



Business growth is our business

Study of the Impact of
“*Digital Tax Stamps*”
on the Manufacturing
Sector.

FINAL REPORT





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Glossary of Terms and Abbreviations

The glossary below contains a selection of abbreviations that may be found in the report.

| Abbreviation | Term |
|--------------|---|
| CIT | Corporate Income Tax |
| DCM | Digital Conformity Mark |
| DLR | De La Rue |
| DRMS | Domestic Revenue Mobilisation Strategy |
| DTS | Digital Tax Stamps |
| EFRIS | Electronic Fiscal Receipting and Invoicing System |
| ETS | Electronic Tax Stamps |
| FY | Financial Year |
| LED | Local Excise Duty |
| NDP | National Development Plan |
| PSFU | Private Sector Foundation Uganda |
| SICPA | SICPA Uganda Limited |
| UNBS | Uganda National Bureau of Standards |
| URA | Uganda Revenue Authority |
| VAT | Value Added Tax |

ACKNOWLEDGMENT

This study was a collaborative effort between PSFU and PricewaterhouseCoopers (PwC) through support from Mastercard Foundation, Uganda Manufacturing Association (UMA), Uganda Breweries Limited, Nile Breweries Limited, Premier Distillers Limited, and British American Tobacco Uganda (BATU) among other manufacturers. The Consultant (PwC) designed the methodology under the manufacturers' and PSFU's guidance, managed field data collection, analyzed data, and developed some of the recommendations included in this report. This Study Report was accomplished through the engagement of several organizations among the manufacturers affected by the digital tax stamps, and government agencies who provided invaluable information.

Sincere gratitude goes to the chairman and board of directors of PSFU and Uganda's manufacturers who provided strategic leadership and guidance throughout this process. We acknowledge inputs provided by the key informants, manufacturers, key Ministries, Departments, and Agencies who gave their time to participate in the study.

The efforts of PwC led by Pamela Natamba Juliet Najjinda and other team members are highly appreciated. The technical team led by the PSFU's Director of Policy Advocacy and Research Dr. Julius Byaruhanga, Martin Maku, Colins Agaba, Juliet Navvuma, Ronald Kyagulanyi, Eva Ekanya, Esther Nabeeta, Eric Ssempambo, Allan Ssenyondwa (UMA), Muzzamil Muhammed Mabira (UMA) is appreciated for the technical backstopping and guidance throughout the exercise. Lastly, the leadership and stewardship of both Mr. Appollo Muyanja Mbazzira, Project Director for the LFS project and Mr. Stephen Asiimwe the Chief Executive Officer of PSFU were exceptional.

FOREWORD



The Private Sector Foundation Uganda (PSFU), the apex body for the private sector in Uganda is mandated to sustain policy dialogue with the Government on matters affecting private sector competitiveness for her members. The membership of PSFU comprises of 330 associations, corporate companies, and associated agencies. Indirectly, PSFU is a home for over 3 million businesses impacting over 30 million people. In fulfilment of PSFU's mandate, the PSFU in collaboration with Mastercard Foundation and manufacturing companies partnered to assess the impact of the Digital Tax Stamps on the manufacturing sector. Specifically, the study sought to.

- i. Assess the extent to which the DTS system has achieved the objectives of its establishment.
- ii. Assess the extent to which the DTS system has affected the manufacturing sector, job creation and revenue collection.
- iii. Assess the general impact of DTS on the cost of doing business in Uganda in comparison to other neighbouring countries like Kenya, Tanzania, and Rwanda.
- iv. Evaluate the practical and business-friendly solutions to challenges (if any) faced during the implementation of the DTS system.
- v. Assess if there are any other practical and cost-efficient alternatives to reduce illicit trade and increase revenue to the government.

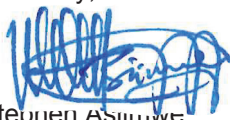
Data was collected from the manufacturing companies in the sector where DTS is being implemented and these include cigarettes, beers, spirits, wines, bottled water, soft drinks, and other alcoholic beverages. It also studied fermented beverages, sugar, cement, cooking oil, fresh juice, and vegetable juice and any other non-alcoholic beverages.

From the findings of the study, Local Excise Duty (LED) collections experienced a notable 29% growth attributed to increased market participants and the introduction of new excisable goods. However, post-COVID 19, this growth plateaued at 7.6%, down from the pre-DTS rate of 7.9%. The implementation of Digital Tax Stamps (DTS) has emerged as a significant operational cost, consuming a substantial 15.5% of actual LED payments. Notably, this figure excludes the sizable initial installation fees averaging UGX575 million for major manufacturers. The heavy burden of these costs likely contributed to the stagnation in LED growth rates.

In the final analysis, the study recommends reduction in costs associated with implementation of DTS and affixing of stamps to spur compliance and encourage best-in-class service providers to eliminate monopoly and spur competition among DTS suppliers.

As part of the private sector evidence-based support to government, the PSFU has therefore used the findings to develop key policy proposals geared towards influencing the Government policy on matters relevant to revenue collection and increasing business competitiveness and the paper will be presented to key MDAs for consideration and action. We hope the document will bolster the performance of the government led private sector driven support to the economy.

Sincerely,



Stephen Asiimwe

CHIEF EXECUTIVE OFFICER.



EXECUTIVE

SUMMARY

Executive Summary

1.0 Introduction

Excise duty regimes around the world differ significantly; influenced by economic, cultural, and policy considerations. Historically, Excise duty has been imposed on items like alcohol, tobacco, and fuel to serve the dual purposes of raising government revenue and addressing public health and environmental concerns.

The excise duty regime in Uganda plays a pivotal role in revenue generation and regulation of specific goods and services, including alcohol, tobacco, petroleum products, soft drinks, and telecommunications services. It is levied based on factors like volume, weight, or value, and the rates vary across different products, with periodic adjustments to align with economic conditions.

Introduction of Digital Tax Stamps In Uganda

A Digital Tax Stamp is a marking that is affixed to manufactured and imported goods or their packaging to ensure that they are tracked for excise duty purposes. These stamps also contain codes to that are used to prevent counterfeiting of goods.

Figure 1.1. Samples of the stamps



DTS was introduced in Uganda, on 1 November 2019, as a tax administration tool in the excise duty system with the aim of;

- i) Protecting government revenues;
- ii) Combating trade in counterfeit products and illicit trade;
- iii) Enhancing fair competition in the market; and
- iv) Providing real statistical data for both tax policy and administration

In 2022, The list of gazetted products was expanded to include various locally manufactured goods and imported goods like cement, cooking oil, alcoholic spirits, cigarettes, soda, among others with an aim of maximising excise duty collection. The adoption of DTS stemmed from concerns that local manufacturers and importers were underreporting production figures as well as the resultant excise duty. While initial evidence to support these concerns was limited, DTS has been used as tool for safeguarding government revenues and curbing illicit trade in Uganda.

Following the enactment of regulations mandating all manufacturers of gazetted products in the country to implement a DTS management system, the contract for this initiative was awarded to a Swiss-based company named SICPA Uganda Limited (“SICPA”), which was tasked by the Uganda Revenue Authority (“URA”) and Uganda National Bureau of Standards (“UNBS”) to oversee the installation and enrolment of all manufacturers, producers, and importers onto the system.

1.1 Objectives and preamble of the report.

In our analysis, we explored how DTS impacts Uganda's manufacturing sector, including its effects on tax revenue, business operational costs, and how effective its implementation strategies have been. This comprehensive analysis aims to enhance tax collection, ease operational efficiency, and facilitate a favourable environment for DTS implementation.

DTS was introduced for mainly two reasons; to increase revenue collection and curb illicit trade. The analysis demonstrates that it has not been able to do that, possibly caused by a reduction in trade and consumers/manufacturers who may have turned to illicit trade as a result of increased costs. Evidence suggests that illicit trade appears to have increased, as costs of goods have increased. DTS has also had a significant negative impact on the performance of the economy and jobs created. DTS prices in Uganda cover more products compared to the neighbouring countries thus handicapping the Ugandan economy compared to other markets. Implementation of DTS has been costly, and in some cases has led to businesses leaving the country or closing. While DTS is touted as a tool to tackle illicit trade, fundamental flaws in its ability to control the supply chain undermine its effectiveness.

Figure 1.2: Key Objectives of Review of Impact of DTS

- 1 Assess the extent to which the DTS system has achieved the objectives of its establishment.*
- 2 Assess the extent to which the DTS system has affected the manufacturing sector, job creation and revenue collection.*
- 3 Assess the general impact of DTS on the cost of doing business in Uganda in comparison to other neighbouring countries like Kenya, Tanzania, and Rwanda.*
- 4 Evaluate the practical and business-friendly solutions to challenges (if any) faced during the implementation of DTS system; and*
- 5 Assess if there are any other practical and cost-efficient alternatives to reduce illicit trade and increase revenue to government.*

1.2 Impact Assessment Findings

Balanced and reasonable regulation is essential for the growth of the manufacturing sector. In this context, members of the manufacturing and importing sector have consistently expressed their support for the government's efforts in implementing appropriate technical advancements. However, it is evident that the current structure and fees associated with DTS are excessively high, leading to elevated operational expenses and, in turn, impacting growth, tax revenue generation and to some extent consumers.

