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Stephen Mnyawi, Tafuteni Chusi and Rogers Andrew Lumenyela



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Stephen Mnyawi¹, Tafuteni Chusi² and Rogers Andrew Lumenyela³

¹Institute of Rural Development Planning, Mwanza

^{2,3}Institute of Rural Development Planning, Dodoma

Corresponding author's email: tnc0917@gmail.com

ABSTRACT

Purpose: This paper examines the challenges facing the implementation of using Electronic Fiscal Device (EFD) in tax collection in Tanzania. Specific objectives were to identify the challenges facing the implementation of the use of EFD machines, to evaluate causes for the challenges facing the implementation of the use of electronic fiscal devices, to assess the difficulties faced by taxpayers in adapting the use of EFD machines.

Methodology: The study adopted the survey research design and the sample size of 68 taxpayers (VAT registered and none registered, but both who use the EFD machines) was used. The study was carried out in Dodoma City Council. Data were gathered using interview method in which questionnaire tool was administered. Data collected were organized, coded, and analyzed using by (SPSS) version 20. Data were analyzed by using descriptive statistics through frequencies and percentages as well as multiple linear regression model was also used.

Findings: The system to a great extent assisted in sealing loopholes of tax evasion in Tanzania. The system had also assisted in improvement on tax compliance. The study established that the Authority is still experiencing some resistance to change from both internal and external customers.

Conclusion: Thus, through major findings of the study; it has been indicated that EFD system had a lot of challenges which hinder the implementation of using the machine though the system enhanced tax collection in business premises in Tanzania. Those challenges include regular break down of power and internet, fairness of tax estimated from tax payers, lack of education on the use of EFDs machines, maintenance of machines and under pricing of tax from traders.

Recommendation: The study recommends that stakeholders need more awareness of the system and friendly environment of using EFD machines in which they suggest strongly strategies for improvements of the system.

Keywords: *Electronic Fiscal Device (EFD), Tax collection.*

1.0 INTRODUCTION

Electronic fiscal device (EFD) is the device designed for use in business for efficient management controls in areas of sales and analysis and stock controls system and which conforms to the requirements specified by laws. The EFD machines first introduced in 2010 in the Tanzania tax system, it was introduced to both Value Added Tax (VAT) registered traders under “the VAT Regulation 2010” subsidiary legislation and those who are non-VAT registered but having the turnover ranging from TZS 14 million and above per year traders dealing with selected business such as petrol stations, mini supermarkets, mobile phones, bar and restaurants, spare parts, hard ware, pharmaceutical, stores, electronic shops and so of the like (Zakaria, 2019). The process was meant to first introduction of EFD machines to the VAT registered traders under “the VAT 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 (Kaisi, 2019). TRA’s new EFD system became effective on July 1, 2010 (Finance Act, 2010). The system aims at allowing the taxman to get correct sales information from business people; reduce tax collection costs in the side of TRA and helping business people to comply with the Value Added Tax (VAT) regulations among others in Tanzania (Kapera, M. O. 2017). Tanzania Revenue Authority started to implement the second phase of Electronic Fiscal Device (EFD) in 2013 with the aim of boosting revenue collections and simplify tax administration. Tanzania Revenue Authority (TRA) introduced the use of Electronic Fiscal Device for issuing receipts and invoices for every sale made. The System was planned to be implemented in two main phases. The implementation of phase one begun in July 2010, involving only VAT registered traders (Kira, 2016).

The Second Phase intended to cover non-VAT registered traders. Implementation of the second phase of EFD shall include the following groups; persons who are not VAT registered with a turnover ranging from TZS 14 million and above per year; traders trading in the region’s prime areas, identified on the basis of rent payable; and traders dealing with selected business sectors such as spare parts, hardware, mini-supermarkets, petrol stations, mobile phone shops, sub-wholesale shops, bar and restaurants, pharmaceutical stores; electronic shops etc. Tanzania Revenue Authority proudly launches the second phase of Electronic Fiscal Devices (EFDs) on May 15, 2013, in order to better cover Tax collection from non-VAT registered traders. It is the first Revenue Authority to implement such a technologically advanced solution with GPRS based Fiscal machines providing two-way communications between a very advanced Server Software called EFDMS and Fiscal Cash Registers. This was meant to streamline Tax information from over 200,000 traders (Kira, 2016).

The government required all the business conducted to pay tax, but there has been tax avoidance by many people. Due to this the government had to take several measures to ensure that all tax information reaches TRA but still some data do not reach TRA, and those that reach TRA are not submitted on time (Kira, 2017). This is because the EFDs machines have got a lot of challenges in the implementation stage due to the new technology inseminated, lack of conviction of need for change; dislike of imposed change or no involvement in the change, dislike of surprises/no information for readiness, fear of the unknown, and uncertainty; reluctance to deal with unpopular issues; fear of inadequacy and failures due to need for new skills; disturbed practices, habits, relations and familiarity; and lack of respect and trust in persons promoting the new system (Weru *et al*, 2013).

