

**THE IMPACT OF INTRODUCING ELECTRONIC FISCAL
DEVICE (EFD) SYSTEM IN REVENUE COLLECTION IN
TANZANIA:
THE CASE OF TEMEKE REGIONAL TAX COLLECTION**

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THE CASE OF TEMEKE REGIONAL TAX COLLECTION**

**By
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**A Dissertation Submitted in Partial Fulfillment of the Requirements for the Award
of the Degree of Master of Business Administration in Corporate Management
(MBA-CM) of Mzumbe University.**

2014

CERTIFICATION

We, the undersigned, certify that we have read and hereby recommend for acceptance by the Mzumbe University DCC, a dissertation entitled **The Impact Of Introducing Electronic Fiscal Device (EFD) System In Revenue Collection In Tanzania** for the partial fulfillment of the requirements for award of the degree of Masters of **Business Administration in Corporate Management (MBA-CM)** of **Mzumbe University** Dar es Salaam Campus College.

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I, **Erasto Nzota**, hereby declare that this dissertation is my own original work and that it has not been presented and will not be presented to any other university for a similar or any other degree award.

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ABSTRACT

This study was assessing the **impact of introducing electronic fiscal device (efd) system in revenue collection in Tanzania**. It was conducted at **TEMEKE REGIONAL TAX COLLECTION**. Both qualitative and quantitative approaches were employed using a sample of twenty six respondents. The main research instruments used were the questionnaire and interview. Both qualitative and quantitative data collected were analyzed using simple descriptive statistical methods such as frequencies, percentages and cross tabulations. The major focus was to examine the extent EFD has improved tax collection at Temeke Regional Tax Collection, to investigate the performance of the EFD on revenue collection at Temeke Regional Tax Collection, and To examine the system used by TRA for monitoring the use of EFD in business transactions at Temeke Regional Tax Collection

The results show that, EFDs play a big role in the increase of revenue collections. The report also shows 2010/2011 revenue collected was (all amounts in Shs millions) TZS 800,285.23/= and the 2011/2012 collections was TZS 991,034.00. Electronic fiscal devices compliance monitoring progress report show that for the year 2014 the target of revenue collection before EFDs acquisition was 325,646,369.00/= but the actual collection was 378,069,279.71/= The revenue target after EFDs acquisition was 371,859,441.00/= the actual collection was 727,375,890.00/= This implies that the collection was extremely increased after the acquisition of EFDs machines at Temeke Tax Collection Region. EFDs have really helped increase profits due to their efficient nature, increased efficient on preparation of other sales report, increased efficient in stock taking, wise control of inventory is often a critical factor, easily timely preparations of reports and EFD has assisted ease the work of processing VAT returns.

The response of regular breakdowns of the Devices should be done on time thus ensuring the usage of the machines to all registered VAT traders, moreover the existing devices should be subjected to a new test in order to minimize and remove substandard devices believed to be in the circulation

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CHAPTER ONE

INTRODUCTION AND BACKGROUND OF THE STUDY

1.1 Introduction

1.2 Background of the Study

The Government of Tanzania through its Revenue Authority embarked on the system of providing receipts by using Electronic Fiscal Devices (EFDs) which replaces the former machines known as Electronic Cash Register (ECRs) that were implemented before and proved futile to the expectations and objectives including enhancing effective tax administration and proper management of sales in business.

With effect from 1st July 2010 TRA introduced Electronic Fiscal devices through the Value Added Tax (Electronic Fiscal Devices) Regulation, 2010; Subsidiary Legislation, Government Notice Number 192, published on 28th May, 2010 and enriched in the Finance Act 2010 with the main of enhancing VAT compliance in Tanzania (Finance Act, 2010). Therefore, every registered trader for VAT purposes must acquire and possess the EFD machines, failure to comply with the EFD use directive is a punishable offence under VAT Electronic Fiscal Device Regulation 29 of the year 2010.

The owner of EFD machines are required to faithfully preserve their records with regards to the transaction that will be reflected directly by TRA through network. The EFD machines have ability to provide information which will be used in tax administration.

The devices are to be used by trades to record sales and issue fiscal receipts/invoices. It also stores information such as sales, stock, and also issues various reports including day, week, month and annual sales. EFD machines have a fiscal memory and several other special security features.

EFD machines are therefore, important tools for compliance monitoring and enforcement as it provides for the storage of tax information at the time of sale and online monitoring transactions. The capture information enables easy cross matching with tax returns, detection of non-compliance, regular field inspections and surveillance and risk-based enforcement programs. They also facilitate adequate information for administration of other taxes and facilitate provision of high quality taxpayer's services.

Since the EFD introduced in 2010, the taxpayers have been reluctant to install it in their business for various reasons including unreliable power, cost to acquire the machines and maintenance of the same. All this scenarios was dealt with in this paper in order to come up with answers that will enables the tax authorities to come up with some mechanism that will enable more government revenue to be collected hence minimize loopholes that give room for corruption and tax avoidance.

1.2 Statement of the Problem

One of the problems that hinder Tax Authorities in developing countries is that of chronic understatement of turnover by retailers and wholesalers. They either do not issue sales receipts to customers (cash memos) or when pressed to do so, issue informal receipts not serially numbered/dated/authenticated in any proper manner and these receipts are of no value at the time of tax audit. It is evident that this is an extremely serious problem that has had a highly detrimental effect on tax revenue as understatement of turnover leads inevitably to understatement of total income when the Return of Income (ROI) is filed

With many sub-Saharan tax administration facing difficulties in reliably obtaining basic utilities, over and above their needs for effective systems and equipment, they need now also to address the introduction of electronic commerce. One solution to this chronic and complex problem is to put technology to work and empower the commissioner of

income Tax by a suitable amendment in the Statute to order the installation of so called Electronic Fiscal Devices (EFD)

The TRA five corporate plan highlight on how it can collect revenue in a cost effective way. In view of this with effect from 1st July, 2010, the Government decided to introduce the EFDs system to taxpayer registered for VAT purposes first in order to enhance compliance with VAT and other tax laws.

The implementation of the EFD machines has however been marked with technical difficulties and some of them are such as;

- (i.) Lack of knowledge by the intended user as the business people were not educated on how best to use the machines hence leading to the improper use of the same.
- (ii.) The supplier of the EFDs have faced difficulties to link the device with the taxpayers business accounting systems
- (iii.) The Suppliers fails to solve the technical problem of this machine to taxpayer's premises on time.
- (iv.) Sometimes TRA server is said to be incapable of dealing with so many information, or GPRS system is overloaded.
- (v.) Offence imposed by TRA for failure to use of EFDs is very high and its reduce the progress and efficiency of the business to Taxpayers.

If TRA succeeds in solving all these problems, EFD machines could help it avoid missing its revenue collection targets. According to estimates, the device could help the revenue body realize up to 50 percent increase of in collection if all Value Added Tax (VAT) registered traders are connected to the devices.

It should be noted that, if the EFD machines were effective enough, then there could be no complaints from the most of taxpayers and therefore issues pertaining to ineffective operation of machines and other could not be reported.

1.3 Objective of the Study

1.3.1 General Objectives

The main objective of the study is to assess the impact of introducing electronic fiscal device (EFD) system in revenue collection in Tanzania (the case of Temeke regional tax collection)

1.3.2 Specific Objectives

- (i) To examine the extent EFD has improved tax collection at Temeke Regional Tax Collection
- (ii) To investigate the performance of the EFD on revenue collection at Temeke Regional Tax Collection
- (iii) To examine the system used by TRA for monitoring the use of EFD in business transactions at Temeke Regional Tax Collection

1.3.3 Research Questions

- (i) What are the performances of the EFDs on revenue collection at Temeke Regional Tax Collection?
- (ii) To what extent EFDs has improved tax collection at Temeke Regional Tax Collection?
- (iii) What are the systems used by TRA for monitoring the use of EFD in business transactions at Temeke Regional Tax Collection?
- (iv) How the EFD machines have been performed in terms of revenue collection before and after the introduction of EFD machines?

1.4 Significance of the Study

The study is intended to facilitate policy makers and other stakeholders in formulating policies in insuring all the tax payers are using EFDs machines to ensure that they pay tax in accordance with the income. The study should provide additional and useful data that will help to address the problem under study. Moreover, the study will be partial

fulfillment of a requirement for the award of Masters Degree in Business Administration in Corporate Management.

1.5 Limitation of the Study and Delimitation

In undertaking this study, there are a number of constraints' that are likely to hinder the researcher's smooth implementation of research process. These constraints include time, Problems with respondents, shortage of fund and overlapping of tasks. Time is the major constraint because the research will be conducted a research concurrently with other employment obligations. Thus, the researcher will have to balance time for research as well as employer's obligation by asking for some days off and sometimes during working hours when there will be no pressure at work, the researcher use an employer's time to do some researcher work, as result this may cause the researcher not to spare enough time for the research.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter dwells on review of literature, both theoretical and empirical, which relates to the study. It begins by providing the definition and concepts then follows the theoretical review, which presents the role of tax and more insight on EFD, conceptual framework and finally the empirical perspectives related to the study are presented.

2.2.1 The concept of Electronic Fiscal Device

Electronic Fiscal Device (EFD) means a machine designed for use in business for efficient management controls in areas of sales analysis and stock control system and which conforms to the requirements specified by the laws. This includes; Electronic Tax Register (ETR), Electronic Fiscal Printer (EFP) and Electronic Signature Device (ESD) (TRA manual 2010).

2.2.2 Types of Electronic Fiscal Devices (EFDs)

There are different types of Electronic Fiscal Device introducing by TRA as explained above, and the taxpayer is advised to buy a certain type of an EFD depending on the different factors to be considered, such as: nature of business, geographical location of premises, size of the business and so on.

a) Electronic Signature Device (ESD)

The device is designed to authenticate by signing any personal computer (PC) produced financial document such as tax invoice. The device uses a special computer program to generate a unique number (Signature) which is appended to and printed to every invoice issued by the user's system.

b) Electronic Tax Register (ETR)

This device is appropriate and commonly used by retail business that issue receipts manually. This device may be used as standalone which keeps totals in fiscal memory and print retail receipts using an in built printer, example of users of this device include small retailers of all types of business (TRA manual 2010).

c) Electronic Fiscal Printer (EFP)

The device is commonly used by computerized retail outlet. The device is connected in a computer network to store every sale transaction made its fiscal memory while the user issue receipts to customer. It is basically similar to printers that are currently used in supermarkets, except for the fiscal memory. Example of users of this kind of device includes supermarkets, Petrol Stations and Ticket offices (TRA manual 2010).

2.3 Importance of EFDs

EFDs has the following importance, it has in-built Fiscal Memory which cannot be erased by mechanical, chemical or electromagnetic interferences; automatic self-enforcing issuing of daily “Z” report after every 24 hours; transmits tax information to TRA system automatically; it has irreversible date mechanism, issues fiscal receipts/invoice which is uniquely identifiable; it can be used as a stand-alone and configured into a network; it has at least 48 hours power backup, and it can use external battery in areas with no electricity supply; It saves configured data and records on permanent fiscal memory automatically and It has tax memory capacity that stores data for at least 5 years or 1800 day transactions.

2.4 The Tax Administration

In order to effectively and efficiently implement fiscal policy the Government during 1995/96 established an autonomous revenue administration under the TRA Act No.11 of 1995, the Tanzania Revenue Authority (TRA), charged with the assessment, collection and accounting of Central Government revenues. Since then, TRA has to a larger extent

increased the efficiency, effectiveness and transparency in revenue administration, features that were lacking under the regime that was replaced. Under the new tax administrative arrangement the government has achieved significant transformation in revenue mobilization through initiating several administrative measures aimed at streamlining it, modernizing systems and removing inefficiencies.

The United Republic of Tanzania Constitution recognizes the two parties of the union, namely Zanzibar and the Mainland Tanzania. As such, the Constitution has identified union taxes and non-union taxes. While Tanzania Revenue Authority collects the Union taxes, the Zanzibar Revenue Board collects all non-union taxes in Zanzibar. Taxes on income imposed under the Income Tax Act 2004 and custom duties under the East African Customs Management Act 2004 are union taxes, whereas domestic consumption taxes including the Value Added Tax, Excise Duties, hotel levies, stamp duties, motor vehicle taxes, and other charges are non-union taxes.