Below is a summary of our key findings;

Table 1.1: Summary of Key Findings

| Key Objective | Key Findings | Key Implications |
|---|--|--|
| Assess the extent to which the DTS system has achieved the objectives of its establishment. | <ul style="list-style-type: none"> Domestic Revenue – LED collections continued to grow post the introduction of DTS but at a lower rate in comparison to the historical growth rate. Before the implementation of the DTS (Pre-DTS), LED collections experienced significant growth with a 12% increase, reaching UGX 2.13 trillion from July 2016 to June 2019. However, with the aggressive introduction of the DTS system in the fiscal year 2020, there was a subsequent 7% average decline in LED collections. This decline in revenue was followed by a 13% average increase in LED collections, totalling UGX 2.74 trillion, in the period spanning from July 2020 to June 2023 (Post-DTS). The above analysis represents an overall LED revenue growth rate of 9% between July 2016 and June 2023. | <ul style="list-style-type: none"> There's a notable increase in LED collections between July 2016 and June 2023 which has been partially attributed to <i>interalia</i>, mandatory registration for DTS as well as new manufacturers that came on board. However, based on the analysis undertaken, it has been noted that while there is a general perception that there has been an increment in LED collection post DTS implementation, this growth rate is lower than the historic growth rate achieved before the introduction of DTS. Additionally, based on the analysis undertaken, it has been noted that while LED collections continued to grow post DTS introduction, this growth is also in line with the general economic growth |
| Assess the impact of DTS on the manufacturing sector, job creation, and revenue collection. | <ul style="list-style-type: none"> The implementation of DTS led to a significant increase in the cost of operations for most manufacturers. These costs include the procurement of hardware, software, infrastructure required for DTS compliance. These upfront investments have posed significant financial challenges for manufacturers, particularly Small Medium Enterprises ("SMEs") with limited capital resources. Overall, there has been an additional increase in operational expenses incurred by manufacturers equivalent to an | <ul style="list-style-type: none"> Most of the costs incurred were absorbed by the manufacturers and not passed on to the final consumers. Increment of product prices would have had a negative impact on consumer demand which would have led to a decrease in revenue and consequently a decrease in taxes remitted. Due to the closure of businesses, DTS related costs have impacted some manufacturers' capacity to create more jobs, invest in additional infrastructure, and increase their production capacity |

| | | |
|--|--|---|
| | <p>average of 16% of their LED obligations.</p> <ul style="list-style-type: none"> • Due to the significant operational costs, operational setbacks and other regulatory compliance requirements, some manufacturers closed their businesses. | <p>which consequently led to a decrease in government revenue.</p> |
| <p>Assess the general impact of DTS on the cost of doing business in Uganda in comparison to other neighbouring countries.</p> | <p>Based on the information collected from the different countries.</p> <ul style="list-style-type: none"> • Kenya ETS Prices are on average 28.7% lower than Uganda DTS prices, Supplier: SICPA • Rwanda DTS Prices: on average 4.5% lower than Uganda DTS Prices, Supplier: TBC • Zambia ETS Prices: on average 89.2% lower than Uganda DTS Prices, Supplier: Authentix • Tanzania ETS Prices: on average 25.9% lower than Uganda DTS prices, Supplier: SICPA | <ul style="list-style-type: none"> • When compared to ETS prices in similar regions, Uganda's current DTS prices are, on average, 34.8% higher. • Other countries in the region employing the same supplier (SICPA) are facing elevated stamp costs as well but at a less impact than Uganda. • Given the modest rise in government collections and excise duty payments, alongside the substantial stamp fees for manufacturers, it is evident that a review of the financial framework of the existing system is warranted. |
| <p>Evaluate the practical and business-friendly solutions</p> | <ul style="list-style-type: none"> • The introduction of favourable tax legislation tailored for the recovery of process losses incurred in manufacturing processes as well as obtaining a refund for the cost incurred in procuring DTS would be a welcome initiative. • Without such legislation, manufacturers face difficulties in accounting for stamps lost in the production processes and face further severe penalties from URA. In addition, the manufacturers suffer excessive costs in purchasing DTS which has an impact on their margins. • In addition, the imposition of VAT on stamps poses a cash flow burden to manufacturers which can be alleviated through amending VAT legislation. • The existing monopoly held by SICPA Uganda, acting as the exclusive supplier of stamps in the region, raises concerns regarding market competition and potential impact on pricing and accessibility. Below is an analysis of existing alternative solutions that were evaluated. | <ul style="list-style-type: none"> • Introducing a cost sharing initiative to reduce the cost of implementation would enhance compliance and reduce the burden currently being incurred by manufacturers. This can be accomplished through the offset of DTS costs from the excise duty payable. • Introducing the process loss provision legislation, that allows for the write-off of the damaged and wasted stamps, would ease compliance, and facilitate growth of the manufacturing sector. • Additionally, the zero rating of the DTS would ease the cash flow burden that manufacturers are currently facing. • Furthermore, the proposed alternative solutions offer better contractual obligations, greater control to URA over data collected and provide manufacturers with a variety of preferred DTS stamp options for their specific industries. • Given the current advantages of using digital tracking solutions, it is recommended that the revenue authority and MOFPED |

| | | |
|--|--|---|
| | <ul style="list-style-type: none"> • De La Rue: International Limited company with over 12 successful tax stamp solutions across the world, including 3 successful solutions in Africa. • Inexto SA: Inexto is a provider of software and services for brand protection, authentication, secure serialisation, Track & Trace, and Digital Volume Verification. • ABI Blockchain Tech: ABI presents a solution that is simple, quick to be implemented and will have minimal impact in sector operations. • UNBS Digital Conformity Mark (“DCM”) Solution: UNBS in collaboration with SICPA Uganda are in the process of rolling out the DCM solution for certifying locally manufactured and imported goods. | <p>collaborate with the alternative solution providers to leverage their expertise in expanding the scope of digital solutions providers for the sector.</p> |
| <p>Assess practical alternatives to reduce illicit trade and increase government revenue</p> | <p>Through the data collection phase of the study, we were able to gather valuable insights from manufacturers, on the progress made by the Government in curbing illicit trade as well the gaps that need to be closed to enhance government revenue collection.</p> | <ul style="list-style-type: none"> • Need for the government to conduct a long-term impact assessment to track the evolution of revenue collection and illicit trade post-DTS adoption. • Need for the government to investigate consumer behaviour and awareness regarding DTS to understand its societal impact and effectiveness of public sensitization campaigns. • Need for the government to perform a comparative analysis within and outside Africa that have implemented DTS systems for valuable benchmarks and lessons. • Focus on a comprehensive regulatory impact analysis (RIA) of suggested reforms and alternatives to inform policy decisions. |

1.3 Conclusions and recommendations

Prior to the adoption of DTS, Uganda relied on a conventional paper stamp system, which was deemed inefficient and prone to errors. This outdated system had its vulnerabilities, providing opportunities for illicit activities by dishonest individuals. The transition to DTS was hoped to be a significant stride in advancing tax administration and combating counterfeit goods, though not without its notable implications for the manufacturing sector.

Below we present our key conclusions and recommendations for consideration.

a. Reduction of costs of stamps, review of “best in class” and re-negotiation of existing contract

In Uganda, the cost of DTS varies depending on factors such as the type of product, production volume, and the specific requirements set by the URA. Manufacturers are typically responsible for purchasing and affixing the stamps to their products, as well as activating the stamps depending on the mode of application. These costs are considered an essential part of compliance with tax regulations.

Government needs to intentionally review or benchmark with the “best in class” systems. These systems aim to ensure that different manufacturers/importers can obtain the best system at the least cost possible. This review can be effected by referring to the Illicit Trade Protocol, the European Track and Trace solution for tobacco, World Health Organisation papers on track and trace in the pharmaceutical sector, to mention but a few. This benchmark could go a long way in opening the understanding on track and trace systems suitable for the different manufacturers and importers.

In the alternative, government needs to re-evaluate the existing contract for the DTS system and re-negotiate the costs of stamps considering the impact of these costs on the manufacturing sector. This will require a thorough analysis of similar regional and global systems. Leveraging this comparative information, the government should be able to achieve independence from stringent contract terms, address the concerns of manufacturers, increase revenue collections, and reduce illicit trade as per the objectives of the introduction of the DTS system in Uganda.

b. Government should also review other business-friendly solutions to challenges faced during the implementation of DTS system:

- *Other alternative existing solution providers*

Considering and evaluating alternative solutions is a crucial step in effective policy making and implementation. When it comes to DTS or similar initiatives, Government should explore a range of options to ensure they are selecting the most efficient and cost-effective solution. In this report, we consider the most efficient cost-efficient alternatives that the government can re-evaluate.

- *Tax Legislation*

To mitigate the anticipated adverse effects of DTS costs on both the sector and the Government, we suggest that a mechanism be established for manufacturers and importers to recover incurred DTS expenses. This would be contingent on manufacturers and importers demonstrating to the URA that they have fully settled all applicable excise duties on their excisable goods. This recovery process could involve offsetting the DTS costs against the excise duty payable in their monthly returns.

Additionally, zero-rating the cost of DTS stamps for VAT purposes would reduce the cash-flow burden associated with the cost of the stamps and an introduction of legislation that allows for the write-off of the damaged and wasted stamps, would ease compliance, and facilitate seamless adoption of the DTS system.

These proposals consider the economic challenges faced by the manufacturing sector, recognizing that sudden cost spikes, like those associated with DTS, have led to higher costs of production and effectively reduced sales growth, particularly with respect to local manufacturers and importers who are more price sensitive. This, in turn, might have led to a decline in tax revenue growth from the sector.



REPORT

SUMMARY



About PSFU



Key Takeaways

2.0 Report Summary

PSFU was formed on the foundation of a member-based organizations with a sole objective of representing and spearheading the interests of the entire private sector in Uganda.

PSFU in collaboration with PwC undertook a study of the DTS system and its impact on the stakeholders and the economy as a whole. This study centred on the objectives as highlighted here and the review of practical business friendly solutions.

DTS was introduced in Uganda in November 2019, following the enactment of regulations mandating all manufacturers of gazetted products in the country to implement an electronic tax stamp management system

Uganda experienced increased excise duty collections from July 2016 to June 2023, linked to mandatory DTS registration and new manufacturers. Albeit this increase, business closures due to DTS related expenses affected job creation and infrastructure investment, resulting in lower government revenue collection than what was expected.

Uganda's stamp prices, on average, are more expensive than those in the East African region by 38%. Uganda also has more products gazetted for excise duty when, compared to its neighbouring countries. Notably, all three countries share the same supplier, SICPA.

The government should review or benchmark with leading DTS systems globally to ensure manufacturers/importers access cost-effective solutions. Reference to protocols like the Illicit Trade Protocol and WHO papers can inform this process.

Objectives of the Study



Effect on Revenue collections

To ascertain the extent to which the DTS system has achieved the objectives of its establishment i.e. increase in revenue collection



Job creation & Revenue collection

To ascertain the extent to which the DTS system has affected the manufacturing sector, job creation and revenue collection.



Comparison to other countries

To assess the general impact of DTS on the cost of doing business in Uganda in comparison to other neighbouring countries like Kenya, Tanzania and Rwanda.



Practical & Business-friendly solutions

To evaluate the practical and business-friendly solutions to challenges (if any) faced during the implementation of DTS system.



Cost-effective alternatives

To evaluate any other practical and cost-effective alternatives to reduce illicit trade and increase revenue to government.

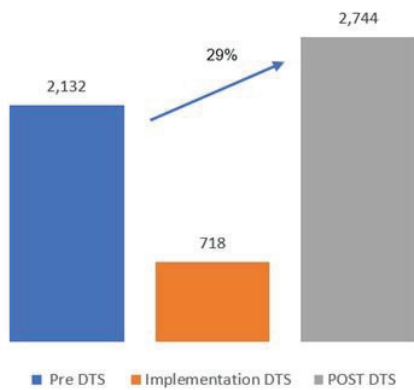
Study Demographics & Methodology

- ▶ **Modelling of the right critical success factors** which played a role in achieving the project's objectives and ensuring sustainability throughout the review process.
- ▶ **Historical analysis of primary and secondary data** collected from viable sources.
- ▶ **Various stakeholders were interviewed, that is other alternative service providers.** in the region and the world at large, PwC tax teams in the East African region

FINDINGS FROM THE STUDY.

