

# Perceptions of Taxpayers on the Adoption of Electronic Fiscal Devices in Revenue Collection in Tanzania: A Case of Arusha Municipality

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**Abstract:** *The Government of the United Republic of Tanzania introduced EFDs since year 2013 in its second. The second phase includes non VAT registered traders administered under The Tax Administration Act 2015, to replace the Electronic Cash Register. The operations under Electronic Cash Register did not meet the desired expectations, including tax collections, and administration of the system. The newly introduced EFD has been prepared to cater for the inefficiencies inherent in the former system of tax collection. The purpose of the study was to assess the perceptions of tax payers on the adoption of Electronic Fiscal Devices in revenue in Arusha municipality. The study focused on analyzing the benefits of adopting EFDs in revenue collection in Arusha Municipality, identifying challenges towards adopting EFDs in revenue collection and suggesting measures to overcome the challenges associated with adopting EFDs in revenue collection in Arusha Municipality. The study adopted both quantitative and qualitative research approaches using a descriptive research design. The study collected data from a random sample of 99 respondents using interviews and questionnaires. Descriptive statistics version 21 was used to analyze data. The findings indicate that among the benefits of adopting EFDs in revenue collection include reducing the time tax payers take to prepare sales report and ensures accurate tax rate to be paid by tax payers. Further, the challenges towards adopting EFDs were high price of buying EFDs and lack of training to tax payers. The study recommends that Government through TRA should provide subsidized EFD machines and provide more training to tax payers on the application and use of EFDs.*

**Keywords:** Electronic fiscal devices, Tanzania Revenue Authority, Value-added tax, Electronic tax register

## 1. Introduction

Efficient and effective revenue collection is an important aspect of economic development of any country (Malima, 2013). In the modern world today in any developed or developing countries, tax collection has been the main source of the revenues that are used for economic and social development. The adequacy of government revenues allows the government to support its operations ranging from administrative activities, infrastructure constructions and service provision. Ebeke (2010) argues that in order to enhance the speed of development in developing countries they must ensure all revenue collected were managed properly.

Tanzania Revenue Authority's (TRA) Electronic Fiscal Device (EFD) was introduced to VAT registered traders under the "The Value Added Tax (Electronic Fiscal Device) Regulation, 2010"-Subsidiary Legislation, Government Notice No. 192 published on May 28, 2010, and enshrined in the Finance Act 2010 with the main aim of enhancing VAT compliance in Tanzania. TRA's new EFD system became effective on July 1, 2010 (Finance Act, 2010). The system aims at aiding the taxpayer to get correct sales information from businesspeople; reduce tax collection costs and helping business people to comply with the VAT regulations among others.

It is important for TRA to obtain feedback from citizens on their perceptions of the tax system; whether people comply with VAT regulations. Also, find out if people eventually pay VAT, people's views on tax administration and enforcement, perceived benefits of paying taxes, people's tax payment behavior in relation to government perception,

people's perception towards ease use of EFDs and their attitude towards using it. Ajayi (2007) states that the development and adoption of an analytical technological framework emphasizes the role of knowledge, attitudes and perceptions in the efficient and effective decision-making process. Theories and empirical studies demonstrate that risk and uncertainty play an important role in the adoption of new technologies (ibid). Therefore, it is important to have feedback on the EFDs.

## 2. Purpose

The purpose of the study was to assess the perception of taxpayer's on the adoption of Electronic Fiscal Devices in revenue collection in Tanzania. Specifically, the study sought to identify the benefits of adopting EFDs machine in revenue collection, challenges towards the use of the EFDs in revenue collection and to suggest measures that should be instituted to overcome challenges associated with adopting EFDs in revenue collection in Arusha Municipality.

## 3. Research Methodology

The study was both qualitative and quantitative in nature. It adopted a descriptive survey research design to enable collection of detailed data. The sample covered was 99 respondents drawn from a total population of 5321. Data collection was done using survey questionnaire and interviews with key respondents. Before its administration, the questionnaire was pre-tested to ensure collection of valid and reliable data. As part of data collection, the study conducted documentary review of various documentary sources that helped to obtain proper perspectives and adequate grounding on the constructs under study.