2.5 Tax

A tax is an involuntary fee paid by individuals or businesses to a government.

Taxes may be paid in cash or kind (although payments in kind may not always be allowed or classified as taxes in all systems). The means of taxation, and the uses to which the funds raised through taxation should be put, are a matter of hot dispute in politics and economics, so discussions of taxation are frequently tendentious (Bird, R. 2007).

2.6 Revenue

For a company, this is the total amount of money received by the company for good sold or services provided during a certain period. It is also include all the net sales, exchange of asset; interest and any other increase in owner's equity and is calculated before expenses are subtracted. (Corsi Jerome 2007). From government perspective can be defined as the increase in assets of governmental funds that do not increase liability or

recovery of expenditure. This is revenue obtained from taxes, licenses and fees. (Corsi Jerome 2007).

Fiscalised electronic devices are small machines or mini-computers that are used to determine the amount of Value Added Tax remitted to the government (Niosi 1994). These devices are designed in such a way that they record each transaction made by an organisation to calculate the amount which is supposed to be remitted to the government as Value Added Tax . Rathus and Nevid (1987) identify four types of fiscalised electronic devices, which comprises of electronic cash registers (ECRs), electronic Tax registers (ETRs), fiscalised printers (FPs) and electronic signature devices (ESDs).

Electronic cash registers are devices used by traders to record sales and issue receipts, they also store information such as sales, stocks and can issue reports for example daily sales report. Rathus and Nevid (1987) define electronic tax registers as cash registers with fiscal memory, which is a special, read only memory built into the cash register to store tax information at the time of sale. Cascio (1986) also defines electronic signature device as any electronic means that indicates that a person adopts the contents of an electronic message. This electronic device is used in conjunction with the accounting system to validate documents. Fiscal printers are high speed printers connected to a point of sales terminal or sales computer to store every sale transaction in its memory while it issues receipts to taxpayers.

Burkhardt and Marlene (1994) argue that technological change has become the mode of operation in the 20th century business community. As the workplace product transforms from paper to information services, employers and employees scramble to keep abreast of the rising tide of information and the new service opportunities created by the innovations in the technology available to business. However, there are some organisations which are still using the manual method which involves the use of hands instead of computers for determining the value of tax remitted to the government.

According to Koohang (1989), companies are resorting to manual method because the cost incurred in the process of acquiring such devices is exorbitant.

Another reason why some companies are still using the manual method is that they are not aware of the latest methods used in determining the value of tax remitted to the government, and some are just resistant to change that is given all the resources the managers and directors will reject the new technology. Arthur (1990) propounds that individuals with low educational levels may consciously opt not to become familiar with computers (fiscalised electronic devices) due to the challenging nature of the technology. This theory shows us that companies in the motor industry with employees who have low educational ability will find it difficult to use fiscalised electronic devices.

Cascio (1986) states that electronic device processing methods make use of computers in determining the amount of tax to be remitted to government. He further argues that this method is more reliable and fast as compared to the manual data processing method. Electronic device processing method is less time consuming, less costly, more accurate and faster as compared to the manual data processing method. According to Liden and Adams (1992), older employees usually favor the use of manual methods in determining the value of tax while the younger employees usually favor the use of electronic devices citing the above benefits. They went on to say that younger generations usually have positive attitudes towards the use of electronic devices while older generations have negative attitudes towards the use of electronic devices.

The Motor industry in Zimbabwe spearheaded the introduction of the electronic tax registers and electronic signature devices because they offer unique benefits to traders and revenue authority. Newcomb (1943) states that the benefits of automation include a reduction of fraud, remote access to information, improved collection of statistics and uniform application of tax legislation. The introduction of tax automation minimizes direct contacts between tax collection officers and traders or their agents and hence leads

to a reduction of corruption. Further benefits achieved through customs automation include improved reporting, control of file transfer, automation reconciliation of Tax returns declarations and compliance testing of bank files. Paperless declarations and customs automation save time and make it easier to focus on inspecting high-risk consignments. The possibility of submitting Tax returns declarations on-line has in some cases made it possible to reduce the associated fees, in other cases it eliminates the obligatory contracting of customs agents.

Sacks (1991) developed a theory, which advocates that males tend to display positive attitudes towards the use of these devices, regardless of the level of familiarity, while females' attitudes become more positive as the levels of familiarity increases. Brief (1998) argues that females tend to be resistant to the use of fiscalised electronic devices while males accept to the change in the motor industry. In contrast, a survey conducted by Baack and Brown (1991) advocate that older adults indicated that they are less likely than their younger counterparts to use these devices unless there is a perceived need. The same study attributed the low usage rates to low levels of familiarity.

According to Liden and Adams (1992) older individuals do not respond as well to rapid change as their younger counterparts unless the change is gradual overtime. A study by Arthur, Winfred and Hart (1990) identified a positive relationship between educational ability and familiarity with these electronic devices. The authors suggested that employees with low educational ability levels might consciously opt not to become familiar with these electronic devices due to the challenging nature of the technology.

A study by Gardner, Dukes and Discenza (1993) identified a positive correlation between experience with electronic devices and attitudes towards them. Not surprisingly, negative experience with these electronic devices correlated with negative beliefs and attitudes towards the technology. Employees with positive experience also espoused positive attitudes towards the devices.

Koohang (1989) advocates that people of varying backgrounds often have different beliefs and values system which give rise to dissimilar attitudes. Therefore, varying backgrounds and beliefs systems contribute to an individual's attitude towards technology. Belief systems also contribute to attitudes towards innovation adoption rate.

Koohang (1989) concludes that there is a positive correlation between favorable attitudes towards new technology and computer familiarity, meaning that employees that are computer familiarity will produce positive attitudes towards the use of fiscalised electronic devices and on the other side employees that are not computer familiarity will produce negative attitudes towards the use of these devices. A study by Gardner et al (1993) identified a positive 0.75 correlation between experience with computers and beliefs towards them. He concludes that negative experience with computers correlate with negative beliefs and attitudes towards the technology.

Northcraft (1996) postulates that the effects of introducing new technology on attitudes and perception is more positive when employees are given enough time to become familiar with the technology in a risk free environment. Both satisfaction levels and feelings of expertise were positively related to the user's perception of having control of the environment pertaining to interfacing with the technology. In another study carried by Murrell, Audrey and Sprinkle (1993) it was concluded that organisations must address the user's phobia of the technology and allow for a gradual introduction of the innovation. Anna (2006) carried a research on the attitudes towards the use of electronic invoicing by financial managers in small to medium sized companies in Finland.

Electronic tax registers were introduced to help KRA establish the amount of VAT payable without necessarily requiring the traders to providerecords for crosschecking. There was concern that thousands of traders were undervaluing their sales in order to evade tax. The success of ETR machines in Kenya was questioned

during its initial stages of implementation. According to Kathuri (2006), the gadgets had failed in 21 countries including Tanzania. There was also fear that accurate records could not be kept with the devices because there is no provision for return of goods and services.

2.7 Advantages of Electronic Fiscal Devices

TRA manual (2010) elaborates the advantages of Electronic Fiscal devices over Electronic Cash register as follows;

- (i.) In built read only Memory (ROM) which cannot be erased by mechanical, chemical or electromagnetic interference.
- (ii.) Automatically self-enforcing issuing of daily “Z report after every 24hours.
- (iii.) Transmit tax information to TRA server automatically.
- (iv.) Has irreversible date mechanism.
- (v.) Has 48 hours power backup, and it can also use external battery in areas without electricity supply.
- (vi.) Save configured data and records on permanent fiscal memory automatically.
- (vii.) Has tax memory capacity that stores data for at least years or 1800day transactions
- (viii.) Bears fiscal seal.

2.8 Benefits of Automation Tax Systems

Benefits of automation include a reduction of fraud, remote access to information, improved collection of statistics, and uniform application of tax legislation. The introduction of tax automation minimizes direct contacts between tax collection officers and traders or their agents, and hence leads to a reduction of corruption. Further benefits achieved through customs automation include improved reporting, control of file transfers, automatic reconciliation of tax returns declarations, and compliance testing of bank files. Paperless declarations and customs automation save time and make it easier to focus on inspecting high-risk consignments. The possibility of submitting tax returns

declarations on-line has in some cases made it possible to reduce the associated fees; in other cases it has helped eliminate the obligatory contracting of Customs agents (Robert S.,1997).

ICTs can significantly reduce the number and the potential negative impact of physical inspections. ICTs allow, inter alia, for pre-arrival clearance, risk analysis by tax authorities, and separation of release from clearance. With the help of ICTs, it is further possible to better plan the timing and location of physical inspections, thus significantly reducing the waiting times for trucks and containers. Finally, ICT solutions allow for better measurement of the length and number of physical inspections. Such measurement needs to cover the complete trade and transport operation and not be limited to tax clearance times only.

2.9 Uses of Tax

Bates, R etal (2005) explains that; funds provided by taxation have been used by governments throughout history to carry out the functions of the government such as;

(i) National Defense

In defending the nation, the fund comes from the taxation is used in enforcement of law and public order, protection of property, improving and enabling economic infrastructures like building roads, legal tender, enforcement of contracts, the same fund can be useful in the public works and the operation of the government itself.

(ii) Welfare and Public Services

Most modern government also uses the taxes to fund welfare and public services such as; education systems, health care systems, pensions for the elderly, unemployment benefit, energy, water and waste management system as well as public transportation,

Government use different kind of taxes and vary the tax rates so as to distribute the tax burden between individuals or classes in the population involved in taxable activities such as business, to redistribute resources between individuals or classes in the population, also to influence the performance of the economy. The government's strategy for ensuring the collection of tax is called fiscal policy.

By the introduction of the Electronic fiscal devices in Tanzania we are hoping that the revenue collections will be boosted as the Commissioner General of Tanzania Revenue Authorities Mr. Harry Kitilya had been quoted saying that "the introduction of devices did not mean a total control on tax evasion, but was confident that it will reduce the tax evasions" he added that "overall objective for this move is to enable tax revenue collectors to have correct sales information and to reduce administration costs of tax collection. He said the move will increase the GDP" (The citizen, June 2010). If what has been aimed by TRA could be achieved then better national defense and standard welfare and public services is a guarantee for the Tanzanians as the government will receive more revenues.

2.10 Roles of Tax

Waidyasekera D.D. M (2009) explains the role of taxation and fiscal policy in the development strategy, he postulates that the roles has to be view from the background of the functions which taxation system performs, its main function in relation to economic development are as follows;

- (i) The primary function of a tax is to raise revenue for government for its public expenditure, so the first goal in the development strategy as regard to taxation policy is to ensure that this function is discharged adequately.
- (ii) To reduce in equalities through the policy of income and wealth. Higher rates for income taxes, capital transfer taxes and wealth taxes are some means adopted for achieving these ends.

- (iii) For social purposes such as discouraging certain activities which are considered undesirable, for instance the excise taxes on liquor and tobacco, the special excise duties on luxury goods, betting and gaming levy are examples of such taxes.
- (iv) To ensure economic goals through the ability of the taxation system to influence the allocation of resources. This includes; transferring resources from private sector to the government to finance the public investment program, the direction of private investment into desired channels through such measures as regulation of tax rates and the grant of tax incentives etc. this include investment incentives to attract foreign direct investment (FDI) into the country.
- (v) To increase the level of savings and capital formation in the private sector partly for borrowing by the government and partly for enhancing investment resources within the private sector for economic development.
- (vi) To protect local industries from foreign competition through the use of import duties. This has the effect of transferring a certain amount of demand from imported goods to domestically produced goods.
- (vii) To stabilize national income by using taxation as an instrument of demand management. Taxation reduced the effect of the multiplier and so can be used to dampen cyclical fluctuations on the economy.