Contribution of DTS to LED Collections

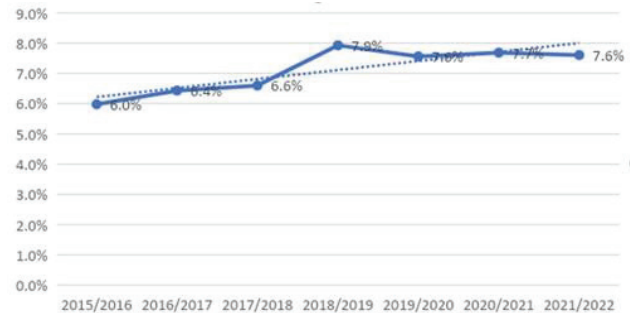
The LED collections grew by 29% over the period. This growth was mainly due to more entrants in the market and new excisable products.



Graph showing the impact of introduction of DTS on revenue collections.

Effect of DTS on general LED collections

The trend on the growth of LED did not recover following the impact of COVID. From a 7.9% growth rate prior to DTS, the rate only managed to remain at 7.6% post DTS.



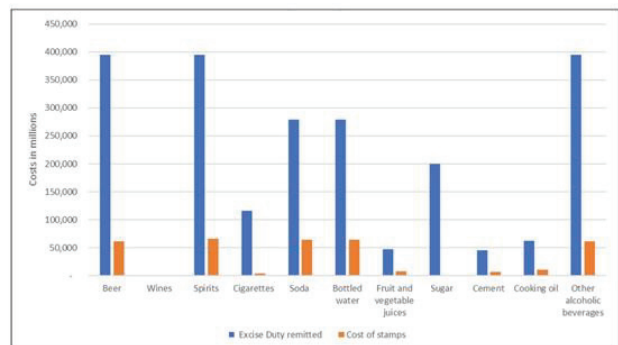
Graph showing the contribution of LED to general tax collections.

Impact of DTS on Illicit trade in Uganda

Illicit trade constitutes **29.4% of the tobacco market and 64.7% of the alcohol market** resulting in URA revenue of over UGX 30 billion and UGX 1.6 trillion respectively in tax revenue annually from tax evaded products. There are no published results on the efforts by DTS to reduce this.

Impact of DTS on the Cost of doing business.

The introduction of DTS has become a primary contributor to this operational cost, constituting a substantial 15.5% of the actual LED payments made to the URA. It is important to note that this cost does not encompass the initial installation expenses, which averaged around UGX 575 million for the large-scale manufacturers.



Graph showing the proportion of cost of stamps to the Excise Duty remitted.





INTRODUCTION

1.0 Introduction

1.1 About PSFU

Private Sector Foundation Uganda (PSFU) is Uganda's umbrella body of the private sector made up of over 330 Business Associations, Corporate bodies and the major Public Sector Agencies that support private sector growth. Since its founding in 1995, PSFU has served as a focal point for private sector advocacy as well as capacity building and continues to sustain a positive dialogue with the government on behalf of the private sector. PSFU is also the government's implementation partner for several projects and programs aimed at strengthening the private sector as an engine of economic growth in Uganda. PSFU is now home for over 2.5 million businesses directly and over 10 million indirectly.

PSFU's competitiveness agenda is driven by the urge to increase private investments and productivity. These two are supported by a robust business environment that attracts and protects investment capital. The business environment is better where there is: effective government, efficient markets, and strong human development. The Ugandan private sector appreciates the Government of Uganda is moving steadfastly to establish such an environment and both local and Foreign Direct Investments have taken advantage of the stable business environment. PSFU as the apex body has now expanded and scaled up its reach from merely providing business information, managing projects/grants, training, and Business development support, to a diverse private sector think tank and innovation hub with a new stable platform for growth and sustainable development. This is being done in full collaboration with the government of Uganda and the UNDP. PSFU is a value-based and ethically driven entity premised on 10 sectors that drive Uganda's economic growth.

The foundation is also the focal point for the East African Business Council and the COMESA Business council. Using this platform, PSFU has spearheaded the Trade Policy and Trade Development agenda on behalf of the Uganda business community, directly engaging with regional policy platforms.

Key Mandate

- i. Research and advocacy on policy issues that affect private enterprise.
- ii. Maintain institutionalized dialogue with the government on behalf of the private sector in Uganda.
- iii. Review of business legislation and regulation to make it more efficient for private sector operations.
- iv. Business development support for SMEs such as product development, standards improvement, market access, technology acquisition and application, skills training, and capacity building at all levels.
- v. Maintaining close relationships and partnerships with development partners, government, civil society, regional and continental bodies.

1.2 Overview and background of the impact review of DTS

In the ever-evolving landscape of tax administration, the Government of Uganda embarked on a transformative journey by introducing the Digital Tracking Solution for excisable products, marking a significant shift in tax collection and revenue management. On 1 November 2019, this ground-breaking initiative was set into motion, fundamentally altering the dynamics of tax compliance for manufacturers and importers alike. Under this system, manufacturers and importers of specified products were obligated to embrace DTS through affixing their goods with paper stamps with digital authentication functionality. These products encompassed a wide array, including but not limited to beer, soda, bottled water, wines, spirits, tobacco products, sugar, and cement. As the DTS regime evolved, so did its reach. By 1 May 2022, DTS' scope was expanded to encompass additional categories, such as cooking oil, juices, non-alcoholic beverages, as well as fermented beverages.

SICPA S.A., a global entity with operations in multiple countries, played a central role in this transformation. Their expertise lies in providing tax stamps and digitized authentication solutions customized for government revenue collection agencies. SICPA's similar implementations in other

African regions enabled them to emerge as a viable alternative for Uganda's Digital Tracking Solution initiative.

Initially selected in April 2018, SICPA was tasked with supplying DTS for imported products, specifically targeting tobacco, wines, and spirits. However, the Government's vision for DTS swiftly expanded, encompassing locally manufactured products, including soft drinks, bottled water, alcoholic beverages, beers, cement, and various other manufactured excisable goods. This broadening of scope was driven by a core objective—to safeguard the government against potential revenue losses due to smuggling and counterfeit product trade as well as under declaration of manufacturing volumes. URA asserted that a significant number of local manufacturers were potentially underreporting production figures and undervaluing production costs, albeit with limited substantiating evidence.

Within this dynamic context, PSFU emerged as a pivotal player, embodying the collective voice and aspirations of the private sector. Established to bolster business growth, enhance competitiveness, and promote sustainable wealth creation, PSFU's primary mission is centred on empowering the private sector to advocate for effective policies and achieve market competitiveness on national, regional, and international fronts. This diverse coalition of PSFU members echoes a shared vision—a desire to see a reduction in the cost associated with DTS while simultaneously striving to fulfil the Government's Local Excise Duty (“LED”) revenue objectives. PSFU members have voiced apprehension about the system's costliness and effectiveness, citing potential adverse impacts on business scalability, job creation, and government revenue augmentation.

Crucially, the debate surrounding DTS extends to its efficacy in combating counterfeiting, a concern particularly pronounced within the sphere of alcohol manufacturing. Empirical studies have presented compelling arguments, revealing that a substantial portion of alcohol consumption in Uganda remains mired in the illicit sector, fuelling scepticism about the system's sustainability and its ability to address this issue. This intricate tapestry of challenges and opportunities has motivated PSFU, in collaboration with its manufacturing sector constituents, to embark on an independent evaluation of the DTS pilot project—a comprehensive study aimed at shedding light on the multifaceted impact of DTS on Uganda's manufacturing sector during the 2019-2022 timeframe.

1.3 Scope of work

The implementation of DTS has had a significant impact on the manufacturing sector, as manufacturers are required to affix the stamps to their products at exorbitant costs and comply with DTS regulations. This has led to concerns about the cost of implementation and the impact on business operations.

This comprehensive study has covered five distinct objectives, addressing the intricate impact and ramifications of DTS while also exploring alternative digital tracking solutions. The study objectives are laid out below:

1.1.1. Assessment of the extent to which the DTS System has achieved the objectives of its establishment.

As part of this objective, we scrutinised government revenue collections pre and post DTS implementation. Leveraging the URA quarterly revenue collections reports spanning from 2017 to 2022, we homed in on excisable goods affixed with DTS. Through meetings with the URA, we corroborated and validated the data obtained from the reports as well as our findings. We additionally conducted an analysis of the impact on other tax categories, including Value Added Tax (“VAT”), LED, and Corporate Income Tax (“CIT”) which enabled us to establish a comprehensive perspective on the financial implications of DTS.

1.1.2. Assessment of the extent to which the DTS system has affected the manufacturing sector, job creation and revenue collection.

For this objective, we reviewed information and statistics received from a sample of manufacturers on LED collection, job creation and their revenue collection. We established the impact of DTS related costs on the manufacturers' ability to grow their businesses.

1.1.3. Assessment of the general impact of DTS on the cost of doing business in Uganda in comparison to other neighbouring countries like Kenya, Tanzania, and Rwanda.

We assessed the costs incurred by the manufacturers due to DTS implementation. The responses provided insights into DTS adoption rates and their consequent effects on operational costs.

As part of the cross-border exploration, we obtained information from other countries in the region on the Digital Tracking Solutions in their respective regimes to compare those regimes to Uganda. This regional perspective demonstrated cost differentials and potential avenues for cost reduction within Uganda.

1.1.4. Exploration of other practical and business-friendly solutions to challenges faced during the implementation of the DTS system.

For this objective, we explored available solutions to alleviate the negative impact of DTS such as the amendment of the tax legislation as well as engaging and outlining alternative digital tracking solution providers in the region that could offer competitive stamp costs.

1.1.5. Evaluation of Practical and Cost-Efficient Alternatives to increase government revenue and curb illicit trade:

Under this objective, we assessed the suggestions that were proposed by the manufacturers to aid in curbing illicit trade while increasing the revenue to the government. We equally reviewed the existing framework by the government to reduce illicit trade and improve on revenue collection.