Quantitative data was analyzed using frequencies, percentages and mean while qualitative data was analyzed using content analysis.

#### 4. Results and Discussion

EFD program is one of the tax administration reform measures that Tanzania Revenue Authority has undertaken to ensure that registered taxpayers in the country properly records sales. The introduction EFDs in Tanzania initiatives was initially focused on improving compliance with VAT requirements; it was believed to have the capacity to transform revenue collection in this field, as it is the case with other countries. The study population comprised of taxpayers using EFD machines in Arusha Municipality. From the study findings, 60 respondents presented the types of Electronic Fiscal Device they were using; 75.0% of the respondents were using Electronic Tax Register (ETR); 25.0% were using Electronic Fiscal Printer (EFP) while none were using Electronic Signature Device (ESD) in revenue collection. ETR is used where invoicing is done manually while the ESD is used where invoicing is computerized. The study found out that majority of taxpayers were using ETR because most of the taxpayers in Arusha Municipality were using manual invoices compare to other types ESDs. The study revealed the following perception regarding adoption of EFDs.

##### Adoption of EFDs has reduced the time tax payer's takes to prepare sales report

In this part the respondents were asked to say if the adoption of EFDs has reduced the time tax payer's takes to prepare sales report. The finding shows that 65% respondents agreed that EFDs has reduced the time it takes to prepare sales report, 15% respondents disagreed that EFDs has reduced the time it takes to prepare sales report while 20% respondents were undecided. Finding show that majority of respondents agreed that EFDs does not consume much time in preparing monthly sales report. This findings is in agreement with the finding of Mohamed (2015) who found that majority of respondents agreed that FDDs has reduced their time in preparing monthly report compared to manually method in Kinondoni Municipality. As shown in Table 1.

**Table 1:** EFD Machine has reduced the Time it takes to Prepare Sales Report

Category	Frequency	Percent
Agree	39	65
Disagree	9	15
Undecided	12	20
Total	60	100.0

##### Adoption of EFDs Machine Ensures Accurate Tax Rate to Be Paid By the Tax Payers

In this part the respondents were asked to indicate if the adoption of EFD machine ensures accurate tax rate to be paid by the tax payers. The findings show that 13% respondents agreed that EFD machines ensure accurate tax rate to be paid by the tax payers, 75% respondents disagreed that EFDs machine ensure accurate tax rate to be paid by the tax payers, while 12% respondents undecided. This implies that majority of respondents disagree that the EFDs machine ensures accurate tax rate to be paid by the tax payers to

TRA. This finding is in agreement with the findings of Kira (2016) who found that majority of respondents 62.7% disagree that EFDs machine ensure accurate tax rate to be paid by the tax payers in Dodoma

##### Challenges faced by taxpayers in Adopting EFD System in Business

The respondents were asked to give their opinion if they faced any challenges in adopting EFD machine in their business. According to the study findings, majority (83%) of the respondents agreed that they faced challenges in using EFD machines while the remaining (17%) were not facing any problem on the adoption of EFD machine in revenue collection. Findings show that majority of respondents faced challenges in adopting EFDs system in business. The findings are in agreement with those of a study by Kira (2016) who found that majority of respondents (57.3%) agreed that they were facing challenges in adopting EFD machine. They are agree with those obtained by Casey and Castro (2014) on their studies on EFDs' Taxpayer Compliance and Administrative Efficiency'' in Ethiopia and Kenya. The study revealed that there are some challenges in the adoption of EFDs' technology particularly the universal requirement of English as the main language in the devices; scarcity of devices in the initial stages of implementation, and price of devices were expensive.

##### Official Instructions on Adoption of EFD Technology

The respondents were asked to indicate whether they receive any official instructions on adoption of EFDs technology system in revenue collection. The purpose of this question was to understand if the tax payers received any instructions from TRA official during adoption of EFDs technology system in revenue collection. According to the study findings, 33% of the respondents indicated that they received official instruction on adoption of EFDs technology in their business while (67%) respondents indicated that they never received any official instruction on adoption of EFD machine on tax collection. Majority of respondents were of the view that during the implementation stage they didn't receive official instruction from tax officials on how to use the device. They pointed out that more education was needed on how to use and the importance of using the machine on their business before adopting EFDs technology.