A well-developed fiscal policies and devices will help the government attaining the above roles effectively, on the introduction of this new electronic fiscal devices the Commissioner general of TRA Mr. Kitilya said that “Last year (2009) TRA missed the tax revenue collection targeted by 10 per cent and this year (2010) projections show that collections might fall short of the projection by at least 6 percent, Mr. Kitilya hopes the new machines would help the authority to detect traders who were initially evading paying VAT”. He added that “the country with the population of 40 million has 600,000 taxpayers; however Mr. Kitilya said that the figure could be rose to about three million if

a modern mechanism is established to trace and identify transaction of every person” (The citizen, June 2010).

2.11 Economics of Taxation

Tax collection systems in Sub – Saharan Africa unlike in the Western countries are still developing. The World Customs Organization (WCO) has helped in setting up standards that averagely need to be adopted by almost every country in order to combat tax vices that exist in almost all countries (IMF, Nov.2005).

In economic terms, taxation transfers wealth from households or businesses to the government of a nation. The side-effects of taxation and theories about how best to tax are an important subject in microeconomics. Taxation is almost never a simple transfer of wealth. Economic theories of taxation approach the question of how to minimize the loss of economic welfare through taxation and also discuss how a nation can perform redistribution of wealth in the most efficient manner. Johnsson Richard (2004).

David De Souza (2010) postulates that; whether it’s developed or developing country the effect of wide spread taxation has always been felt by the people living in these countries. The economics of taxation seeks to explain the effects of various tax measures on the economy of any nation.

For one to understand the economic impact that taxes will have on an economy, we have to look on it as the forced transfer of wealth from individuals and corporate organizations to the government. It is the government which then determines how these resources will be allocated, mainly for the good of the public.

The first thing that we need to look at when considering the economics of taxing person is the redistribution of income. In many societies income tax is progressive; this means that the more you earn the higher will be the tax rate. The effect of this is that it helps to

redistribute income from the rich to the poor. This is especially true if the poor are given benefits such as unemployment benefits.

The other economic impact of taxation is the reallocation of resources. It is quite hard if not impossible for citizens to come up and unanimously form an army that they will pay and then make contributions towards the same. However through a taxation, a government can direct resources into areas which otherwise would not have received the required resources.

2.12 Cost Offset

In order to minimize the cost of EFD acquisition and bring about compliance and willingness to use EFD in Tanzania, the government will bear the cost of acquiring the first EFD for each user by allowing set off of the EFD cost (deemed input tax) against the output tax in the VAT returns. Any credit balance left after six month the input tax shall be paid under the normal refund system. This cost offset serves as an incentive to the user. The cost of the machine alone, it does not include configuration, installation and transport cost of the machine. (TRA manual 2010).

However the TRA manual (2010) stipulates the treatments of coat offset are; the first actual cost of acquiring EFD shall be offset from the output tax upon submission of the VAT monthly return. The cost setoff will continue until the entire amount is exhausted. Any credit balance left after six months periods, input tax shall be paid under the normal refund system.

- (i.) The full amount of acquisition cost shall be deemed as input tax as stipulated under section 16 of the Value Added Tax Act, Cap 148.
- (ii.) That cost shall be declared as input tax on the VAT returns in the month following the month of purchase.

- (iii.) In case the amount of cost is not exhausted by the output tax for that particular return, user shall carry forward the balance of the cost amount in the following VAT return.
- (iv.) Where the amount is credit remains for six consecutive months the user shall apply for refund using normal procedure for Vat refund

2.13 Empirical Review

2. 13.1 EFDs in Processing VAT

There are very few studies in place to give more insight on EFDs. Lumumba Omweri Martin (2010) in his paper on “effectiveness of EFD in processing VAT Returns” Perspectives from Registered VAT Taxpayers in Kisii Town, Kenya found the following; the timely filling of the monthly VAT returns is attributed to many factors. EFD is one of the factors. Also the introduction of ETR has assisted in cutting costs that the business used to incur in processing VAT. Further, it was found that EFDs have enhanced the revenue collection resulting from sound sales and stock audits. Fourthly, to evaluate the effectiveness of EFDs in filling VAT Returns at regular intervals, it was found that the use of EFDs was not a waste of funds and has assisted the business in many ways. Lastly, KRA has articulated a vision for Kenyan customs, and in the process of delivering such mandate, it has faced challenges while meeting its pillars that include The following challenges need to be addressed within the KRA: the cost and classification of the businesses which need to use EFDs. EFDs are expensive, cost to be paid in installments; ETRs should be compatible with computers in business premises.

2. 13.2 Effectiveness and Efficiency of Tax Systems

The briefing paper (May 2009) by Department for international development pointed out that; the tax systems need to be Effective, Efficient and Equitable. The tax ‘system’ comprises the laws and regulations that set out a country’s tax policy, combined with the administrative reality of how policy is actually applied. The shape of public finances – the mix of tax, debt and aid – matters because raising taxes well requires active state

engagement with its citizens. Tax systems should be economically efficient (raising most revenue with least cost and effort, without creating a significant disincentive to work or invest); effective (administratively capable of delivering the desired policy objectives at minimum administrative and compliance cost); and equitable (offering fair treatment of taxpayers and promoting social cohesion). Making tax systems efficient, effective and equitable is difficult everywhere, and especially in those developing countries with weak political institutions, widespread corruption, and poor administrative capacities. Too often this process of ‘tax as state-building’ does not happen: in many developing countries the tax base remains dangerously narrow, its administration overly ineffectual or coercive.

2.14 Tax Reforms in Tanzania

The tax reforms undergone by Tanzania aimed at constantly raising the revenue productivity of the tax system. Nevertheless, Osoro (1991) demonstrated that the reforms have not achieved the objective of raising revenue productivity. This is evidenced by the low buoyancies and the elasticities that the tax system has exhibited over the last decade. Such a low revenue productivity of the tax system is argued to have been attributable to mainly generous tax exemptions, low compliance and tax evasion coming both from a weak tax administration and high tax rates (Osoro 1991).

One criterion of a good tax system is high revenue productivity. Since the tax system is not revenue productive, it is pertinent to link measured productivity with specific tax policies. This analysis is important because, for example, tax policies and reform in the 1970s differed from those of the 1980s (Osoro, 1991, pp. 9-13).

Thus, it is likely that the specific tax policies in a given period might have had different impacts on revenue productivity. It is at this juncture this study aim at finding out whether the newly introduced EFD will bring positive impact on the collection of tax and consequently contributes towards the GDP of Tanzania

2.15 Tax Collection and Enforcement

While the local level valuation department is responsible for the valuation roll and issuing of the tax demand notices, the actual revenue collection and enforcement activities are administered through the Town Treasurer's office. With the exception of Dar Es Salaam which introduced computerized billing for about 30,000 parcels in 1996, all tax demand notices are produced manually, creating problems of delay and transcription errors.⁸ Demand notices are delivered either manually or through the postal system—often with difficulty due to incomplete or out of date addresses and names. In Dar Es Salaam, for example, 15.7 % of the demand notices were returned as undelivered in 1996 (Kironde, 1997).

2.16 Research Gap

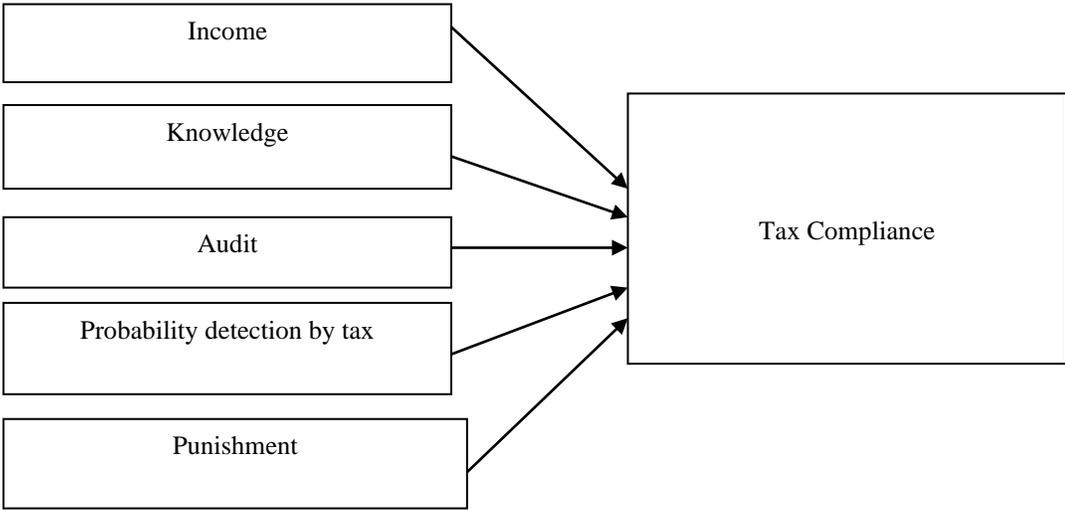
From the above empirical analysis, it shows that extensive empirical studies on the impact of introducing electronic fiscal device (EFD) system in revenue collection in Tanzania is not yet done, and very few in Kenya have been done. The studies reviewed, the main problem in the implementation of EFDs is the implementation of the laws. Apart from close relationship they have, the studies have not yet conducted in Tanzania specifically at Temeke Tax Regional. Therefore, it is on the light of these studies the researcher can be able to go about the study titled, "The impact of introducing Electronic Fiscal Device (EFD) system in revenue collection in Tanzania the case of Temeke Tax Regional.

2.17 Conceptual Framework

The literature on tax compliance points out, the size of income of tax payer, knowledge of tax due, frequency of audit, probability of detection by tax authorities and severity of punishment if caught as some of the important determinants of tax compliance model. Tax compliance can therefore be increased if control measures are put in place to detect non compliers and punitive measures instigated. The use of ETR serves two purposes in this model: automatically generating knowledge of tax due, and acting as a control

compliance control measure. According to Ritsema et al (2003), tax compliance decision depends on income level of an individual taxpayer, inspection (audit) by tax authorities and deterrent measures put in place. This theoretical framework has been adapted for this study since other determinants of compliance such as severity of punishment are uniform for all taxpayers. The use of ETR is likely to go hand in hand with inspection. (See figure 1 below)

Figure 2. 1: Conceptual Framework



CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter explains the way in which the research was carried out. It is organized under the following sub sections area of the study, the research design, the population, sampling techniques, research instruments, and data collection procedures and data analysis.

3.2 Area of the Study

The research was conducted at Temeke Regional Tax Collection) – Dar es Salaam region. The area is selected because its one of regional tax Collection which also use EFDs.

3.3 Research Design

Research design is the overall plan of how the research will be conducted, what and how evidence will be gathered, analyzed and interpreted based on the research questions (Easterby, 2008). This study used the case study design as a mode of investigation out of which collection of data was possible. According to Yin (2009) case study is a research method based on an in-depth investigation of a single individual, group, or event. It may be descriptive or explanatory. Yin (2003) adds that case study is an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident. Yin (2003) notes, however, that case study methods may be used for the “evaluation” of businesses and government programs with the goal of identifying potential explanations for their successes or failures.

Case study design allowed an in depth study to be carried out in the selected study entity. In addition, it enabled the researcher to capture the emotional perspectives of the respondents as far as foreign investment and the rights of land ownership among the natives are concerned. This Case study design was also propose for its flexibility in the use of data collection methods.

3.4 Population of the Study

The population of the study will be composed of selected Taxpayers and TRA employees from Temeke District, These have been selected because they are considered to have necessary information that would meet the objectives of the study.

3.5 Sample and Sampling Procedures

3.5.1 Sample Size

A sample is the unit or item derived from the population to represent the total population. Since it is not possible to examine every item in the population, the researcher selected few items (samples) from a big population which were representative. So the selected items are what we call samples. By using samples, it is possible to obtain sufficiently and accurate results by studying only a part of total population (Kothari, 1990:65).

In this study, the sample 1 constituted 40 respondents which represented the total population from which only 30 respondents were investigated. Stratified random sampling technique will be used in the selection of employees of the TRA in order to ensure appropriate representation. In addition, simple random sampling was used to Tax payers at Temeke District. Purposive sampling was used to select members of the Management of TRA.