1.2. Critical Success Factors

From the inception activities that were already undertaken, we identified critical success factors that played a pivotal role in achieving the project's objectives and ensuring sustainability throughout the review process. These factors are detailed below:

1.2.1. Sampling the right participants:

One of the keys considered determinants of a successful review was the selection of the appropriate participants. Through our collaboration with PSFU, we successfully compiled a comprehensive list of manufacturers and importers dealing with excisable commodities. This list served as our sampling frame, categorising manufacturers and importers using DTS according to the major product categories in question. In addition to manufacturers and importers, we identified other vital stakeholders such as the URA and the UNBS. This selection criteria aligned with the study's objectives, particularly objective 2., which focused on business operations. It was imperative that our review included a diverse range of taxpayers, encompassing both small and medium-sized enterprises as well as large taxpayers who had adopted DTS. This diversity of perspectives allowed us to comprehensively document the impact of DTS across the industry.

1.2.2. Use of the right methodology:

Employing the appropriate methodology was critical to ensuring that our review led to the expected outcomes for each objective. In assessing the impact of DTS, our approach was designed to capture the manufacturing sector's experiences, perceptions, and financial implications since the introduction of DTS. This informed the structure of our data collection templates, which incorporated both quantitative and qualitative data to provide a holistic view.

1.2.3. Availability of pertinent information from key stakeholders:

The success of our review was highly contingent on access to relevant information and perspectives from key stakeholders regarding the impact of DTS since its introduction. It was imperative that stakeholders with pricing and cost figures relevant to our study were engaged early in the process and were provided with clear guidance on the type of information required for our review. By engaging stakeholders, we aimed to comprehensively understand their concerns and perspectives regarding the impact of DTS. Throughout the study, we transparently communicated instances of participant hesitancy or other restrictions that hindered the study's progress or data collection. Additionally, we worked with PSFU to obtain an introduction letter that our staff used in communicating with stakeholders.

1.2.4. Meaningful engagement with Government agencies such as UNBS and URA:

The willingness of government agencies, specifically UNBS and URA, to provide support by promptly responding to issued questionnaires was instrumental to the success of our review.

1.2.5. Timely reporting:

Timely reporting was crucial to the project's progress. Delays in receiving information from stakeholders and non-responsiveness from other stakeholders resulted in setbacks in finalising the study report. These delays impeded our ability to meet initial reporting deadlines, underscoring the importance of timely data acquisition and communication.

These critical success factors were integral to our efforts to comprehensively assess the impact of DTS in Uganda, address potential challenges, and provide meaningful recommendations for the benefit of all stakeholders involved.

1.3. Impact Assessment Methodology

1.3.1. Introduction

Our approach and methodology were refined to ensure that all project outcomes are achieved in a coordinated manner. It also ensured that engagement risks are proactively managed and that there is alignment between project team members and stakeholders.

As per the overview below, the review has been done in four phases including inception, implementation, analysis, and reporting.

1.3.2. Overview of our Methodology

We analysed the data collected and assessed the effects of DTS introduction to the manufacturing sector and government revenue collection. We also utilised the data collected at this stage to assess the practical solutions and cost-efficient alternatives the government/ URA may undertake to reduce illicit trade and increase government revenue.

In the sections below, we provide details of the approach we used in undertaking the review of the five key objectives with the aim of providing evidence-based data for members in the manufacturing sector. Our approach considered the need for immediate action towards cost reduction which include key stakeholders' input and recommendations. Below is an overview of the types of data analysis and collection methods utilised;

a) Research Design

To comprehensively assess the impact of DTS on Uganda's manufacturing sector, a mixed-methods research design was employed. This approach combined quantitative and qualitative methods to provide a holistic understanding of the subject matter.

b) Data Collection

Surveys: Structured questionnaires were distributed to manufacturers affected by DTS. Additionally, questionnaires were sent to key government stakeholders, including UNBS and URA. Questionnaires were also dispatched to several other countries to obtain their views on DTS implementation in their respective countries.

Secondary Data: Relevant secondary data, such as tax revenue figures, production statistics, and trade data, was collected from government agencies, sector reports, and tax records. Follow-up interviews/discussions were conducted with manufacturers who had completed the questionnaires to gain deeper insights and additional information.

c) Data Analysis

Quantitative Analysis:

We used descriptive statistics to summarise survey responses and tax revenue data. We further undertook inferential statistics to assess the correlation between DTS implementation and variables such as revenue collection, job creation, and compliance. We further utilised information obtained from the URA annual revenue performance reports to enable us to triangulate the information gathered from manufacturers as a way of neutralising the information from the impact of the Covid-19 and other possible interruptions on the manufacturers' businesses.

Qualitative Analysis:

We applied a thematic analysis to qualitative data obtained through interviews and discussions. Themes related to challenges, benefits, and alternative solutions were identified.

d) Comparative Analysis

We held meetings with stakeholders from other countries to gain an understanding of DTS operation, pricing, regulation, service providers, and its impact on the manufacturing sector in those nations. Comparative assessments were made with a focus on neighbouring countries, including Kenya, Tanzania, Zambia, and Rwanda.

e) Policy Review

We conducted a review of relevant policies and regulations concerning DTS implementation and its impact on Uganda's manufacturing sector. Additionally, we reviewed a report by the Confederation of Tanzanian Industries (CTI) on the impact of electronic tax stamps (ETS) for the Tanzania Manufacturing sector, completed in 2021, for comparative insights.

f) Ethical Considerations

Ethical guidelines and principles were strictly followed throughout the research process. Informed consent was obtained from all participants, and data confidentiality was ensured.

g) Limitations

During our study, we encountered several noteworthy limitations that influenced the depth and breadth of our research findings. Firstly, a significant challenge arose from the reluctance of some manufacturers to fully disclose certain information or to share specific numerical data related to their operations. The reluctance could be attributed to concerns about revealing sensitive business information or, in some cases, due to apprehensions about how the data might be used. This limitation necessitated a degree of caution in interpreting certain findings, particularly when assessing the quantitative aspects of DTS impact on revenue and business operations. Despite this limitation, we sought to mitigate the effects by conducting follow-up interviews with those manufacturers willing to provide deeper insights, thereby enriching our understanding of the subject matter.

Secondly, the study identified a notable response bias in the questionnaires completed by manufacturers. This bias, inherent to survey-based research, is a phenomenon where respondents may consciously or unconsciously provide responses that they believe are more socially acceptable or aligned with expected norms. In the context of our research, this manifested as manufacturers presenting their experiences with DTS in a manner that reflects favourably on their compliance or the system's effectiveness. This potential bias was addressed through careful questionnaire design, emphasising anonymity and confidentiality, and through the triangulation of data sources by conducting interviews to validate and delve deeper into questionnaire responses. Acknowledging and addressing response bias was essential to ensure the accuracy and reliability of our findings.

1.3.3. Summary of Key Activities

Our activities under this study were divided into four stages as shown below.

1.3.3.1. Inception Phase

The inception phase served as the foundational stage of our study, where our primary objective was to establish a close partnership between PwC and the PSFU team. This phase was instrumental in ensuring a shared vision, synchronised timelines, and clearly defined objectives. It allowed us to cultivate a comprehensive understanding of the parameters that would define success throughout the project. During this phase, we engaged in extensive consultations and discussions to refine the project scope, fine-tune our approach and methodology, and create a work plan that aligned with the project's objectives. The collaborative efforts of all relevant stakeholders culminated in a well-defined framework that would guide our study through its subsequent phases.

1.3.3.2. Implementation and analysis phase

The implementation phase represented the core of our study, where we diligently executed the activities designed to gather crucial data for assessing the impact of DTS on excisable product manufacturers. With clear objectives outlined in section 3 of the report, our methodology was tailored to each specific objective.

We embarked on data collection endeavours that included surveys, interviews, and reviews of secondary data sources, such as government reports. Subsequently, we analysed the data to assess the effects of DTS on the manufacturing sector, and revenue collection following its implementation. This phase also allowed us to evaluate the practical solutions and cost-efficient alternatives that the government and URA have undertaken to combat illicit trade and enhance government revenue. The comprehensive analysis of the data collected formed the basis for our conclusions and recommendations.

Table 2.2: Summary of data collection methodology and sources

| Objective / problem analysis | Nature of data and source | Output |
|--|---|--|
| <i>Assessment of the impact of DTS on Government revenue collections</i> | <p>This was based on Government collections pre-DTS and post-DTS implementation.</p> <p>The primary sources of data were URA's quarterly tax revenue collection reports. We also conducted interviews with URA personnel to validate the information on Government revenue collections.</p> <p>Given that the effective date of the use of DTS was 1 November 2019, we assessed the revenue collection for the following periods:</p> <ul style="list-style-type: none"> • Pre-DTS: (July 2016 – June 2019) • DTS Adoption Period (November 2019- June 2020) • Post-DTS: (July 2020 – June 2023) | By assessing the impact of DTS on Government revenue collections, we were able to determine whether there has been an increase or reduction in revenue collections in line with Government's DTS objectives. |
| <i>Assessment of the impact of DTS on increased cost to business operations</i> | <p>This was based on conducting a review of the various costs incurred by the selected sample of manufacturers over the same period. Our analysis covered the following costs:</p> | Our evaluation shows that DTS has had a significant impact on the cost of doing business for the affected manufacturers. This is mainly because generally the |

| | | |
|--|---|--|
| | <ul style="list-style-type: none"> • Costs of implementation of the system • Costs of maintaining the DTS systems. • Cost of the stamps • Other overhead costs | manufacturing sector is not passing on the cost of the stamps to the final consumer, resulting into an increased cost of business operation. |
| Comparative analysis of DTS prices and costs within East African Region | We obtained DTS prices within the region. We leveraged our network firms in the region to provide us with information relating to pricing as well as the merits and demerits of DTS in their respective countries. | A comparative report revealed discrepancies between local and regional prices which enabled us to draw some conclusions and make recommendations for alternative solutions. |
| Comparative analysis of UNBS' Digital Conformity Mark ("DCM") solution to the Digital Tax Stamps Solution | <p>In our interaction with UNBS, we discovered that the E-Tag solution that had been proposed under PSFU's Terms of Reference as a potential alternative to DTS was abandoned after the pilot study, following which UNBS embraced the DCM solution.</p> <p>We therefore conducted an analysis of UNBS' DCM solution and assessed the possibility of the DCM replacing DTS.</p> <p>We conducted interviews with UNBS to obtain their viewpoint on the differences between the two systems in addition to gathering information on alternatives to reduction of illicit trade and boosting Government revenue.</p> | We were able to identify alternative digital tracking solution providers for the manufacturing sector which could potentially have a reduced impact on cost of doing business as well as protection against unauthorised stamps and illicit trade. |
| Exploration of alternative existing solution providers | We held interviews with other companies offering similar digital tracking solutions both in and outside the East African region to assess their competitiveness and readiness to supply such solutions in Uganda | Through our comparative research, we were able to establish possible more cost-efficient alternatives service providers for DTS. |

1.3.3.3. Reporting phase

In the reporting phase, the primary goal is to present the study's conclusions and recommendations to the PSFU while documenting valuable lessons learned and best practices for future interventions. This phase commenced with the preparation of a draft report for discussion, which was shared with stakeholders in a dissemination event. Feedback and suggestions from PSFU members have been considered and incorporated into the analysis and the final report, ensuring that all comments and requirements are suitably addressed. The engagement will conclude with a closeout meeting to ensure that we have fully met the PSFU's expectations.