The introduction of Electronic Fiscal Devices (EFDs) Machines to taxpayers has been seen as an effective way to solve the problem of noncompliance and raise government revenues. Also, the machines have in-built Fiscal Memory which cannot be erased by mechanical, chemical or electromagnetic interferences, automatically self-enforcing issuing of daily “Z” report after every 24 hours, transmits tax information to TRA system automatically and has irreversible date mechanism. Also, the machines issues fiscal receipts/invoice which is uniquely identifiable and can be used as a standalone and configured into a network has 48 hours power backup, can also use external battery in areas without electricity supply. The introduction of Electronic Fiscal Devices (EFDs) is aimed at enhancing voluntary compliance and ease operation of the VAT and Income Tax laws by TRA tax officials (Kapera, 2017). Therefore, this study, intends to examine the challenges facing the implementations of using the EFDs machines in all phases.

2.0 MATERIALS AND METHODS

2.1 Research design and sampling procedure

The study used descriptive research design. In this study data were collected at a single point in time. A questionnaire was used to collect data. The design is helpful in determination of relationship between variables of the study (Babbie & Mouton, 2007). The study employed both probability and non- probability sampling techniques. Probability sampling technique was used by employing the simple random sampling where by a sample size of 68 taxpayers (VAT registered and none registered, but both who use the EFD machines) was used. The study was carried out in in Dodoma City Council. Purposive sampling as a non-probability sampling was used to select key informants who are the EFD registered users and other tax stakeholders. In this study, the dependent variable is the use of EFDs in tax revenue collection. It depends on resistance to change, network and power supplies problems, poor honesty and integrity to tax officials, non accessibility and reliability of the devices, bureaucratic monitoring and enforcement procedures. The independent variables are mainly assumed as the challenges hindering the use of the EFD machines in tax revenue collection. Thus, when the above identified hindering factors are mitigated, there will be predominant use of EFDs in tax revenue collection.

2.2 Data collection and Analysis

The study used both primary and secondary data. Primary data were collected from Dodoma City Council, whereby a sample size of 68 taxpayers (VAT registered and none registered, but both who use the EFD machines) was used. Secondary data were collected from organized documents and reports, archival records, Memos, and diaries at various places such as from the internet and the regional TRA office. Primary data were collected from respondents through interviews and observations methods with the assist of questionnaire and checklist tools. Secondary data were collected through documentary review methods to supplement primary data. Valuable background information was collected from published literature and un-published literature by using a list of questions (checklist). Data were analyzed both qualitatively and quantitatively. Data analysis involved the use of Statistical Package for Social Sciences (IBM SPSS Version 20). Data were analyzed by using descriptive statistics through frequencies and percentages. Furthermore, multiple linear regression model was used as follows;

$$\text{Revenue Collection} = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \epsilon_p$$

Where:

X_1 = resistance to change

X_2 = Network and power supplies problems

X_3 = Poor honesty and integrity to tax officials

X_4 = Non accessibility and reliability of the devices

X_5 = Bureaucratic monitoring and enforcement procedures

C_p = Error Term which account for other possible factors that could influence Y that are not captured in the model

3.0 FINDINGS AND DISCUSSIONS

The study found that the major concern of the businessmen is the way TRA handles issue of the electronic Fiscal Device (EFDs). Most of the business people complain bitterly saying that they do not know for what use the gadgets are. Some said they do not know how to use them, the business people also complained that some TRA officers often threatened them instead of using a friendly approach when discussing taxation matters, hence creating negative attitude towards the EFD use that is why there is resistance to change, and this finding relates to the study done by Lwiza (2020), who recommended that the HR department in TRA should develop and deliver an education program to tax payers on weekly basis to reduce their negative perception and make it clear that EFD is a way of simplifying tax assessment.

The other challenge raised by most interviewees (tax payers) is the intermittent power outage (power failure or cut off or its in availability in such situation tax payers are not able to enter the required data). The issue of concern was that when power returns, it takes too much of their time entering the required data of their transactions made in the trading day. They believe in such power cut period, because, the device is rendered useless and so it's supposed benefits of fast and real time entry transaction becomes meaningless. They suggested that it would be beneficial to have device that runs on alternative source of energy such as solar, or back up battery, and this finding relates to the study done by (Cornel, 2017) the study recommended that, the payers should install a solar based source of alternative energy. This will ensure that EFD is operating 24 hours a day and enable tax payers to enter tax data information in real time.

It has been found that some of the tax officials are not honest and do not have integrity, some use the ignorance of the tax payers about the tax role and regulations as well as their rights to undermine the tax payers, therefore due to their little knowledge, the do not have faith to the officers about tax issues EFDs inclusive. The following observation was done from the one of the respondents, "*... we pay tax but we don't see any changes in social services, we see officials gaining and we continue to suffer as a community.*" This shows that tax payers have little faith on the tax official about the tax issues, and this finding relates to the study done by Eilu (2018), who recommended that, revenue authority officials should establish a public relations (PR) department to regularly visit taxpayers, talk to them and get comments or suggestions on different aspects of tax assessment and collection. This will create a better working business relationship between TRA and tax payers.