3.5.2 Sampling Procedures

This study used a combination of purposive and stratified sampling techniques as underscored here under.

3.6 Data Collection Methods

This study used a combination of methods to collect data including a standardized questionnaire with both open and close ended questions supplemented by in depth interviews with key informants and observations. The use of multiple instruments ensured validity and reliability of data collected.

3.6.2 Interview

An interview is a conversation between two people (the interviewer and the interviewee) where questions are asked by the interviewer to obtain information from the interviewee. As qualitative research, interview seeks to describe the meanings of central themes in the life world of the subjects. The main task in interviewing was to understand the meaning of what the interviewees say. (Kvale,1996). Hence the researcher was making conversation with the interviewee to get some information known by interviewee the revenue collected through EFDs.

3.6.3 Documentary Review

These are secondary data which was collected through library research and documentary review. Both published and unpublished materials like books, journals, articles, research reports, budgets, project documents and e-resources was reviewed and major points summarized.

3.7 Data Collection Instruments

A combination of instruments was used to facilitate data collection and analysis as follows:

3.7.1 Questionnaire Instruments

This was an instrument used to collect data. A questionnaire refers to a set of written questions that people respond directly on the form without the aid of an interviewer (Monette, et. al., 2008). A standardized and structured questionnaire with both open and close ended questions was administered directly to respondents for them to fill in the data. The major advantages of a questionnaire allowed a researcher to collect data from a large audience located in different geographical areas and the instrument is cost effective. Two types of questionnaires were designed and distributed to the selected sample. The first set was designed for tax payers and, the second set were for the employees of the TRA.

3.7.2 Interviews Questions

According to Monette, et. al, (2008) interview is a technique in which an interviewer reads questions to respondents and records their verbal responses. In depth face to face Interviews were conducted by the researcher during the working hours to collect additional information that was not covered in the questionnaire. The respondent who will be participated in the study was purposively selected based on the judgment of the researcher. This is a good method because it was less time consuming and cost effective. It was designed to collect the respondents' views and opinions.

3.8 Data Analysis Procedures

Both qualitative and quantitative methods of data analysis were employed. Quantitative field data was organized into categories, labeled, edited and coded. A Statistical Package for Social Scientists (SPSS) for Windows Version 19 was used to derive, frequencies, percentages, tables and charts etc. Qualitative data from interviews and open ended questions were organized into meaningful themes and analyzed using content analysis. This will enable the researcher to interpret data collected and ultimately make necessary, recommendation and reach a conclusion.

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND DISCUSSION OF RESEARCH FINDINGS

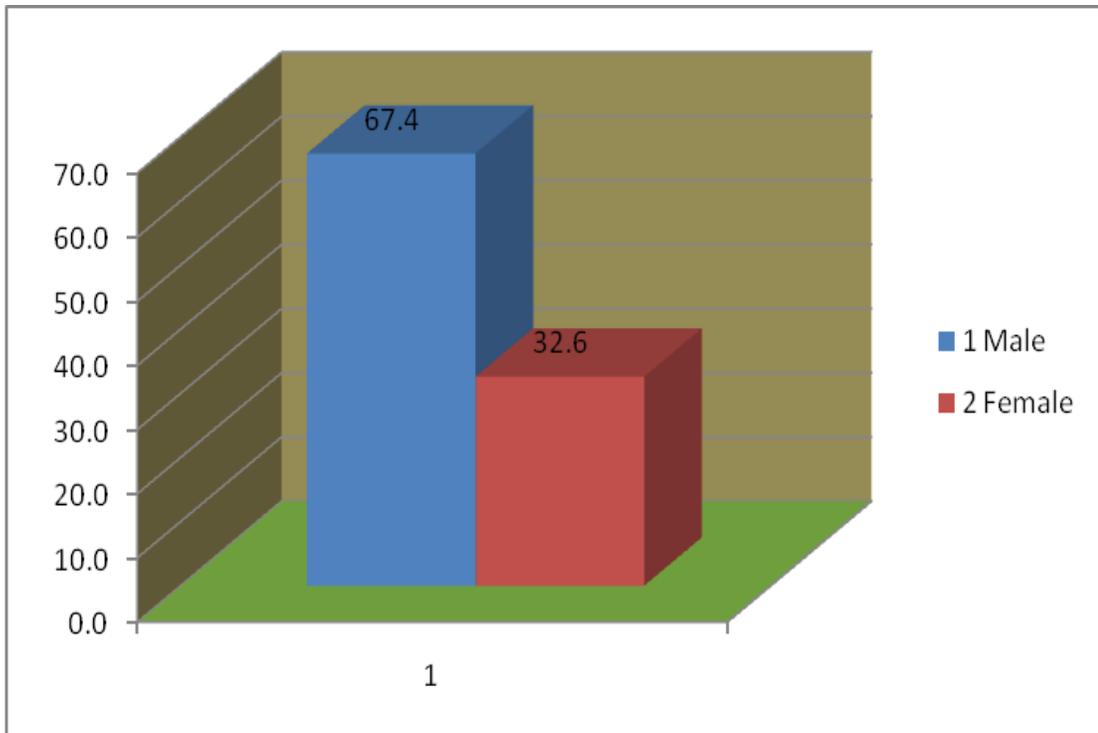
4.1 Introduction

In this chapter, collected data is analyzed, presented and discussed based on the research objectives. Prior to this, the profile of respondents is presented and explained based on their age, gender, working experience and education. It is organized into four sections namely; the profile of respondents, the extent EFD has improved tax collection at Temeke regional Tax collection, investigate the performance of the EFD on revenue collection at Temeke regional tax Collection, and examine the system used by TRA for monitoring the use of EFD in business transactions.

4.2 The Profile of Respondents

Data collection was done through personal interview, whereby the researcher administered questionnaires to 50 respondents and the response rate was overwhelmingly well as 46 questionnaires were responded. The sample comprised TRA Temeke region Staffs and VAT registered Traders were taken from tax consultations firms to retailers. Out of 46 respondents 31 were male and 15 female aged between 18 to 50 years and above.

Figure 4.1: Respondents Gender Profile



Source: Field Data, 2014

4.2.1 Age of the Respondents

A question on age was asked. Findings revealed that 4 (8.7 %) of the respondents were of the age between 18-25, whereas 16(34.8%) of the respondents were between 26-35years, 14(30.4%) were between 36-45 years. Between 50 and above years there were only 12 (26.1 %) of all the respondents who returned the questionnaires (See Table 2).

Table 4.1: Age of the Respondents

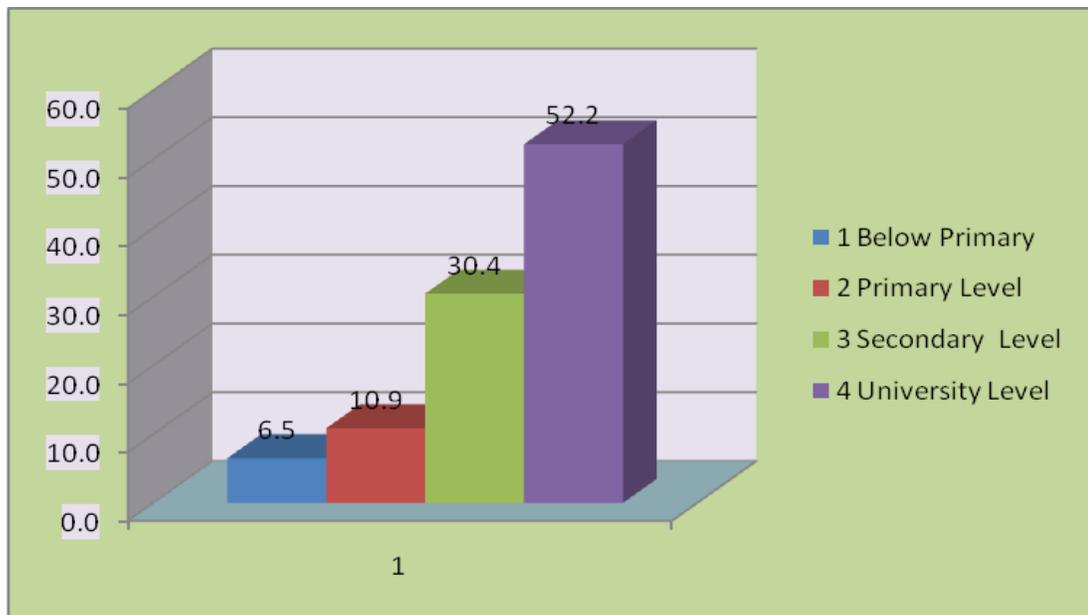
S/N	Responses	Frequency	Percent	Valid Percent	Cumulative Percent
1	18-25	4	8.7	8.7	8.7
2	26-35	16	34.8	34.8	43.5
3	36-45	14	30.4	30.4	73.9
4	50 and above	12	26.1	26.1	100.0
	Total	46	100.0	100.0	

Sources: Field work Data, 2014

4.2.2 Education of the Respondents

Findings from respondents showed that education levels of respondents were adequate, since more specifically, data shows that 52.2% of the respondents had completed university level, 30.4% were having a secondary education level, 10.9% primary level and 6.5% below primary education. This implies that a good number of respondents were providing valid and reliable data.

Figure 4.2: Education of the Respondents



Sources: Field work Data, 2014

4.2.3 TRA Staff Working Experience

20 TRA staffs that were interviewed, the results revealed that, 35% they worked with the TRA for 1-3 years, 45% they have been working with the TRA for between 3-5 years, and 20% have experience of 5-10 years. While on the VAT registered traders due to the nature of the private industry most of them have been with the businesses or companies within 1-3 years which amounted to 50%, 3-5 years were around 35.7% percent and 5-10 years 14.3%, no above 10years found

Table: 4. 2: Working Experience with TRA

	Frequency	Percentage	Cumulative Percentage
1-3 years	7	35	35
3-5 years	9	45	80
5-10 years	4	20	100
Total	20	100	

Sources: Field work Data, 2014

4.2.4 Marital Status

The results from the field show that, out 46 respondents which were interviewed, 15(32.6%) were single, 27(58.7%) were married, 3(6.55) were separated from their married and only 1(2.2%) was a widow.

Table 4.3: Marital Status

S/N	Responses	Frequency	Percent	Valid Percent	Cumulative Percent
1	Single	15	32.6	32.6	32.6
2	Married	27	58.7	58.7	91.3
3	Separated	3	6.5	6.5	97.8
4	Widower/Widow	1	2.2	2.2	100.0
	Total	46	100.0	100.0	

4.3 EFDs Effectiveness as far as Tax Collection is Concerned

EFDs play a big role in the increase of revenue collections, 84.8% said that the EFDs is very effective on revenue collection. However, only 15.2% said that EFDs is not effective on revenue collections. Along with these results from the respondents, the table 12 entails TRA revenue collections for the year 2010/2011 and 2011/2011 which shows an increase of 19.23% on revenue collection. The report also shows 2010/2011 revenue collected was (all amounts in Shs millions) TZS 800,285.23/= and the 2011/2012 collections was TZS 991,034.00.