We are committed to delivering on all the agreed-upon deliverables, encompassing both what has been delivered and what remains outstanding. This comprehensive approach allows us to provide a well-rounded assessment of the impact of DTS on Uganda's manufacturing sector, facilitating informed decision-making and future interventions.



FINDINGS FROM

THE STUDY



OBJECTIVE 1:

Extent to which the DTS System has achieved the objectives of its establishment.

2. Objective 1: Extent to which the DTS system has achieved the objectives of its establishment.

2.1.1. Introduction

Within this objective of our study, we placed a specific focus on scrutinising the LED and VAT contribution from excisable products relevant to the sampled members in order to ascertain whether the government achieved its objective of maximising revenue collection and curbing illicit trade.

The URA provides annual tax revenue reports that we have reviewed to extract pertinent government revenue data pertaining to the impact of the implementation of the DTS system. Considering that the effective commencement of DTS usage was on 1 November 2019, our assessment was structured around revenue collections during the following periods:

- Pre-DTS: (July 2017 – June 2019)
- Implementation: (July 2019-June 2020)
- Post-DTS: (July 2020 – June 2023)

2.1.2. Impact of DTS on domestic revenue collection

2.1.3. Excise Duty Collections

For LED collections, our analysis focused on specific excisable product categories on which DTS applies. As illustrated in the table below, the URA collected LED amounting to UGX 2.13 trillion, a figure that has notably surged to UGX 2.7 trillion in the post-DTS period. To provide a more granular perspective, the table below offers a breakdown of government revenue collections during both the pre-DTS, at implementation and post-DTS periods.

Table 4.1: Pre- DTS and Post-DTS Excise Duty collections

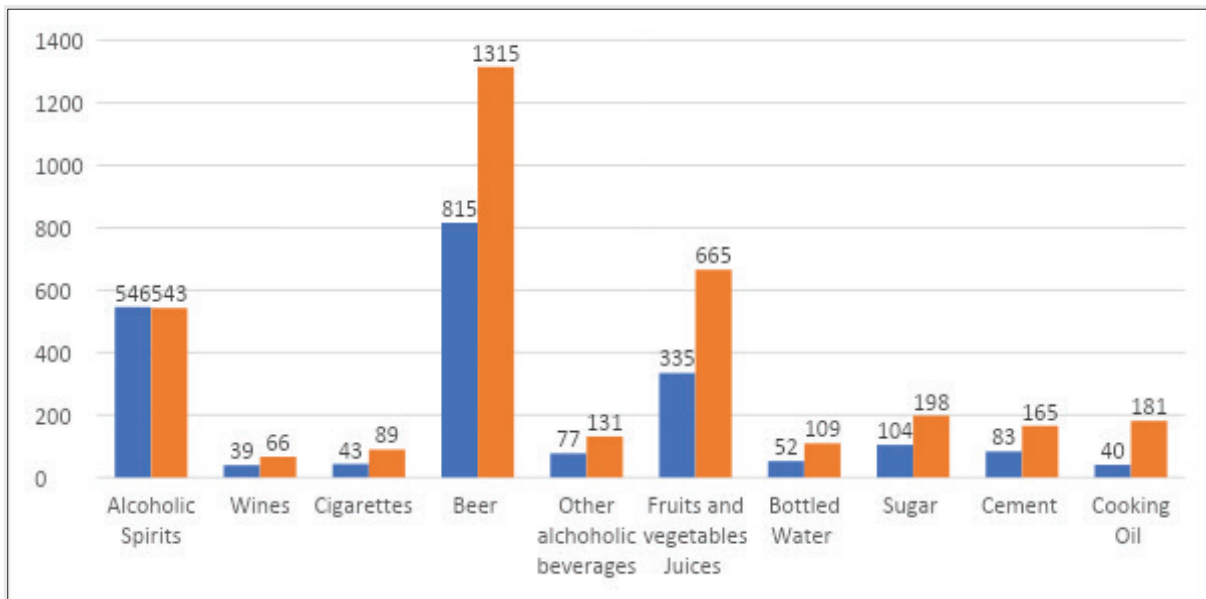
| Category | Pre DTS | Implementation DTS | POST DTS // | Percentage increase/(decrease) |
|------------------------------|---------------|--------------------|--------------|--------------------------------|
| | (Billion UGX) | | | |
| Alcoholic Spirits | 546 | 112 | 431 | (27%) |
| Wines | 39 | 13 | 53 | 26% |
| Cigarettes | 43 | 21 | 68 | 37% |
| Beer | 815 | 281 | 1034 | 21% |
| Other alcoholic beverages | 77 | 28 | 103 | 26% |
| Fruits and vegetables Juices | 335 | 121 | 544 | 38% |
| Bottled Water | 52 | 19 | 90 | 43% |
| Sugar | 104 | 40 | 158 | 34% |
| Cement | 83 | 35 | 130 | 37% |
| Cooking Oil | 40 | 49 | 132 | 70% |
| Total | 2,132 | 718 | 2,744 | 22% |

Source: Data collected from manufacturers and importers who participated in the study.

In general, there was growth in the sales of products subject to LED, except for spirits, which experienced a decline in both production and sales after the implementation of DTS. The adoption of DTS for locally produced excisable products defined the scope of the taxpayer base.

The 2020/21 URA Revenue performance report highlights the significant impact of COVID-19 restrictions on the spirits sector. This was mainly attributable to factors such as shutting down bars and nightclubs during the lockdown. The 2021/22 report also identifies the presence of informal players who continued to engage in selling counterfeit spirits and unstamped spirits, which adversely affected DTS registered taxpayers that continued to face higher manufacturing costs due to the stamps. Additionally, a decrease in the demand for spirits for sanitizer production in FY 2021/22, compared to the previous year, contributed to the deficit.

Figure 4.1: Comparison of Government revenue collections pre-DTS vs. Post-DTS (Million Ushs.)



Source: URA annual Revenue Performance Reports from 2015 to 2022.

Based on the above table and figure, there has generally been growth in LED revenues collected for the different categories of products. This is largely attributed to mandatory registrations for all businesses for both taxes and DTS for both small to large taxpayers as well as new entrants into the market which has enabled the government to widen the tax base. With strict requirements for registration and licensing, the revenue collection increases could also be attributed to the government's concentrated effort to collect taxes from all relevant manufacturers and reduce tax evading practices.

Table 4.2: Excise Duty Collections for Each Gazetted Product

| Category | 2016/17 | 2017/18 | 2018/19 | 2019/20 | 2020/21 | 2021/22 | 2022/23 |
|---|------------------------|---------|---------|---------|---------|---------|---------|
| | Ushs (billions) | | | | | | |
| Alcoholic Spirits - Local | 98.89 | 157.51 | 155.65 | 104.55 | 114.62 | 122.92 | 185.39 |
| Alcoholic Spirits Imported | 70.72 | 44.52 | 18.89 | 7.53 | 1.16 | 0.21 | 6.69 |
| Wine - Local | | | | | | 0.85 | 0.35 |
| Wine Imported | 10.06 | 13.55 | 15.39 | 13.04 | 15.93 | 17.26 | 18.22 |
| Cigarettes and other manufactured tobacco | 12.07 | 15.59 | 14.91 | 21.02 | 27 | 21.39 | 19.54 |
| Beer - Local | 216.72 | 263.07 | 269.28 | 267.89 | 300.04 | 322.74 | 369.95 |

| | | | | | | | |
|---|-------|--------|--------|--------|--------|--------|--------|
| Beer - Imported | 19.32 | 25.31 | 21.36 | 13.04 | 19.35 | 13.53 | 8.08 |
| Other alcoholic beverages - local | | | | | | 2.1 | 19.43 |
| Other alcoholic beverages - Imported | 22.56 | 25.82 | 28.39 | 28.19 | 27.33 | 33.41 | 20.8 |
| Fruits and vegetables Juices - Local | 90.01 | 118.87 | 125.99 | 120.53 | 152.42 | 176.02 | 213.95 |
| Fruits and vegetables Juices - Imported | - | - | - | - | 0.23 | 0.6 | 1.01 |
| Bottled water | 16.17 | 16.43 | 19.03 | 19.14 | 26.46 | 31.08 | 32.88 |
| Sugar | 37.97 | 30.28 | 35.53 | 40.1 | 46.29 | 59.6 | 52.22 |
| Cement | 23.73 | 26.74 | 32.09 | 34.51 | 43.72 | 44.02 | 42.3 |
| Cooking oil | - | - | 39.84 | 48.92 | 50.43 | 39.99 | 42.07 |

Source: Uganda Revenue Authority.

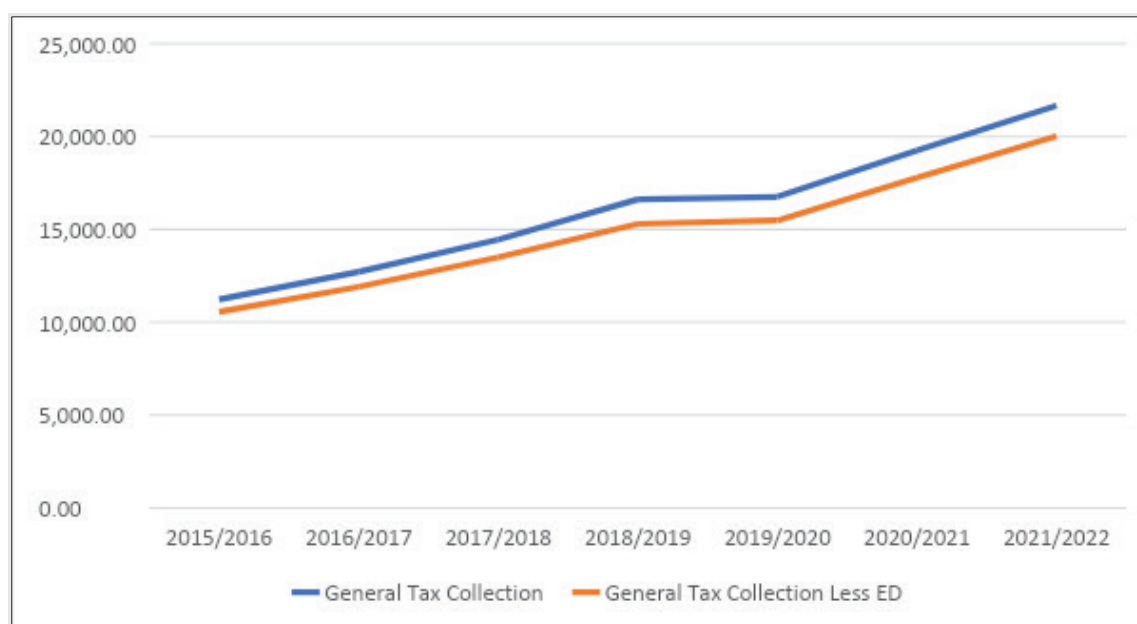
The table above shows the amounts in Billions received by the URA over the period from 2017 – 2022. There is a general growth in the revenue collected over the years evidenced by a consistent increment in the amounts collected. However, there was a dip in the production in the period 2021/22.