##### The Purchasing Price of EFDs Machine

TRA. The respondents were asked if the price of purchasing EFDs machine is reasonable. The purpose of this question was to understand if the tax payers are able to afford the price of EFDs machine; 8% of the respondents were of the view that the price of EFD machine was reasonable while 92% indicated that the purchasing price of EFD machine was not reasonable. Therefore, majority of respondents disagree that the price of purchasing of EFDs machine is reasonable. Those who indicated that the price was not reasonable said that this machinery have high cost of buying in connection to their business. The taxpayers suggested that the government through TRA could either provide EFDs to them free in order to influence more people affordability to acquire and adopt EFDs in their business or to reduce EFDs prices. The findings are in agreement with those of Magutu *et al.*, (2010) in their study which found that the price of

ETRs was expensive which limit taxpayers to acquire those machines.

### Measures to Improve Adopting of EFDs in Revenue Collection

The purpose of this objective was to uncover measures that should be implemented to overcome the challenges associated with adoption of EFDs technology in revenue collection in Arusha Municipality; 42% respondents said that in order to overcome challenges associated with adopting EFDs in revenue collection, TRA should reduce the price EFDs machines, 17% respondents said that TRA should ensure the EFDs machine have constant network; the study observed that sometimes EFDs have low network which causes tax payers problems in printing tax invoices, 33% respondents said that TRA should conduct regular trainings and workshops to enable them apply EFDs in the business and only (8%) respondents said TRA should increase the suppliers of EFDs machine (Table 2).

**Table 2:** Measures to improve of adoption EFD in revenue collection

Category	Frequency	Percent
Reduce the price of buying EFD machine.	25	42
Stability of EFD machine network.	10	17
To conduct training and workshops with tax payers on EFD machine application.	20	33
To increase the suppliers of EFDs	5	8
<b>Total</b>	60	100.0

This finding is in agreement with those of Kira (2016) who found that majority of respondents preferred trainings and workshops with taxpayers on EFDs application; to provide incentives to encourage taxpayers' adoption of EFDs; to ensure sensitization, education and training programs are promoted to taxpayers' awareness in on EFDs system in friendly manner in order to overcome challenges associated with adoption of EFDs in revenue collection in Dodoma. Further, the findings are in line with those of Mandari, Kolesen and Nguridada (2017) who found that in order to increase the acceptance of EFDs policy makers should provide more awareness campaign as well as providing online assistance to EFD users in United Kingdom.

### 5. Conclusions

Based on the findings, one can conclude that respondents witnessed benefits of using EFD machine in revenue collection in many aspects such as EFDs has reduced the time it takes to prepare sales report; EFDs ensure timely sales filing and reporting to TRA and EFDs print weekly, monthly and yearly reports. The EFDs system in Tanzania like any other developing country faces number of challenges such as networking problem, tax payer not having enough education on how to use and the importance of using EFDs, the high cost of buying the EFDs, the fiscal tax invoice is not durable as they are not readable after a short period of time (durability of EFD receipts). Further, the receipts do not show the description of items purchased they create problems between tax payers customers and the (TRA), and low number of agents to supply the electronic fiscal devices machinery compare to the high number of taxpayer's available in the country; and in order to overcome

those challenges the price of buying the EFDs should be low and TRA officials should provide enough education to tax payers on how to use EFD machines and ensure the networking of EFDs is stable.

### 6. Recommendations

Based on the study findings, the following recommendations are made:

The Government through TRA should involve stakeholders in the whole process has impact in the implementation process. Explaining and discussing changes by involving all stakeholders such as tax payers and suppliers before it is implemented is essential. Tax payers should be involved from the initial stages in order to get their views before implementation stage. TRA needs to embark on sensitization, education and training programs in order to address the challenges which are still affecting the implementation of the EFDs system. More stakeholders need to be sensitized to reduce resistance and also to increase the coverage on the use of the system. The government through TRA should provide EFDs to business owners for free as the way of boosting tax collection. Government should negotiate with the agents that sell EFD and set the term of payment that will be affordable to TRA and then provide them to business owners for free and set the time for TRA to pay to the agent as they receive tax from the taxpayers. This will reduce resistance and the pain that business owner felt during buying the TRA device.

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