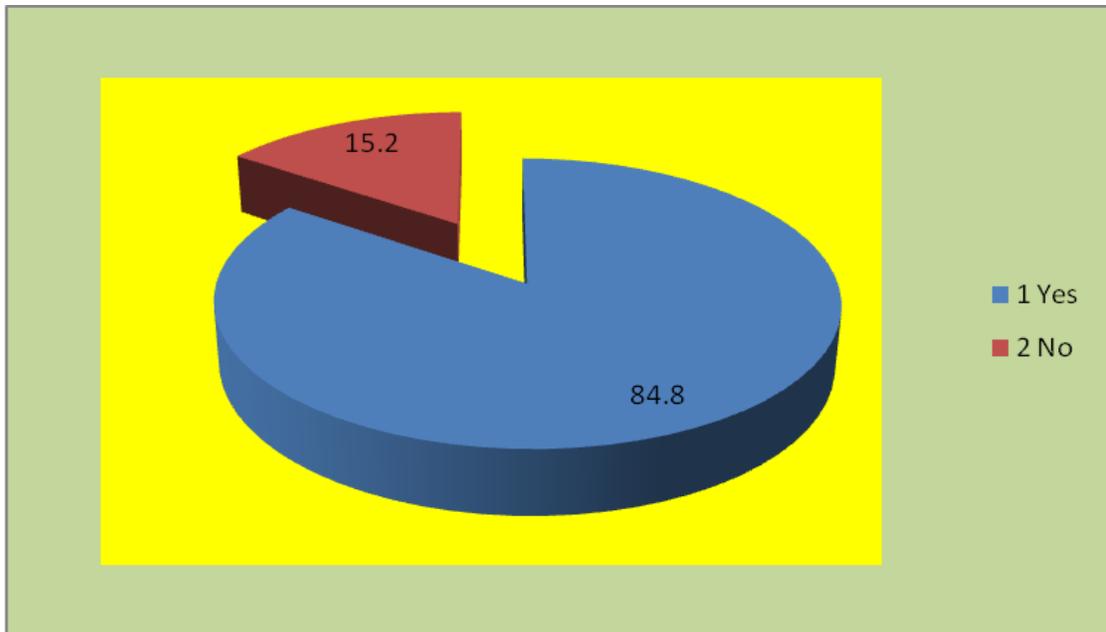
Table 4.4: Tax Revenue Report June 2012

GFS CODE	2010/2011				2011/2012		
	ITEM	EST YTD	ACTUAL S YTD	PERF FOR MONT H %	EST YTD	ACTUAL S YTD	PERF FOR MONTH %
50100	VAT local	0	0		0	0	
50103	Petroleum	0	2,691.40	0%	0	736.7	0%
50138	Beer	84,525.80	80,504.00	0%	97,158.60	90,140.40	0%
50102	Cigarettes	41,865.10	33,850.40	0%	40,729.40	39,102.10	0%
50101	Textiles	1,275.00	502.5	67%	3,031.20	969.9	63%
50105	Soft Drinks	30,495.20	25,881.30	0%	31,157.50	27,181.80	0%
50144	Bottled water	0	0	0%	0	27.5	0%
50106	Soap & Detergents	0	109.6	0%	0	179.3	0%
050108/9	Spirits/Konyagi	0	1,731.00	0%	0	4,024.30	0%
50104	Sugar	37,925.60	24,868.90	0%	39,162.60	38,161.30	0%
50142	Others	522,128.1	423,029.2	101%	566,740.90	534,536.2	120%
50116	Cement	32,882.13	34,238.23	111%	29,825.30	30,973.80	96%
50201	Electricity	75,593.30	31,536.50	33%	44,441.90	27,294.70	107%
50202	Telephone	165,634.2	139,434.9	87%	183,297.90	190,433.8	118%
070201-04	Stamp duty	3,355.00	1,904.70	63%	2,384.20	4,182.70	133%
070303-04	Departure charges	326.4	2.6	0%	4,330.10	3,089.50	48%
	Total	996,005.8	800,285.2	81%	1,042,259.6	991,034.0	109%

Source: TRA Office Report of 2014)

From its introduction of EFDs on 1st July 2010 phase one which covering all value added tax (VAT) registered traders have shown a great improvement on revenue collection, as addressed by the TRA; Director of Taxpayer services and education, said that “we normally achieve our targets but we have never surpassed them this much. Sometimes we do not attain them but we also exceed the goals by little margins at times, this is remarkable. He attributed the success to strict revenue control measure, the use of electronic fiscal devices (EFD) and public awareness campaign on the importance of paying tax”. Through its Research and Policy department, TRA starts measuring the performance for the period from the effective date of commencement Oct 2010 to May, 2011 and July 2011 to June 2012. During the performance measurement, the focus has been on acquisition, usage of EFDs and revenue growth. The VAT revenue collection for the first year of implementation 2010/2011 indicated that, for the first year of EFD implementation 2010/11 collection was 800,285.23 million shillings and fiscal year 2011/2012 the collection was 991,034 million shillings, the increase is by 19.23%. Revenue collection showed an increasing trend. This increase is attributed by EFD among other factors. The effect of EFD implementation on revenue impact has been analyzed by TRA Research and Policy Department (RPD) as per Appendix I.

Figure: 4.3: EFDs Effectiveness as far as Tax Collection is Concerned



Sources: Field Report, 2014

Benefit of EFDs in Tax Collection

The surveyed respondent from TRA and taxpayers were asked to indicate the benefits of using EFDs in tax collection. Generally speaking the benefits have been categorized into three groups namely benefits to buyers, government and traders.

(i) Benefits to Traders

EFD provides business security for traders as all information entered in to the machine stored in to a fiscal memory can not be erased or altered. Hence the traders can keep track of all business transactions, this help to enhance fairness in tax assessment as all tax information is transimitted to TRA system automatically and therefore reduces objection or disputes, EFD as well it's a morden way of keeping records after immigration from manual register, also provides for easy retrieval of sales report on daily, weekly or monthly basis and provides for permanent storage of data.

(ii) Benefits to Buyers

- (a) The receipts issued by EFD machine provides for legal benefits of ownership of goods procured
- (b) Provides for assurance that tax has been remitted to the Government
- (c) Tax paid by consumer of goods and services enables the Government to provides social and economic needs and demanding for receipts is a legal obligation of the buyer, hence by acquiring a receipt a buyer will have fulfilled the requirement of the law and therefore avoids fines.

(iii) Benefits to Government

- (a) Taxes collected through EFD enable the Government to provide social and economic needs
- (b) Provides for bases for fair assessment
- (c) Easy monitoring of taxes and provides for collection of taxes in cost effective way.

The key informant from TRA informed that since TRA started to use the EFDs, the revenue has increased as intended by the government.

4.4 Challenges that TRA Facing in Monitoring the EFDs Machines

Along the introduction of the EFDs machines, TRA introduced the Electronic Fiscal Device Management system (EFDMS), this system has been used by the TRA staffs in monitoring the EFDs machines. When asked about the challenges that TRA facing during the monitoring of EFD, 50% complains about the insufficient knowledge on EFDMS, and the other 50% complains over the improper use of the EFD by the users.

Table 4.5: Challenges that TRA Facing In Monitoring the EFD Machines

	Most Likely	Likely	Cumulative Percentage
Substandard performance of the EFDMS	0%	0%	0%
Insufficient knowledge over EFDMS	50%	0%	50%
Improper use of the EFD by users	50%	0%	100%
Total	100%	0%	

Source: The author, 2014

However, other challenges that TRA facing in monitoring the EFDs machines are as follows:

(i) Poor city Planning and Briefcase business

Poor city planning for business premises has been a problem on the administration of EFDs, there are traders that have briefcase businesses (business without tangible business premises.). It has been very difficult to locate them as it seems done intentionally, the address provided in the ITAX system is not valid hence inaccessible. Surprise check has been very difficult to such kind of traders.

(ii) Dormant and Closed Business

It is unfortunately that are business that have ceased business operation since more than five years ago but the list on VAT traders still indicates them as live taxpayers. This poses difficulties on the administration of EFDs as the number of VAT traders showing a big number while the large numbers of Taxpayers are not in existence.

(iii) Public awareness on Demanding Receipts

There has been a challenge on enforcing the penalties to the public for the failure to demand receipts. While others (few) do not know completely that the fiscal receipts/invoice is their right. Others (many) does not see the logic behind, and merely treat as wastage of time and resources demanding for receipts/invoice; these are

particular the users that they do have nowhere to claims for refunds and others (few) knows and claiming for the same.

4.5 Challenges faced in using the EFD Machines

The VAT registered traders were asked to mention the challenges they face in using the EFD machines. From the research findings the following were posed as challenges in using the EFD machines; Failure/delay by the Suppliers to establish integration solutions to the existing accounting packages, there is no room for correcting errors and back dating, Lack/shortage of qualified technicians to carry out device technical maintenance/services, Lack of Suppliers service centers in upcountry regions, High initial acquisition cost and subsequent maintenance charges, Network problems.

4.6 Measures to be taken to increase efficiency of the EFDs

The VAT traders were asked to suggest measures that can be taken to improve efficiency of EFD machines. The following were the measures recommended; TRA should put controls or security in place to ensure that every transaction processed by the VAT trader which attracts VAT is passed through the EFD machine, training on awareness and exposure of the EFD machines, EFD should be compatible with computers and accounting software in the business, TRA should introduce different systems for different businesses.

ELECTRONIC FISCAL DEVICES COMPLIANCE MONITORING PROGRESS REPORT (ACQUISITION AND USAGE)
FOR THE MONTH OF JUNE 2014

REGION: TEMEKE			BEFORE ACQUISITION AND ENFORCEMENT OF EFD			AFTER ACQUISITION AND ENFORCEMENT OF EFD					
S/N	Name of tax payer	TIN	SET TARGET	ACTUAL PAYMENT	% ACTUAL PAYMENT TO THEIR TARGET	SET TARGET	ACTUAL PAYMENT	PERF. RATE (%) [BOX 8/7]	% INCREASE/DECREASE IN	(%) PERFORMANCE PREVIOUS MONTH	(%) INCREASE/DECREASE IN THE CURRENT MONTH (11-13)
1	WAMBI LUBE OIL DISTRIBUTOR LTD	107-022-961	1,802,961	6,472,934	359	12,531,246	17,046,918	136	(223)	0	136
2	TABISCO ENTERPRISES LTD	100-219-557	1,756,700	7,062,820	402	4,915,527	8,902,985	181	(221)	0	181
3	SIGN INDUSTRIES LTD	104-873-952	1,079,195	1,181,565	109	3,617,337.00	1,617,337.00	45	(65)	38.29	6.42
4	TARMAL	100-101-661			207						

5	INDUSTRIES LIMITED		6,095, 236	12,612,5 14		6,028,89 4.00	7,040,0 22.00	117	(90)	37.49	79.28
	NATIONAL INDUSTRIES		556,98 3			6,412,56 5.00	6,615,9 68.0				
				647,150				103	(13)	45.00	58.17
6	ENT.LTD	100-107-104			116		0				
	JAMANA PRINTERS LTD	100-145-049	104,53 8,606	110,277, 306	105	18,117,2 38	128,14 6,766	707	602	4211	(3,503.68)
	AL HADDAD ELECTRICT WORKS	100-146-525	3,872, 037	4,810,33 8	124	4,456,60 9.00	3,601,0 38.00	81	(43)	67.73	13.07
8	FANTUZZI INVESTMENT LTD	107-412-484	666,00 0	3,139,32 2.00	471	12,019,1 80.00	17,100, 000.00	142	(329)	32.82	109.45
9	TANZANIA BRUSH PRODUCTS LTD	100-100-355	3,383, 3,383	3,707,31 3,707,31	110	28,405,4 28,405,4	31,154, 31,154,	110	0	115.8	(6.14)

			044	8.00		45.00	563.00			2	
10	JOEL M MABIBA LTD	101-589-439	1,858, 437	2,014,97 3	108	1,773,11 5.00	2,379,2 98.00	134	26	36.47	97.71
11	MOFED TANZANIA LIMITED	101-445-054	33,421 ,182	34,480,9 51	103	17,613,9 27.00	39,789, 551.00	226	123	32.94	192.96
12	GOLDEN FLEET LTD	106-691-851	13,570 ,974	53,270,0 21	393	62,107,1 63	121,48 2,485	196	(197)	116.1 4	79.47
13	BOC TANZANIA LIMITED	100-228-076	26,550 ,874	22,765,5 95.00	86	1,557,82 8.00	1,789,2 55.00	115	29	6.19	108.67
14	A YUSUFALI& SONS LTD	100-104-857	1,762, 076	2,635,51 2	150	4,882,83 8	5,529,0 36	113	(36)	19.40	93.84
15	RECO ENGINEERING CO .LTD	100-102-439	4,741, 798	3,983,93 3.00	84	7,739,10 0.00	6,156,1 13.00	80	(4)	193.6 8	(114.14)
16	BALAJI THERMOWARE (2009) LTD	108-989-130	2,965, 266	7,658,30 3.00	258	1,470,82 5.00	935,88 3.00	64	(195)	16.11	47.52
17	FLP TANZANIA LTD	105-981-864	68,789	64,176,5	93	147,775, 287,63	195	101	431.3	(236.74)	

			,919	42.71		853.00	8,513.00			9	
18	QUAIM STEEL MILLS LTD	103-626-668	38,230,093	28,717,868	75	22,102,486.00	29,147,414.00	132	57	76.60	55.28
19	CAR AND TRUCK DISTRIBUTOR LTD	100-235-749	4,116,282	2,764,906.00	67	5,822,760.00	5,670,737.00	97	30	22.85	74.54
20	AQUA COOL LTD	100-149-036	5,888,706	5,689,408.00	97	2,509,505.00	5,632,008.00	224	128	4.61	219.82
	TOTAL		325,646,369.00	378,069,279.71	116.10	371,859,441.00	727,375,890.00	195.61	79.51	52.95	142.65

4.7 Respondents Suggestions

Customs and Excise require VAT registered businesses to complete VAT, the use of EFD is not a wastage of fund despite it has assisted business in so many ways like EFDs has assisted businesses in cutting costs that the business used to incur in processing VAT, because previously some businesses has to hire consultants in helping processing the VAT returns, EFDs have really helped to increase profit due to their efficient nature, increased efficient on preparation of other sales report, increased efficient in stock taking, wise control of inventory is often a critical factor, easily timely preparations of reports and EFD has assisted ease the work of processing VAT returns.