We further analyse to what extent this recorded increase in excise duty collections is attributable to the implementation of DTS.

2.1.4. Impact of DTS on LED collections

The introduction of DTS coincided with the onset of the COVID-19 pandemic. Therefore, to gain insights into the impact of DTS on excise duty, it was imperative to illustrate the broader ramifications of COVID-19 on overall tax collection.

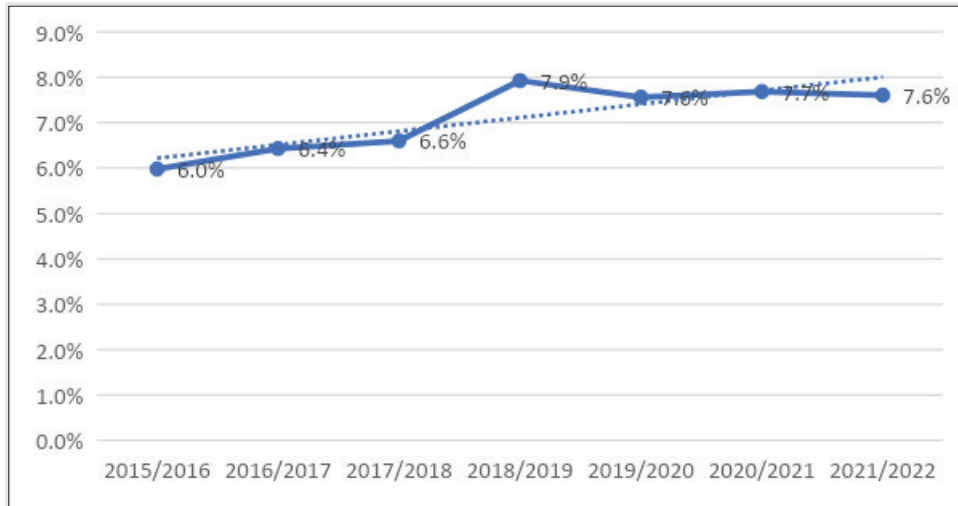
Figure 4.2: General tax collections with/without LED



Source: URA annual Revenue Performance Reports from 2015 to 2022.

Based on the graph above, for scenarios inclusive and exclusive of LED, there was no growth in tax collections from 2018/19 to 2019/20, followed by a subsequent recovery. Notably, the gap between general tax collection and tax collection excluding LED started widening in 2019 and continues to do so as the economy rebounds from the COVID-19 pandemic. This widening gap signifies an increasing contribution of LED to the overall tax collection. However, further analysis below illustrates that this gap ought to have widened more significantly if it had not been for the pandemic and introduction of DTS.

Figure 4.3: Contribution of LED to general tax collections

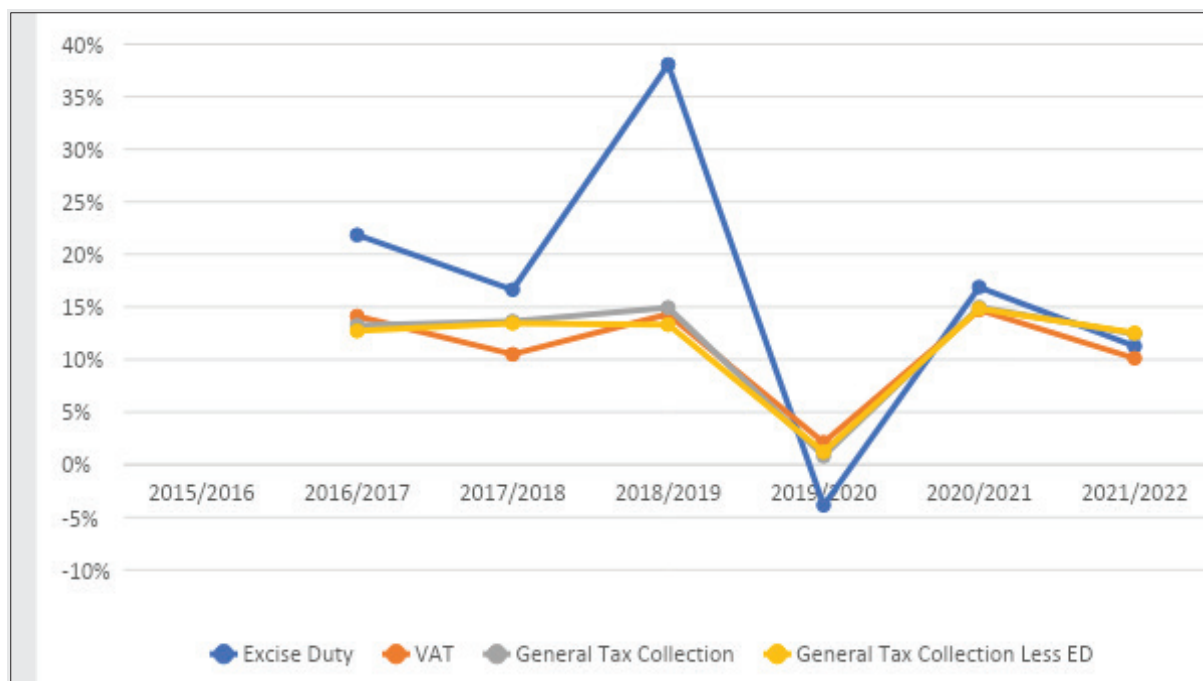


Source: URA annual Revenue Performance Reports from 2015 to 2022.

The contribution of LED to the broader tax portfolio showed an upward trend, rising from 6.0% in 2015/2016 to 7.9% in 2018/2019. However, this figure declined to 7.6% in 2019/2020 and further increased to 7.7% in 2020/21, only to revert to 7.6% in 2021/22.

The persistent reduction in LED's contribution, coupled with its inability to recover / exceed the 7.9% mark where it was in 2018/2019, raises concerns. Moreover, the general tax recovery rate consistently outpaces that of LED, which has seen its contribution to the fiscus fluctuate between 7.6% and 7.7%, representing a mere 0.1% increase.

Based on the above analysis, we've observed that the growth of LED hasn't followed historical patterns, as shown in the graph. This divergence can be attributed to various factors affecting overall spending and consumption within the economy. Consequently, it was necessary to closely examine the growth trends of both LED and the economic growth over time. The goal was to determine if the growth of LED aligns with the general economic growth. Below we delve into further analysis to understand the correlation between these two growth trends.

Figure 4.5: Comparison of performance of excise duty to other tax heads

Source: URA annual Revenue Performance Reports from 2015 to 2022.

The yearly growth rate of tax collections exhibited a downward trend from 2018/19 to 2019/2020, followed by a rebound in the 2020/21 fiscal year. Notably, LED experienced a more pronounced decline compared to VAT and other general tax collections during this period. This steeper drop in LED revenue can be attributed to two key factors: the impact of both COVID-19 and the introduction of DTS, which coincided in time, as opposed to VAT and other tax types that were primarily affected by only the COVID-19 pandemic.

Based on the above analyses, while there is a general perception that there has been an increment in excise duty collection post DTS implementation, this increment has not attained its historic growth rate as seen before the introduction of DTS.

We analysed the relationship between the growth of LED collections and overall economic growth and observed varied correlations between LED collections and the general economic performance during the analysed period. For instance, in 2020, there was an 8.7% economic downturn attributed to the negative effects of COVID 19 while DTS growth itself saw a 0.3% decrease. This implies that the 0.3% reduction in LED collections following DTS implementation corresponded with a more significant 8.6% economic decline. Subsequently, a modest 0.1% increase in LED collections aligned with a 6.6% economic recovery in the 2021.

In 2022, although LED collections experienced a slight 0.1% decline, this was offset by a positive economic growth of 0.8%. This suggests that the decrease in LED collections did not surpass the overall economic growth trend for that year. These findings highlight the intricate relationship between LED collections and economic performance, emphasizing the influence of external factors like the implementation of DTS.

From this analysis we however also noted that whereas there is a correlation between LED growth and economic growth, various other factors influence the economic growth and any changes to a specific factor may directly or indirectly influence the general growth. On this basis, we have excluded the impact of the economic growth from the overall impact analysis due to insufficient information and the effect of various factors.

2.1.5. Impact of DTS on reduction of Illicit trade

The second objective for the introduction of DTS by the government was to curb illicit trade. To evaluate the DTS system's impact on curbing illicit trade, it was imperative for the government to track detailed incidences of illicit trade over the defined period. These reports would have served as critical benchmarks for discerning any identifiable reductions in illicit trade activities following the implementation of the DTS system.

In an interview with URA, this information was only available for the current financial year. This limited our ability to assess whether there has been a notable decline in illicit trade following the roll out of DTS.

2.1.5.1. Dialogue on illicit trade organised by PSFU.

During a discussion about illegal trade organised by PSFU¹ in collaboration with key players in various industries such as Uganda Breweries, BAT, Unilever, Movit Limited, and the Uganda Alcohol Sector Association in March of this year², it came to light that illicit trade is a widespread problem affecting multiple sectors, including, and not limited to alcohol, water, and cigarettes.

Surveys presented at this discussion revealed that illicit trade makes up 29.4% of the tobacco market and a whopping 64.7% of the alcohol market. This results in a substantial annual tax revenue loss of over Ushs. 30 billion and Ushs 1.6 trillion, respectively as disclosed by PSFU.

One alarming statistic revealed during the dialogue was the rapid growth of illicit alcohol, increasing at an annual rate of 9% over the past five years and now constituting over 65% of all alcohol available in the market.

2.1.5.2. URA annual revenue performance report 2021/2022 on illicit trade

According to URA's annual revenue performance report 2021/2022, URA reported a staggering loss of over Ushs 91 billion shillings in 2022³ due to illicit trade.

