital assets and for insurance recoveries, NO 224-A, 401Merritte, Norwal CT 06856-5116
- Gopalkrishnar P. & Sundaresan M. 1997. Materials Management: An integrated Approach: Obsolete, Surplus and Scrap Management; Prentice, Hall of India, Private Limited New Delhi-100001, Eastern Economic Edition
- Gopalkrishnar P. 1994. Handbook of Materials Management: Obsolete Inventory, Eastern Economic Edition,

- Asoke, Ghosh, PHI Learning Private Limited, New Delhi.110001, India
- Granof M. 2001 .Government and Not-For-profit Accounting, Concepts and Practice: Ling-Lived Assets, 2nd Ed, John Wiley & Sons, Inc., USA
- John Black (2002): Dictionary of Economics Oxford University Press, 2nd edition
- Jones K. and White A. (2008): RICS Public Sector Asset Management Guidelines: A guide to best practice, Royal Institution of Chartered Surveyors.
- Lowe J. (2008): Value for money and the valuation of public sector assets
- Lyons,M.2004 Towards Better Management of Public Sector Assets <http://83.231.159.114/documents/> (Accessed on 5 June 2015).
- Macauley M., Palmer K. & Shih J. 2001. Modeling the Costs and Environmental Benefits of Disposal options for End of Life Electronic Equipment: the case of used computers, Resource for the future, Washington DC, 1616 P Street, NW
- MoFED 2007. Government Owned Fixed Assets Management Manual: Disposal of Fixed Assets: Ministry of Finance & Economic Development of Ethiopia, Addis Ababa, Ethiopia
- MOFED 2009. The Ethiopian Federal Government Procurement and Property Administration Proclamation No. 649/2009, 15th Year No. 60, 9th September, 2009, Addis Ababa.
- MoFED 2010. Stock Management Manual: Disposal of Stock: Federal Democratic Republic of Ethiopia Ministry of Finance and Economic Development, Addis Ababa, Ethiopia
- MOFED 2011.The Federal Government of Ethiopia Property Administration Directive. Government Property Disposal, No.9/2011
- Nair N. K.2005. Purchasing and Materials Management: Disposal of Surplus and Scrap, Vikas publishing house PVT, LTD, New Delhi, India
- New South Wales Treasury 2006. Total Asset Management Guideline: Asset Disposal Strategic Planning www.treasury.nsw.gov.au (Accessed on 25 July 2015).
- NSW Government Asset Management Committee (GAMC) (2003): Total Asset Management Manual: Asset Disposal Strategic Plan, Sydney NSW 2000 AUSTRALIA gamc.secretariat@dpws.nsw.gov.au
- Office of Government Commerce of UK 2005. Guide for the disposal of surplus property, www.webarchive.nationalarchives.gov.uk (Accessed on 18 May 2015).
- Office of the New York State Comptroller 2008. Division of Local Government and School Accountability Capital Assets, <https://www.osc.state.ny.us/localgov/> (Accessed on 18 May 2015).
- Oxford University Press (2007): Oxford Student's Dictionary, Oxford Dictionary Press
- Queensland Department of Housing and Public Works (2010): Strategic Asset Management Framework Guideline: Asset Disposal
- Queensland Government Chief Procurement Office, Department of Public Works, January 2010: Procurement guidance, Disposal of surplus government assets
- Razek J., Hosch G. & Ives M. 2000. Introduction to Governmental and Not-For-Profit Accounting: General Fixed Assets, 4th Ed, Prentice-Hall, Inc, USA
- Robert M. Monczka, Robert B. Handfield, Larry C. Giunipero, James L. Patterson, and Donald Waters 2010. Purchasing and supply chain Management; Seng Lee Press Singapore, UK Thomas Rennie
- Sharma A.K. 2006. Purchasing and Materials Management: Disposal of Scrap and Obsolete Materials: Anmel Publications PVT, LTD, New Delhi 110002, Printed at Mehra offset Press Delhi, India
- South Africa National Treasury (n.d). Municipal Finance Management Act: Local Government Capital Asset Management Guideline: Tangible Capital Assets, ISBN: 978-0-621-38093-4, <https://www.westerncape.gov.za/text/2009/9/> (Accessed on 10 May 2015).
- Texas A&M University System 2013. Asset Management Manual. Acquisition and Disposals
- Thai Khi V.2009. International Handbook of Public Procurement: Fixed Asset Disposal: Methods and Strategies for Disposing of Personal Property in the Public Sector Taylor & Francis Group, Broken Sound Parkway NW, USA
- Tunbull J., Lea D., Parkinson D., Phillips P., Francis B., Webb S., & Bull V. (2010): Oxford Learner's Dictionary of Current English Oxford University Press 8th edition
- University of Leeds (2006): Improving Property Asset Management in the Central Civil Government Estate
- University of Sydney 2010. Finance and Accounting Manual: Asset Disposal Procedures-Plant and Equipment
- University of Vermont 2012. Disposal of Surplus Property and Movable equipment
- Warren C., Reeve J. & Fess P.2005. Financial Accounting: Disposal of Fixed Assets, International Students Edition, 9th Ed, South Western, Singapore