Electronic Fiscal Devices reduce the tax-reporting burden on businesses while improving the efficiency and effectiveness of government operations, provide timely and accurate tax information to businesses, increase the availability of electronic tax filing, and models simplified state tax employment laws.

Benefits hold a strong case in the use of EFDs but the machines facing so many challenges that shines out some of the users in using them, EFD user has the right to be connected to the system throughout, but users experienced a lot of networks breakdowns which discouraging the use of the EFD, the machines does not provide a room for correcting error or backdates, for the case of error the machines does not give room for users for correction, this may results to wrong reporting,

EFDs like any other machine is subject to breakdown which might lead to drawbacks including failure to file returns, failure to pay correct taxes, tax evasion activities, non-payment of duty on imported goods and so many, and the user has the right to report the breakdown immediately, but users complains delay on fixing the machines, which gives a room to tax evasion. The supplier has the obligations to make sure that malefactions shall be corrected within 48 hours after the reporting time while ensuring that data is restored to the original state before such malfunction occur, this has not been in practice, the rate of machines breakdown is huge compared to the rate of fixing them.

Users have the right to receive proper initial and ongoing training on the use of the machine, at the introduction point all users got the training but the is insufficient after sale training for the user and even them available they are insufficient, suppliers has the obligation to ensure provision and availability of sufficient training and qualified technicians to the users for maintenance of the Electronic Fiscal Devices as and when required, so that TRA will have the assurance of the proper usage of the machines by the users and this will lead to more users than more purchaser but few users.

Electronic Fiscal Devices needs a very reliable network for them to perform, users has the rights and obligations to be connected to the system and ensure all their business transactions are electronically transmitted into the system, but this has not been in practice as users experienced a lot of network breakdowns.

Qualified technicians for maintenance and training for users are quite needed, but this has not been so for upcountry regions as the most of the suppliers lacks service centers in Upcountry Regions so for the users which have up countries offices facing challenges on using and maintain the EFDs.

EFDs users also rise complains on the high acquisition cost and maintenance charges of the machines, if TRA wants the machines to be acquired by every VAT registered trader then should look on reducing this cost so that the EFDs should be as a basic need for any business which can be acquired for less.

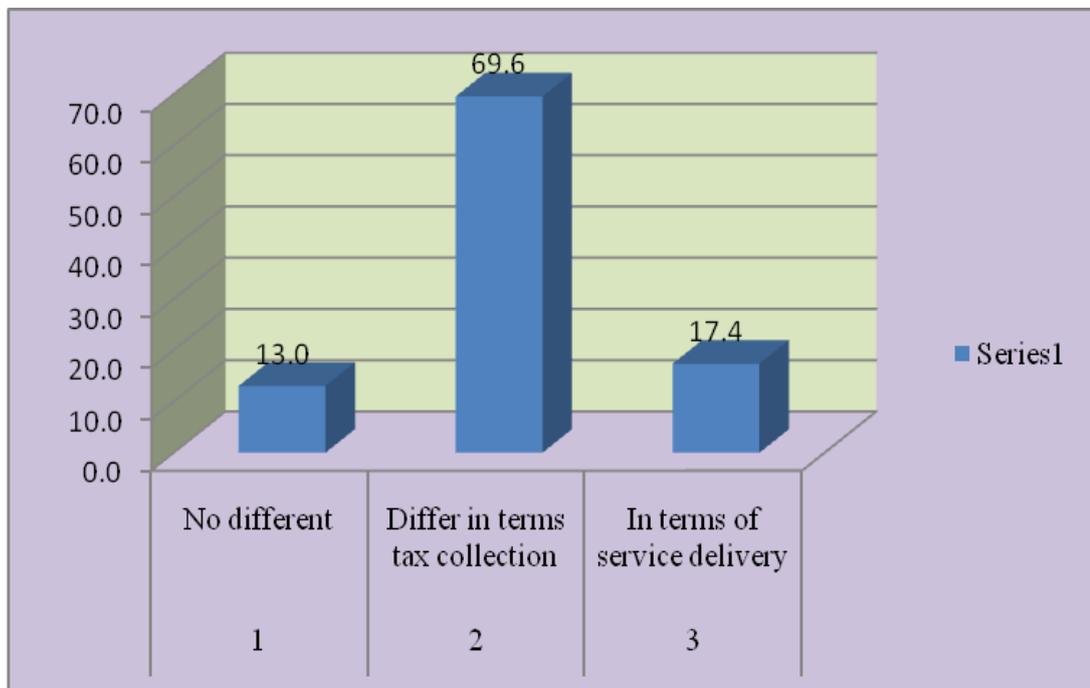
TRA and the manufacturers of the EFD machines should look on modification on the machines so that they might be compatible with computers and accounting software in the business.

4.8 Old-fashioned Electronic Cash Register and Electronic Fiscal Device in Term of Quality

The question of the different between the old fasion of Tax collection and that of using EFDs machines was asked to know if there any different which help in increasing Tax collections. The results from the field show that, 13.0% of the

respondents said that there is no different in the tax collection when the old system were used and when the EFDs machines is used. 69.6% of the respondents said that there is big different in the tax collection when the old system were used and when the EFDs machines is used,also 17. 4% said of the respondents that there is big difference interm of service derivery when EFDs machines is used and when was not. Other EFDs macines useres said that the use of EFD is not a wastage of fund despite its performance on revenue collections it has assisted business in so many ways like EFDs has assisted businesses in cutting costs that the business used to incur in processing VAT, because previously some businesses had to hire consultants in helping processing the VAT returns, EFDs have really helped increase profits due to their efficient nature, increased efficient on preparation of other sales report, increased efficient in stock taking, wise control of inventory is often a critical factor, easily timely preparations of reports and EFD has assisted ease the work of processing VAT returns.

Figure 4.4: Old-fashioned Electronic Cash Register and Electronic Fiscal Device in Term of Quality



Source: Field Report Data, 2014

Electronic Fiscal Devices Management System (EFDMS) was identified by TRA as a tool to be used for proper administration of Tax Collections. The system was intended to process Z reports and generates various operational reports to be used by TRA officers for effective administration of Tax collection

4.9 Operational and technical difficulties of EFDs Machines

The results show that out of 46 respondents, 18(39.1%) they strongly agree that, there is an operational and technical difficulties of EFDs Machines,20(43.5%) they agree that there are some operational and technical difficulties of EFDs Machines. The VAT registered traders were asked to mention the Operational and technical difficulties they face in using the EFD machines. From the research findings the following were posed as Operational and technical difficulties in using the EFD machines; Failure/delay by the Suppliers to establish integration solutions to the existing accounting packages, there is no room for correcting errors and back dating, Lack/shortage of qualified technicians to carry out device technical maintenance/services, Lack of Suppliers service centers in upcountry regions, High initial acquisition cost and subsequent maintenance charges, and Network problems.

Table 4.6: Operational and Technical Difficulties of EFDs Machines

S/N	Responses	Frequency	Percent	Valid Percent	Cumulative Percent
1	Strongly Agree	18	39.1	39.1	39.1
2	Agree	20	43.5	43.5	82.6
3	Neutral	4	8.7	8.7	91.3
4	Disagree	2	4.3	4.3	95.7
5	Strongly Disagree	2	4.3	4.3	100.0
	Total	46	100.0	100.0	

Source: Field Data, 2014

4.10 Provisson of Education to EFDs Useres

The question on the use of EFDs Machines was asked to know if yours have enough knowledge on the use of EFDs Machines by providing education to te users, the results show that, 30.4% of the respondents said that, they are not provided with

enough knowledge on the use of EFDs machines. However, 69.6% said that TRA and EFDs providers provide enough education on the use of EFDs machines to EFDs machines users. Also users explain that, training on awareness and exposure of the EFD machines, EFDs is very important therefore TRA should make sure that they make emphasis to EFDs provider to make sure that they have enough time to educate the users on the machines operations and its functions. Also the machines should be compatible with computers and accounting software in the business, TRA should introduce different systems for different businesses. Provide more education to VAT registered traders on the importance of using EFDs machines both to the users and TRA as well as its contribution to the economy of the country.

Table 4.7: Provision of Education to EFDs Users

S/N	Responses	Frequency	Percent	Valid Percent	Cumulative Percent
1	Yes	14	30.4	30.4	30.4
2	No	32	69.6	69.6	100.0
	Total	46	100.0	100.0	

Source: Field data, 2014

4.11 Managed to Reach all the EFDs Users to Provide Education

The results revealed that, education provision to EFDs users is not reached every users in the country. 19.6% of the respondents said that education on the EFDs is well managed by TRA as well as EFDs machines suppliers. However, 80.4% of them said that education on the use of EFDs machines is not well managed by TRA as well as EFDs suppliers. (see table.... Below).

Table 4.8: TRA and EFDs Suppliers Managed to Reach all the EFDs Users to provide Education

S/N	Responses	Frequency	Percent	Valid Percent	Cumulative Percent
1	Yes	9	19.6	19.6	19.6
2	No	37	80.4	80.4	100.0
	Total	46	100.0	100.0	

Source: Field Data, 2014

4.12 In Case Machine Has a Breakdown

The researcher wanted to know if the Machines happened to get breakdown what another stapes taken by the EFDs users. Results from the respondents show that, 50% said that when it happens the machines has breakdown they gave customers normal cash voucher, 10% said that they want offer customer any cash voucher, and 35% said that they call the supplier for maintenance and 5% said they call TRA authority to tell the issue concerned. The tablebelow illustrates the information above

Table 4.9: In Case Machine Has a Breakdown

S/N	Responses	Frequency	Percent	Valid Percent	Cumulative Percent
1	Give the customer the normal cash voucher	10	50.0	50.0	50.0
2	We don't give any cash voucher	2	10.0	10.0	60.0
3	We call the supplier immediatly	7	35.0	35.0	95.0
4	We call TRA authority	1	5.0	5.0	100.0
	Total	20	100.0	100.0	

4.13 Users of the EFD

When the TRA staffs were asked to identify the main users of the EFD machines, 100% identified that all VAT registered traders were the main users of the machines. According to the TRA manual the first phase of the introduction of EFD covers all VAT registered taxpayer from manufacturers, wholesalers, retailers of all kinds and other taxpayers appointed by the commissioner to be eligible person for EFD, in that case out of 20 respondents from EFD users side, the researcher interviewed retailers

by 38.3 %, Financial institutions totaled to 24.8% and the remaining 36.9% was from auditing and tax consultants firms.