In URA's annual revenue performance report for the fiscal year 2021/22⁴, several crucial observations were highlighted:

Wholesale and retail trade: The report emphasised the intense competition within this sector, where legitimate businesses contend with illicit and counterfeit products that infiltrate and undermine the market. As a result, this competition has led to a significant decline in sales by key sector players. Moreover, the illicit sellers of cigarettes have an advantage with more appealing packaging since they are not bound by the official packaging regulations set by Ugandan authorities. This unique packaging can attract consumers, potentially having negative effects on their health and not affecting the sales of illicit cigarettes.

Spirits/Waragi: The report also brought attention to the ongoing issue of counterfeit and illicit spirits being sold by the informal sector in Uganda. These activities continue to disrupt collections within this sub-sector, causing adverse consequences for the revenue authorities and the genuine businesses operating in the spirits sector.

2.2. Conclusion

¹ See, PSFU, Policy Advocacy and Business Development Department Report from 1st January to 30th March 2023 Presented to The Policy Advocacy Committee, 25th May 2023, available at <https://www.psfuganda.org/policy-papers/321-q-3-may-2023-policy-advocacy-department-report.html> accessed on 11 October, 2023.

² <https://www.ugandabreweries.com/sustainability/alcohol-society/eradicating-illicit-trade>

³ Supra note 1.

⁴ URA, Annual Revenue Performance Report, 2021/22

Based on the information above, available secondary data⁵ reveals that there has not been a notable reduction in illicit trade even following the rollout of DTS.

Furthermore, upon a meticulous examination of the data presented above, it becomes evident that the compliance rate has consistently remained at the anticipated level. There is no discernible shift in government revenue collection to indicate that the implementation of DTS has achieved substantial success in mitigating illicit trade.

⁵ Ibid, see also, the National Development Plan II (NDPII).



OBJECTIVE 2:

*Impact of DTS on the manufacturing sector,
job creation, and revenue collection*

3. OBJECTIVE 2: Impact of DTS on the manufacturing sector, job creation, and revenue collection

3.1. Introduction

This chapter delves into a comprehensive assessment of the impact of the DTS system on the cost of doing business, job creation, and revenue collection in the manufacturing sector in Uganda.

3.1.1. Cost of implementation and operation of DTS

As part of this study, we collected information relating to both the installation and operation of the DTS system. The information obtained revealed that manufacturers of excisable goods have incurred various costs in a bid to comply with the DTS regime. These expenditures encompass the procurement of hardware, software, infrastructure required for DTS compliance. These upfront investments have posed significant financial challenges for manufacturers, particularly smaller enterprises with limited capital resources. The table below shows the average cost of installation incurred by the manufacturers who participated in the study.

Table 5.1. Average Cost of Installation of DTS application modes

| Mode of application | Average installation cost in Ushs |
|------------------------------|-----------------------------------|
| Automatic/Applicator Machine | 151,583,333 |
| Manual Application | 485,639,525 |
| Both Modes | 1,271,901,501 |

Source: Data collected from manufacturers who participated in this study.

The table above is a representation of costs incurred by both multinational companies as well as the local companies. The highest and lowest costs of installation were as shown below;

Table 5.2: Cost of Installation of DTS application modes

| Mode of application | Lowest (LTP) (UGX) | Highest (LTP) (UGX) | Lowest (SME) (UGX) | Highest (SME) (UGX) |
|-------------------------------|--------------------|---------------------|--------------------|---------------------|
| Automatic /Applicator Machine | 20,000,000 | 431,750,000 | 3,000,000 | 20,000,000 |
| Manual Application | 9,930,000 | 1,927,728,098 | 400,000 | 4,500,000 |
| Both Modes | 1,338,600,000 | 3,350,000,000 | 2,500,000 | 396,506,003 |

Source: Data collected from manufacturers who participated in this study

In addition to the installation costs, manufacturers are also burdened with ongoing fees for the purchase of digital stamps. The fee structure varies, and manufacturers and importers must make regular payments to meet their needs. This recurring financial commitment has raised concerns among manufacturers regarding its sustainability and overall feasibility, especially in comparison to the revenue generated through excise duties.

3.1.2. Annual growth on volumes produced.

In our research, we established that the manufacturing sector consistently witnessed an annual growth in the production volumes of their products. While the sector has consistently boosted its production volumes, resulting in increased sales and higher revenue for the government, there hasn't been a corresponding decrease in the prices of DTS for most of the products. As a result, the production costs have largely remained constant, hampering the optimum utilisation of the manufacturers' resources, and slowing down the growth in production. The following table visually represents the growth trajectory.

Table 5.3: Analysis of percentage growth of volumes produced annually.

| Products | Pre DTS (June 2016- July 2019) | Inception phase (June 2019- July 2020) | Post DTS (June 2020- June 2023) |
|------------------------|--------------------------------|--|---------------------------------|
| Beer | 12% | -4% | 11% |
| Cigarettes | 61% | 20% | -14% |
| Soda and Bottled water | 17% | 8% | 24% |
| Sugar | 24% | 26% | 0% |
| Cement | 0% | 25712% | -29% |
| Cooking oil | 55% | -17% | 4% |

Source: Data collected from manufacturers who participated in this study. Note: There was no data provided by the cement sector prior to FY20.

From the table above, there was a significant growth in the volumes produced by soda and bottled water. This growth is due to the entry of more manufacturers in this line of production as well as various business restructures in the product sector. The growth in beer is justified by the reopening of places of entertainment, following the uplifting of the pandemic lockdown.

3.1.3. Excise Revenue collections for the period 2017 to 2023

The introduction of DTS was initiated with the aim of augmenting government revenue, and it has yielded some favourable outcomes. Nevertheless, these expectations faced hindrances from several factors. The URA disclosed that a substantial informal sector, manual production practices, insufficient DTS awareness, and taxpayer reluctance to implement DTS due to elevated expenses all contributed to obstructing the anticipated revenue growth. The table below provides an overview of the URA's revenue collections from 2017 to 2023.

Table 5.4: Overview of URA revenue collections from 2017 to 2023

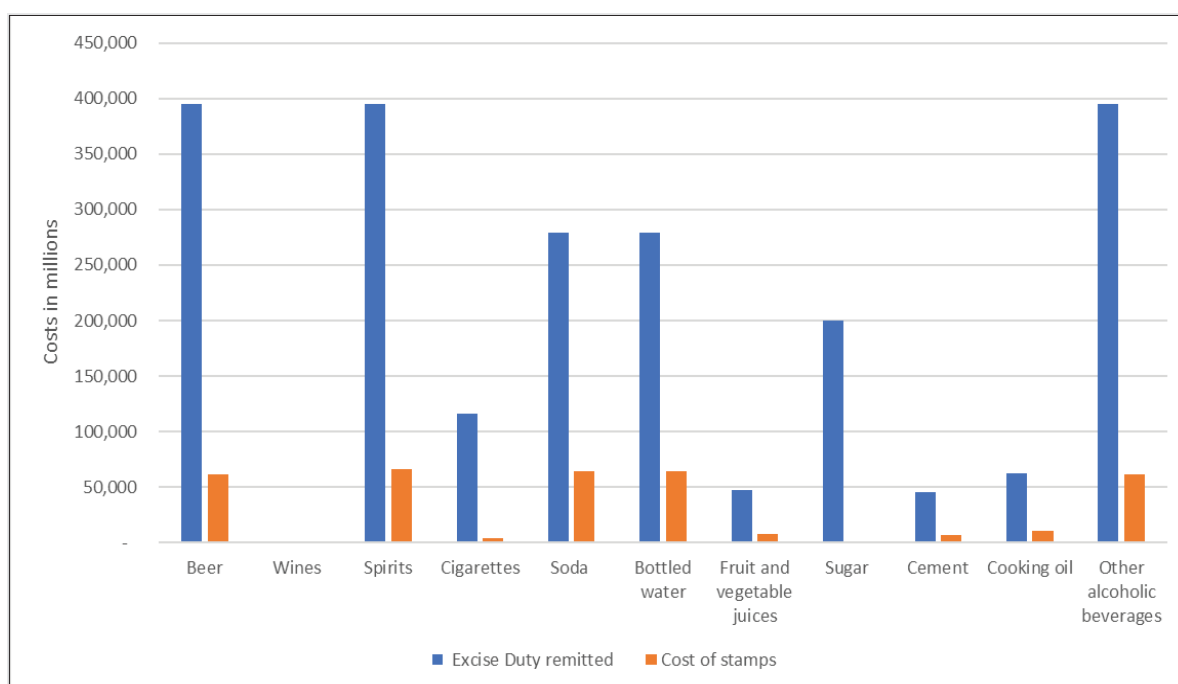
| FY | Revenue (Bn) |
|--------------|-----------------|
| 2018-19 | 1,299.46 |
| 2019-20 | 1,333.28 |
| 2020-21 | 1,476.41 |
| 2021-22 | 1,355.65 |
| 2022-23 | 1,918.24 |
| 2023-24 | 343.23* |
| Total | 7,726.27 |

Source: Uganda Revenue Authority. *FY 2023/24 covers only 3 months

3.1.4. Comparison of cost of stamps to LED collection to the cost of stamps.

While manufacturers incur substantial expenses related to DTS compliance, questions arise about the proportionality of these costs to the revenue generated through excise duties. We noted that DTS costs represent a significant financial commitment for manufacturers, prompting an examination of their impact on pricing strategies and profit margins. Furthermore, the government's revenue collection efforts through excise duty may not have witnessed a commensurate increase, raising concerns about the balance between costs and revenue. The graph below shows the ratio of the excise duty remitted to the cost of stamps.

Figure 5.1: Analysis of proportion of cost of stamps to the Excise Duty remitted.



Source: Data collected from manufacturers who participated in this study for the period 2017 to 2022

The analysed costs include, the cost of applicator machines, stamps, operational expenses like stationery, phones, CCTV cameras and other requirements for both manual and automated application of the DTS. Among the manufacturers that furnished us with data regarding operational costs and LED returns, the average expenditure required for compliance amounted to approximately 16% of their LED payments to URA. This means that companies incurred an additional operational expense, which was equivalent to 16% of their LED obligations.

The primary contributor to this operational cost was the expense associated with DTS stamps, constituting a substantial 15.5% of the actual LED payments made to the URA. It is important to note that this cost does not encompass the initial installation expenses, which averaged around UGX 575 million.