Results from regression indicated in Table 1 reveal that resistance to change (0.000), network and power supplies problems (0.005), poor honesty and integrity to tax officials (0.000), non-accessibility and reliability of the devices (0.000), and bureaucratic monitoring and enforcement procedures (0.001) at ($P \leq 0.000-0.01$) and 95% confident level are among the challenges which hinder the implementation of EFD use in Dodoma city. Therefore, linear regressions provide findings on the challenges which hinder the implementation of EFDs machines in Dodoma city.

Table 1: Results from Regression Analysis

Model	Unstd Coeff.		Std Coeff	T	Sig
	B	Std Error	Beta		
Constant	0.579	0.209		2.772	0.000
Resistance to change	0.907	0.030	0.919	30.294	0.000
Network and power supplies problems	0.096	0.033	0.089	2.890	0.005
Poor honesty and integrity tax officials	-0.193	0.047	-0.121	-4.140	0.000
Non-accessibility and reliability of the devices	0.095	0.032	0.087	2.954	0.000
Bureaucratic monitoring and enforcement procedures.	-0.050	0.021	-0.062	-2.357	0.001

a. Dependent Variable: challenges facing EFDs machines in tax revenue collection

b. Predictors: (Constant), resistance to change, network and power supplies problems, poor honesty and integrity to tax officials, non accessibility and reliability of the devices, bureaucratic monitoring and enforcement procedures.

The study found that high purchasing cost of the EFDs; lack of education (training) and awareness about tax procedures and tax compliance; new technology; and poor implementation strategy are the main causes for the challenges hindering the implementation of the use of electronic fiscal devices in Dodoma city as indicated in Table 2.

Table 2: Causes for the Challenges Hindering the Use of EFDs in Dodoma City

Variable	Yes	No
High purchasing cost of the EFDs	68 (100.0)	0 (0.0)
Lack of education about the use of EFDs	46 (67.6)	22 (32.4)
New technology	60 (88.2)	8 (11.8)
Poor implementation strategies	38 (55.9)	30 (44.1)

Note: The numbers in the parentheses are the percentages

The study found that all 68 respondents agreed that high purchasing cost of the EFDs makes it hard for many of the sales men to accept and to adapt the use of the EFDs in their business. The following condemn was from one of the respondents that “...it is sad to see the government

charging us TZS 590,000/= per EFD device while one can purchase the device at TZS 100,000 or less in China.”

The study found that education and training about the use of EFDs is not provided to the allocated users leaving most of the users not aware about the benefits of using the machines in their business and to the national economy. This leads to resistance to change, as well as the under pricing of tax by the salesmen, as well as the amount being remitted to the government tax authority is sometimes lower than the actual amount that is needed to be remitted. These findings relate to the study done by Rizkyana *et al.*, (2020) where it was recommended that consumer education should be given for improving awareness of the benefits of e-commerce transactions to the tax payers.

The study also found that the use of EFDs in tax collection is a new technology that most of Tanzanians are not familiar with making it difficult to adapt. Therefore, there is a need to make this technology familiar to the Tanzanians so as to make it effective in the process of tax revenue collection. These findings relate to the study done by Mandari and Koloseni, (2017). Who recommended that there is a need of educating taxpayers on this new technology so as to be familiar with the device.

The study explored the difficulties faced by taxpayers in adapting the use of EFDs. Taxpayers face challenges in purchasing the EFDs at high costs 590,000/= in one lump sum for a small device purchased from China at about 100,000/= which is not easily affordable by a small business operator. The respondents commented that such practice is discouraging and unfair. To business people, they would have preferred to pay much less or at least pay it off in installments over a period of time or being given for free.

Also, in using EFDs, taxpayers encounter the challenge of few mechanics to repair the device, when it gets spoiled. This challenge in some ways deters the taxpayers from full utilization of the device and for others to adapt the use of the machines. The TRA officers acknowledged that these challenges do exist. However, they commented that, when introducing a new technology or system challenges such as those mentioned by tax payers are expected. Nevertheless, they admitted that the implementation exercise was not properly executed. They further acknowledge that they ought to have developed an education campaign to market the benefits of EFDs to the tax payers and future users.

4.0 CONCLUSION AND RECOMMENDATIONS

4.1 Conclusion

It is concluded that regular break down of power and network, fairness of tax estimated from tax payers, lack of education on the use of EFDs machines, maintenance of machines and under pricing of tax from traders are the challenges facing the implementation of EFDs in revenue collection in Tanzania.

4.2 Recommendations

It is recommended that there is the need to educate existing taxpayers and potential new business start-up especially on how to use the device, and the benefits of collecting and entering tax data into the EFDs. This will create an atmosphere of honest and fairness to the EFD users. The government should remove import duty or subsidize the purchase of EFDs. In that way tax

payers would find it easy to purchase and encourage other people to acquire and use. Furthermore, there is the need to have a liaison officer who operates as public relations personnel to regularly visit tax payers, listen to their concerns on the use of the EFDs as well as provide opportunity for some taxpayers to ask questions in an informal environment. Also, consumer education is also recommended for improving awareness of the benefits of e-commerce transactions. Furthermore, further research in the behavioral and infrastructural causes of the current low level of tax remittance from e-commerce transactions by sellers is highly recommended.

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