Table 4.10: EFD Main Users

	Frequency	Percentage	Cumulative Percentage
Retailers	8	38.3	38.3
Financial institutions	5	24.8	63.1
Total	7	36.9	100%
Total	20	100	

Source: The author, 2014

4.14 Usage of the EFD Machine

As per the table 6 and chart 6, it shows that out of all 26 VAT registered taxpayers that had been interviewed 64.3% are using the machines in their day to day activities, while the remaining amounted to 35.7% purchased the machines but they are not using for several reasons, some experienced the breakdowns, some experience the network problems then decided not to use the machines, and some just doesn't want to use them. The TRA reports show that 92.3% of all the VAT registered traders acquired the machines.

4.15 Distribution of EFD Machines and the Training on Usage

When asked on the distribution and the initial training on the usage of the machines, 88.5 responded that was excellent, where by 11.5 says it is very good and the remaining. Moreover as for the information obtained from TRA the distribution reached around 92.3% of all VAT registered traders.

Table 4.11: Distribution and Training on the Machine Use

	Frequency	Percentage	Cumulative Percentage
Excellent	23	88.5.0	88.5
Very good	3	11.5.0	100.0
Good	0	0.0	
Poor	0	0.0	
Very Poor	0	0.0	
Total	26	100	

Source: The author, 2014

4.16 Assistance of EFD on Day to Day Business Report

Out of 26 users that responds, 85.8% assures that EFDs when well performed they are excellent in helping preparation of day to day business reports while 7.1% termed as they are very good assistance on business reports preparation and the rest 7.1% responded as the machines are good helpers on preparation of businesses reports.

Table 4.12: Assistance of EFD on Day To Day Business Reports

	Frequency	Percentage	Cumulative Percentage
Excellent	24	85.8	85.8.0
Very good	1	7.1	92.9.0
Good	1	7.1	100.0
Poor	0	0.0	
Very poor	0	0.0	
Total	26	100.0	

Source: The Author, 2014

4.17 Performance of the Machines

The researcher wanted to know about the performance of the EFDs. Therefore users were asked, and the results are; 11.5% termed the performance as very good. 53.8% termed it as good, 19.2 % replied that the performance is poor and the remaining 7.7% identified the performance as very poor.

Table 4.13: Performance of the Machines

	Frequency	Percentage	Cumulative Percentage
Excellent	0	0	0
Very good	3	11.5	11.5
Good	14	53.8	65.3
Poor	5	19.2	84.5
Very poor	2	7.7	100
Total	26	100%	

Source: The author, 2014

4.18 Assistance of EFDs on Tax Collections

When the TRA staff were asked about how the EFDs assisted in tax collection the results are as follows; 20% identified it as excellent, 45% said it is very good, 35% said it is good, despite some setbacks that needs to be adjusted before the introduction of a second phase.

Table 4.14: Assistance of EFD on Tax Collection

	Frequency	Percentage	Cumulative Percentage
Excellent	4	20.0	20.0
Very good	9	45.0	65.0
Good	7	35.0	100.0
Poor	0	0	
Very poor	0	0	
Total	20	100.0	

Source: The Author, 2014.

4.19 Monitoring on the EFDs Collections by TRA

The interview conducted by the researcher with the head of domestic revenue department at Temeke Tax Region in regarding to the effectiveness of the EFDs Machines in Tax collection it was revealed that, up April 2014 Temeke Tax Region there was 1315 Live VAT registered traders, while in May 2014 only 15 were registered. Therefore at 30 June there were 1324 Live VAT Registered Traders. However, the interviewee said that, out of 1324 live vat registered only 1230 (93%)

were Vat registered with EFDs machines. While 94 (7%) were vat registered without EFDs Machines

Using EFDs Machines is not optional it a necessary condition for all registered with EFDs. Failure to use EFD by any means, either failure to send Z report, failure to issue receipts etc. is an offence which can result into penalty. This implies that TRA has a good follow up in the use of EFDs in order to make sure that the revenue collection increases.

Implementation of EFD Phase I Regime is now in its fourth year since it was introduced in July 2010. EFD Phase II has already completed a year since it was rolled out in July 2013. The target of full implementation of this regime has not been reached due to a number of reasons both from within and outside the Authority. The exercise of upgrading Phase I EFDs was expected to be completed by the end of June 2014 but the Manufacturers failed to change the already set specifications. A total number of 24,694 traders are so far using EFDs as at June 30th, 2014 covering both Phase I and II EFD Regime.

Summary Of EFD Acquisition Status

EFD PHASE I

Live VAT registered traders,	21,403,
Traders with EFDs as at June 30th, 2014:	18,846,
Percentage in Performance	88 %

EFD PHASE II:

Targeted Number of traders:	200,000
Identified as at June 30 th , 2014:	128,864
Percentage in Performance:	64.4%

Table 4.15: Acquisition Status as at 30th June, 2014- Phase I

S/N	REGION	LIVE REGISTERED TRADERS	VAT	TRADERS WITH EFDs	PERF. RATE
	ARUSHA	2148		1809	84
	COASTAL	143		120	84
	DODOMA	260		220	84
	ILALA	6087		5817	96
	IRINGA	521		379	73
	KAGERA	198		179	90
	KIGOMA	74		69	93
	KILIMANJARO	690		610	88
	KINONDONI	5985		3994	67
	LINDI	69		49	71
	MANYARA	87		79	81
	MARA	195		175	90
	MBEYA	636		517	81
	MOROGORO	378		330	87
	MTWARA	162		155	96
	MWANZA	1004		946	94
	RUKWA	126		112	89
	RUVUMA	181		174	96
	SHINYANGA	271		243	90
	SINGIDA	135		134	99
	TABORA	200		182	91
	TANGA	529		500	96
	TEMEKE	1324		1230	99

Measurement Criteria

In the report of Sales turnover declaration in the final accounts /end of year return versus summary as per the ‘Z’ reports. It was revealed that 8 regions was selected in the year of 2012in the Average 2 months sales turnover and **Z’ reports** declarations for 2 months of January and February 2014**The revenue Impact** shows that sales turnover has increased by **57 %** as shown in table II below after usage of the

machines. In an effort to ensure different taxpayers use gadgets suitable to the nature of their businesses, the following efforts have been made:

Table 4.16: Measurement Criteria

SELECTION CRITERIA: 20% OF THOSE CONTRIBUTING 80% OF TOTAL REVENUE			BEFORE APPLICATION OF EFD (July 2009-June2010)			AFTER APPLICATION OF EFD (July 2013-June 2014)			
PERIOD	TRADERS WITH EFDs	SAMPLED TRADERS	REVENUE TARGET	COLLECTION	PERFORMANCE (%)	TARGET	COLLECTION	PERFORMANCE	PERF. INCREASE/DECREASE
JUL 13	14,484	490	6,018	5,797	96	6,642	9,596	144	48
AUG 13	14,869	490	7,953	7,019	88	8,386	12,174	145	57
SEPT. 13	15,584	490	7,970	9,216	116	8,400	12,021	143	27
OCT. 13	15,866	490	7,106	9,292	131	7,970	11,523	145	14
NOV. 13	16,072	490	6,954	6,570	94	7,781	11,550	148	54
DEC.13	16,868	490	8,454	10,375	123	9,943	14,960	150	27
JAN.14	17,037	490	7,333	9,186	125	7,523	11,505	153	28
FEB. 14	17,165	490	7,223	8,886	123	7,248	11,127	154	31
MAR. 14	17,194	490	6,496	6,853	105	6,741	10,213	152	47

APR.14	17,422	490	6,520	8,952	137	7,072	10,789	153	16
MAY 14	17,539	490	6,155	9,269	151	6,380	9,793	154	3
June 14	17,612	490	8,784	8,415	96	8,855	13,694	155	1
AVERAGE		490	7,107.5	8,310.5	117	7,644	11,381	149	30

Table 4.17 : EFD Phase II Impact Measurement on Declared Sales Turnover

SN	REGION	Sampled Traders	Average Declaration as per YOI 2012 Return (2 months Average)	Declaration as per Z report (Jan & Feb 2014)	Sales Turnover Increase / (Decrease)	% Increase / (Decrease) of Sales Turnover
1	ARUSHA	18	248,217,369.00	1,746,160,615.00	1,497,943,246.00	603
2	ILALA	17	7,928,503,654.76	18,394,560,802.64	10,466,057,147.88	132
3	KINONDONI	20	72,371,333.00	405,066,791.00	332,695,458.00	460
4	MBEYA	4	7,788,512.00	920,617,140.00	912,828,628.00	11,720
5	KILIMANJARO	5	997,066,673.00	663,570,745.16	(333,495,927.84)	(33)
6	MOROGORO	6	907,533,872.00	2,463,116,948.79	1,555,583,076.79	171
7	MWANZA	18	972,576,346.83	543,249,361.90	(429,326,984.93)	(44)
8	TEMEKE	20	51,373,867	746,532,638	695,158,771	1,353
OVERALL PERF.		108	11,185,431,627	25,882,875,042	14,697,443,415	57
NOTE: Base Period before use of EFD: Year of Income 2012						

4.20 Suggestions from the Respondents

The researcher also pointed out on registered measures to be taken to increase the users of EFD, the respondents pointed the following measures; Improve the refunding process for VAT registered traders who are in repayable position, Punish severely VAT traders who are not complying by amending the VAT act accordingly, Provide more education to VAT registered traders on the importance of using EFD machines both to the users and TRA as well as its contribution to the economy of the country, Inspection should be conducted thoroughly by TRA to assess non users, Increase number of suppliers so as to increase availability of the EFD machines in the market, Reduce challenges faced by the VAT registered traders in using the machines, minimize and remove substandard devices believed to be in circulation.

In order to increase collection of VAT the following ways were suggested; Broaden the tax base such that goods and services that are now subject to zero and reduced rates would gradually be taxed at the standard rate, punish tax avoiders, reduce tax exemptions provided to different companies, broaden the tax base such that goods and services that are now subjected to zero and reduced rates would gradually be taxed at the standard rate., resolve the load of long outstanding or overdue tax assessment, resolve tax cases which are in the court of law and provide more guidance on sections which pose ambiguity to the tax payers, Provide continues education to the public on the importance of paying tax, use the tax collected to the benefit of the country by avoiding misuse of public fund.

Benefits hold a strong case in the use of EFDs but the machines facing so many challenges that shines out some of the users in using them, EFD user has the right to be connected to the system throughout, but users experienced a lot of networks breakdowns which discouraging the use of the EFD, the machines does not provide a room for correcting error or backdates, for the case of error the machines does not give room for users for correction, this may results to wrong reporting,

EFDs like any other machine is subject to breakdown which might lead to drawbacks including failure to file returns, failure to pay correct taxes, tax evasion activities,

non-payment of duty on imported goods and so many, and the user has the right to report the breakdown immediately, but users complains delay on fixing the machines, which gives a room to tax evasion. The supplier has the obligations to make sure that malefactions shall be corrected within 48 hours after the reporting time while ensuring that data is restored to the original state before such malfunction occur, this has not been in practice, the rate of machines breakdown is huge compared to the rate of fixing them.

Users have the right to receive proper initial and ongoing training on the use of the machine, at the introduction point all users got the training but the is insufficient after sale training for the user and even them available they are insufficient, suppliers has the obligation to ensure provision and availability of sufficient training and qualified technicians to the users for maintenance of the Electronic Fiscal Devices as and when required, so that TRA will have the assurance of the proper usage of the machines by the users and this will lead to more users than more purchaser but few users.

Electronic Fiscal Devices needs a very reliable network for them to perform, users has the rights and obligations to be connected to the system and ensure all their business transactions are electronically transmitted into the system, but this has not been in practice as users experienced a lot of network breakdowns.

Qualified technicians for maintenance and training for users are quite needed, but this has not been so for upcountry regions as the most of the suppliers lacks service centers in Upcountry Regions so for the users which have up countries offices facing challenges on using and maintain the EFDs.

EFDs users also rise complains on the high acquisition cost and maintenance charges of the machines, if TRA wants the machines to be acquired by every VAT registered trader then should look on reducing this cost so that the EFDs should be as a basic need for any business which can be acquired for less.

TRA and the manufacturers of the EFD machines should look on modification on the machines so that they might be compatible with computers and accounting software in the business.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATION

5.1 Introduction

This chapter presents a summary of the findings, draws conclusions and puts forward recommendations based on the research findings. The study assessed the **impact of introducing electronic fiscal device (EFD) system in revenue collection in Tanzania: the case of Temeke regional tax collection**. The major focus was to examine the extent EFD has improved tax collection at Temeke Regional Tax Collection, to investigate the performance of the EFD on revenue collection at Temeke Regional Tax Collection, and To examine the system used by TRA for monitoring the use of EFD in business transactions at Temeke Regional Tax Collection

5.2 Summary

The research on assessed the **impact of introducing electronic fiscal device (EFD) system in revenue collection in Tanzania** was conducted at **Temeke regional tax collection** and 26 respondents participated. The general objective of the study was to assess the impact of introducing electronic fiscal device (EFD) system in revenue collection in Tanzania (the case of Temeke regional tax collection). The major focus was to examine the extent EFD has improved tax collection at Temeke Regional Tax Collection, To investigate the performance of the EFD on revenue collection at Temeke Regional Tax Collection, and To examine the system used by TRA for monitoring the use of EFD in business transactions at Temeke Regional Tax Collection

Both the empirical and theoretical literature review was oriented and the research gap was covered. The case study research design was used and questionnaires, observation and documentations were used as data collection instruments.

The study came up with the following findings in accordance with the study's research objectives. The results show that, EFDs play a big role in the increase of revenue collections. The report also shows 2010/2011 revenue collected was (all amounts in Shs millions) TZS 800,285.23/= and the 2011/2012 collections was TZS 991,034.00. Electronic fiscal devices compliance monitoring progress report show that for the year 2014 the target of revenue collection before EFDs acquisition was 325,646,369.00/= but the actual collection was 378,069,279.71/= The revenue target after EFDs acquisition was 371,859,441.00/= the actual collection was 727,375,890.00/= This implies that the collection was extremely increased after the acquisition of EFDs machines at Temeke Tax Collection Region. EFDs have really helped increase profits due to their efficient nature, increased efficient on preparation of other sales report, increased efficient in stock taking, wise control of inventory is often a critical factor, easily timely preparations of reports and EFD has assisted ease the work of processing VAT returns.

Also it was revealed that, Operational and technical difficulties in using the EFD machines; has lead to failure/delay by the Suppliers to establish integration solutions to the existing accounting packages, there is no room for correcting errors and back dating, Lack/shortage of qualified technicians to carry out device technical maintenance/services, Lack of Suppliers service centers in upcountry regions, High initial acquisition cost and subsequent maintenance charges, and Network problems.

EFDs providers provid enough education on the use of EFDs machines to EFDs machines users. Also users explain that, training on awareness and exposure of the EFD machines, EFDs is very important therefore TRA should make sure that the make emphasis to EFDs provider to make sure that they have enough time to educate the uses on the machines operations and its functions. Also the machines should be compatible with computers and accounting software in the business, TRA should introduce different systems for different businesses. Provide more education to VAT registered traders on the importance of using EFDs machines both to the users and TRA as well as its contribution to the economy of the country. The results revealed that, education provision to EFDs users is not reached every users in the country.

April 2014 Temeke Tax Region there was 1315 Live VAT registered traders, while in May 2014 only 15 were registered. Therefore at 30 June there were 1324 Live VAT Registered Traders. Using EFDs Machines is not optional it a necessary condition for all registered with EFDs. Failure to use is an offence which can result into big penalty. This implies that TRA has a good follow up in the use of EFDs in order to make sure that the revenue collection increases. See the table below.

Also it was pointed out on registered measures to be taken to increase the users of EFD, the respondents pointed the following measures; Improve the refunding process for VAT registered traders who are in repayable position, Punish severely VAT traders who are not complying by amending the VAT act accordingly, Provide more education to VAT registered traders on the importance of using EFD machines both to the users and TRA as well as its contribution to the economy of the country, Inspection should be conducted thoroughly by TRA to assess non users, Increase number of suppliers so as to increase availability of the EFD machines in the market, Reduce challenges faced by the VAT registered traders in using the machines, minimize and remove substandard devices believed to be in circulation.

EFDs like any other machine is subject to breakdown which might lead to drawbacks including failure to file returns, failure to pay correct taxes, tax evasion activities, non-payment of duty on imported goods and so many, and the user has the right to report the breakdown immediately, but users complains delay on fixing the machines, which gives a room to tax evasion. The supplier has the obligations to make sure that malefactions shall be corrected within 48 hours after the reporting time while ensuring that data is restored to the original state before such malfunction occur, this has not been in practice, the rate of machines breakdown is huge compared to the rate of fixing them.

Electronic Fiscal Devices needs a very reliable network for them to perform, users has the rights and obligations to be connected to the system and ensure all their business transactions are electronically transmitted into the system, but this has not been in practice as users experienced a lot of network breakdowns.

TRA and the manufacturers of the EFD machines should look on modification on the machines so that they might be compatible with computers and accounting software in the business.

5.3 Conclusion

On the basis of the findings of this study, it can be concluded; EFDs play a big role in the increase of revenue collections. The report also shows 2010/2011 revenue collected was (all amounts in Shs millions) TZS 800,285.23/= and the 2011/2012 collections was TZS 991,034.00. Electronic fiscal devices compliance monitoring progress report show that for the year 2014 the target of revenue collection before EFDs acquisition was 325,646,369.00/= but the actual collection was 378,069,279.71/= The revenue target after EFDs acquisition was 371,859,441.00/= the actual collection was 727,375,890.00/= This implies that the collection was extremely increased after the acquisition of EFDs machines at Temeke Tax Collection Region. EFDs have really helped increase profits due to their efficient nature, increased efficient on preparation of other sales report, increased efficient in stock taking, wise control of inventory is often a critical factor, easily timely preparations of reports and EFD has assisted ease the work of processing VAT returns.

Operational and technical difficulties in using the EFD machines; has lead to failure/delay by the Suppliers to establish integration solutions to the existing accounting packages.

EFDs providers provid enough education on the use of EFDs machines to EFDs machines users. Also users explain that, training on awareness and exposure of the EFD machines, EFDs is very important therefore TRA should make sure that the make emphasis to EFDs provider to make sure that they have enough time to educate the uses on the machines operations and its functions. The supplier has the obligations to make sure that malefactions shall be corrected within 48 hours after the reporting time while ensuring that data is restored to the original state before such

malfunction occur, this has not been in practice, the rate of machines breakdown is huge compared to the rate of fixing them.

5.4 Recommendations

- (i.) As the purpose of this research is to assess the effectiveness of electronic fiscal devices in improving tax collection, while Electronic fiscal Devices being our center of concentration, and TRA and registered VAT traders being a case study, the areas which should be improved in ensuring effectiveness of electronic fiscal devices have been identified bellow, and if the concrete strategies will be focused in this aspect, then TRA will have the most effective system which will guarantee abundantly revenue collections.

- (ii.) As it has been pointed out in chapter four the machines face a lot of breakdowns, TRA should approve new manufacturers before the commencement of EFD Second Phase in order to gain new technology and bring in competition

- (iii.) The existing Approved Manufacturers should be informed of the need to upgrade their products quality, functionality and usability for the assurance of the machines performance. This will also bring more VAT registered traders into the EFD users net.

- (iv.) The response of regular breakdowns of the Devices should be done on time thus ensuring the usage of the machines to all registered VAT traders, moreover the existing devices should be subjected to a new test in order to minimize and remove substandard devices believed to be in the circulation.

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APPENDICES

Appendix 1: Questionnaire

PART 1: To be Answered by Taxpayers

The Impact of Introducing Electronic Fiscal Device (EFD) System In Revenue Collection In Tanzania

Category A:

1. Names [optional]

Surname..... First Name.....

(i) Sex. Male []

(ii) Female []

2. Age of respondent

(i) 18-25 []

(ii) 26-35 []

(iii) 36-45 []

(iv) 50 and above []

3. Marital Status

(i) Single []

(ii) Married []

(iii) Separated []

(iv) Widower/Widow []

4. Education

(i) University/College []

(ii) Secondary []

(iii) Primary []

(iv) None []

Category B:

1. Do you think is EFD effective as far as VAT collection is concerned
 - (i) Yes []
 - (ii) No []

2. What is the difference between the old-fashioned Electronic Cash register and Electronic Fiscal Device in term of quality
 - (i) No different []
 - (ii) Differ in terms tax collection []

3. EFD machines are reported that they have many operational and technical difficulties,
 - (i) Strongly Agree []
 - (ii) Agree []
 - (iii) Neutral []
 - (iv) Disagree []
 - (v) Strongly Disagree []

4. Did the TRA and authorized Supplier provide education on the use of EFDs?
 - (i) Yes []
 - (ii) No []

5. If it happens that the machine has a breakdown, how do you deal with transactions?
 - (i) Give the customer the normal cash voucher []
 - (ii) We don't give any cash voucher []
 - (iii) We call the supplier immediately []
 - (iv) We call TRA authority []

6. In your personnel perspectives, what do you think are the advantages and disadvantages of using EFD machines in business?

- (i) Good record Keeping []
- (ii) Good in Transaction presentation []
- (iii) Easy in tax Collection by TRA []
- (iv) It wastes time for business owners []

7. Do you have any other comment?

8. The name of your company/business/organization?

9. In which Industry your businesses belong?

- (i) Retailers []
- (ii) Supermarkets []
- (iii) Financial Institutions []
- (iv) Telecommunication companies []
- (v) Mining Companies []

10. Does your company use the EFD machines from TRA?

- (i) Yes []
- (ii) No []

If No, please explain why

11. Circle more than one corresponding numbers that best represent your response.

1. Excellent. **2.** Very good. **3.** Good **4.** Poor. **5.** Very poor

	Excellent	Very good	Good	Poor	Very poor
Distribution and training on the use of the machines					
EFD has assisted ease reports of day to day sales of the business					
Performance of the machines					

Thank You for Your Cooperation

PART 2: To be answered by TRA employees

The Impact of Introducing Electronic Fiscal Device (EFD) System in Revenue Collection in Tanzania

Category A:

1. Sex
 - (i) Male []
 - (ii) Female []

2. Age of Employees
 - (i) 18-25 []
 - (ii) 26-35 []
 - (iii) 36-45 []
 - (iv) 50and above []

3. Marital Status
 - (i) Single []
 - (ii) Married []
 - (iii) Separated []
 - (iv) Widower/Widow []

4. Education
 - (i) University/College []
 - (ii) Secondary []
 - (iii) Primary []
 - (iv) None []

Department/Region

Category B:

1. To what extent do you think is EFD effective as far as VAT collection is concerned?

(i) Yes []

(ii) No []

2. What is the response of traders during introduction of EFD machine in the country?

(i) Good []

(ii) Not Good []

3. Is there any improvement in revenue after starting using EFDs as far as VAT collection is VAT concerned?

(i) Yes []

(ii) No []

4. Do traders registered for VAT comply with EFD regulations and other tax laws?

(i) Yes []

(ii) No []

5. Is there any training schedule in the EFD machines?

(i) Yes []

(ii) No []

6. What is your opinion about machines to trader?

7. Any other comments?

8. EFD is a waste of fund and has not assisted TRA in anyway?

(i) Yes []

(ii) No []

9. Circle more than one corresponding numbers that best represent your response.

1. Excellent. **2.** Very good. **3.** Good **4.** Poor. **5.** Very poor

	Excellent	Very good	Good	Poor	Very poor
EFD has assisted ease the work of administrating VAT collection					
Impact of EFD on VAT collection					
Monitoring the evasion on the use of EFD					
Performance of the machines					

10. Do you think EFDs has any impact on efficiency in service delivery?

(i) Yes []

(ii) No []

11. Are you satisfied with the system used by TRA to supply EFDs to Business owners?

(i) Yes []

(ii) No []

Thank You for Your Cooperation