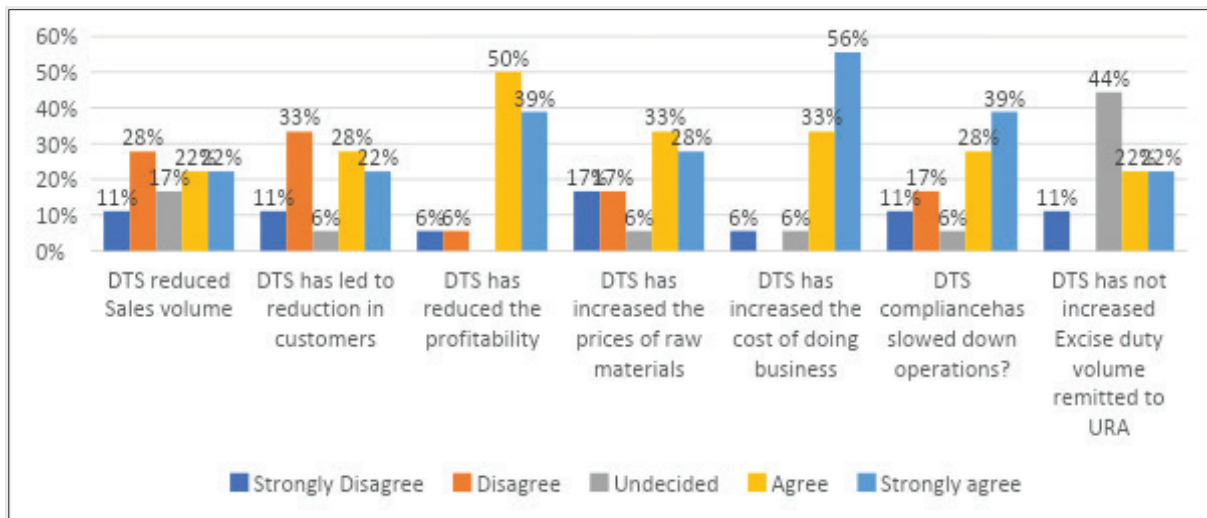
It is also noteworthy that most manufacturers who took part in this study reported that the expense associated with DTS was absorbed by the manufacturer and not transferred to the end consumer. This signifies that manufacturer maintained their selling prices even in the face of increased production costs.

3.1.5. Manufacturers' perceptions of DTS impact on production

In our structured questionnaire, we presented a series of statements to manufacturers, inviting them to express their level of satisfaction with the DTS system. This approach aimed to present a candid insight into how DTS has influenced the production processes for the manufacturers. These responses provide valuable perspectives on the multifaceted impact of DTS implementation on the manufacturing sector.

The graph below illustrates the manufacturers' responses to these statements:

Figure 5.2: Manufacturers' perception of DTS impact on production



Source: Data collected from manufacturers who participated in this study.

Based on the data analysis presented, it is evident that most respondents, constituting 56%, expressed a strong agreement regarding the increased cost of doing business following the implementation of DTS. Additionally, 50% of respondents indicated their agreement with the statement that DTS has diminished the profitability of their businesses, while 44% remained uncertain about whether the introduction of DTS has led to an augmentation in LED volume remitted to URA.

In summary, the responses obtained through our questionnaire shed light on the diverse impact of DTS implementation on the manufacturing sector. These insights reflect the consequences of DTS adoption to the manufacturing sector.

The implementation of DTS necessitated adjustments to financial and reporting systems, diverting resources and attention away from new product development. From the sample of businesses interviewed, 15% noted that they faced a slowdown or delay in introducing new products as they re-allocated time and resources to adapt to the new DTS framework. The learning curve associated with staff training and system integration impeded the innovation process, creating hesitancy among businesses to invest in and launch new products until a stable and compliant operational environment was established.

Additionally, the implementation also involved substantial changes to reporting requirements as companies needed more time to ensure compliance, potentially impacting the regular production schedule for existing products. Mitigating these disruptions required careful planning, effective communication, and support from regulatory authorities to help businesses manage the transition without significant interruptions to the production of existing products.

3.1.6. Impact of DTS on job creation.

The implementation of DTS has introduced a nuanced dimension to job creation and workforce dynamics within Uganda's manufacturing sector. One of the direct impacts of DTS has been the emergence of new job roles related to DTS compliance. Manufacturers have had to hire personnel responsible for overseeing the installation and maintenance of DTS equipment and manual installation, ensuring accurate stamping, and managing the associated administrative tasks. This represents a direct boost to employment opportunities within the sector.

Conversely, the financial burden imposed by DTS compliance has also raised concerns about job security among the existing manufacturing workforces. Some of the manufacturers grappling with increased operational costs have been forced to lay off significant amounts of labour, or worse, shut down. However, the extent of job losses varies among companies, and larger enterprises are better equipped to retain their workforce despite cost pressures.

3.1.7. Implications of DTS on small scale businesses.

In our study, we reached out to up to 30 local manufacturers who ceased operations for various reasons, particularly because of DTS. While many of them were either unreachable or unwilling to discuss their plight, we managed to obtain insightful information from six who complied.

Notably, most of these manufacturers had initiated their businesses before the introduction of DTS but had to close during its implementation. These companies were fully registered with the URA and UNBS and were compliant until their unfortunate closures. Below we analyse the reasons for the closure of their business.

i) **The requirement for EFRIS to get registered for DTS:**

From our discussions, the manufacturers highlighted that the closure wasn't solely due to DTS but rather a combination of Electronic Fiscal Receipting and Invoicing System ("EFRIS") and DTS implementation, among other factors. The system requires that one must purchase raw materials through EFRIS to acquire DTS. Furthermore, numerous similar manufacturers were operating without DTS, which created an unfair competitive landscape. Many of these non-compliant manufacturers were alleged to engage in bribery to continue their operations.

ii) **Economic recovery challenges:**

Other manufacturers recounted that the closure of their businesses was primarily attributed to DTS compliance. This was mainly due to the penalties imposed on non-compliant manufacturers which severely impacted small-scale manufacturers. These penalties eroded the capital invested in the businesses, affecting profitability, and ultimately leading to business closure.

iii) **Lack of education and sensitization:**

Literacy in DTS compliance was one of the contributing factors to business closure. The absence of proper education and sensitization for both manufacturers and consumers regarding the use and significance of DTS on products allowed customers to continue purchasing products that had no DTS. In Uganda, being a developing country, such tax measures often favour larger companies while disadvantaging small-scale manufacturers.

iv) **Market entry challenges for local startups:**

Additionally, due to the challenges posed by high compliance costs, stifling LED rates, and competition from established businesses, market entry and penetration for local startups in the manufacturing sector became an extremely daunting task. The existing hurdles made it nearly impossible for new, small-scale manufacturers to gain a foothold in the market, hindering the growth and emergence of innovative, local businesses.

The impact of the DTS system on the manufacturing sector extends beyond cost implications, affecting job creation and the survival of local manufacturers. While some manufacturers closed their businesses due to the combined effects of DTS and other tax compliance requirements, others faced production cutbacks and struggled to compete. This not only led to job losses but also hindered market entry for local startups. The current tax structure, compliance challenges, and lack of effective education and sensitization efforts have contributed to the difficulties faced by manufacturers, particularly small-scale and local businesses.

The closure of 30 fully registered and compliant businesses signals reduced economic activity and disruptions in local supply chains, impacting related industries. This also results in a loss of tax revenue for the government, affecting public services and infrastructure development.

Furthermore, the negative perception generated among SMEs hindered broader digital transformation efforts and erode confidence in adopting digital technologies, posing long-term obstacles to economic development.



OBJECTIVE 3:

The impact of DTS on the cost of doing business in Uganda in comparison to other neighbouring countries.

4. OBJECTIVE 3: The Impact of DTS on the cost of doing business in Uganda in comparison to other neighbouring countries.

4.1. Introduction.

As with any first-time adoption of a new system, there are likely to be some implementation challenges that are experienced as taxpayers are phased into the system. This was the case for the manufacturers of excisable goods that were gazetted for DTS affixation, particularly considering the increased costs of production. To understand how the manufacturers in Uganda are faring compared its regional counterparts, we examined the following countries as part of our comparison analysis:

- Kenya
- Rwanda
- Zambia
- Tanzania
- Ghana

We were able to compare the local DTS prices to the countries above. Below we provide an overview of our findings from the comparison analysis of DTS prices and systems regionally.

4.2. Analysis of products on which DTS is applied in the East African Community

We undertook a focused analysis of products subject to similar systems to the Ugandan DTS in the region. Our objective was to analyse the implementation and justification for the subjection of specific products to DTS and compare them to other products in the same category in the region. By delving into this, we aimed to unravel the complexities and dynamics associated with systems and the similarities in the DTS reform within the region. Below is a list of these products on which DTS are affixed per country.

Table 6.1: List of gazetted products in the East African region

| Uganda | Kenya | Tanzania | Rwanda |
|-----------------------------------|---|---|------------------|
| Beer | Beer, Cider, Perry, Mead, Opaque beer | Beer local and imported | N/A |
| Spirits | Spirituous beverages of alcoholic strength not exceeding 10%. | N/A | Spirits |
| Fruit Juice and Vegetable Juice | Fruit juices (including grape must), and vegetable juices | Fruit juices local and imported | N/A |
| Any other fermented beverages | mixtures of fermented beverages with non-alcoholic beverages. | N/A | N/A |
| Any other alcoholic beverages | other alcoholic beverages | N/A | N/A |
| Cooking oil | N/A | N/A | N/A |
| Sugar | N/A | N/A | N/A |
| Soda | Sweetened or flavoured water | Sweetened or flavoured water | N/A |
| Wine | Wines including fortified wines | Wines produced locally | Wine |
| Mineral water or bottled water | Mineral water and aerated water | Water | N/A |
| Any other non-alcoholic beverages | non-alcoholic beverages | Other non-alcoholic beverages | N/A |
| Tobacco products | Cigars, cheroots, cigarillos, containing tobacco or tobacco substitutes | Cigarettes and other manufactured tobacco | Tobacco products |
| Cement | N/A | N/A | N/A |
| N/A | Cosmetics and Beauty products. | N/A | N/A |

4.2.1. Cost analysis of DTS in Uganda

We analysed the interplay between Excise and DTS rates, shedding light on their combined impact on the prices of products, costing for manufacturers, local businesses (SMEs), consumers, and the broader fiscal landscape in the country. Below is an analysis of Excise duty rates and DTS rates per product.

Table 6.2: Analysis of Excise Duty rates and DTS rates per product in Uganda

| Excisable goods | LED rates | DTS rate | Percentage OF DTS cost to LED |
|-----------------------------------|------------|----------|-------------------------------|
| | USD | | |
| Beer | 175 | 10 | 6% |
| Spirits | 459 | 30 | 6% |
| Fruit Juice and Vegetable Juice | 67 | 5 | 7% |
| Any other fermented beverages | 256 | 9 | 4% |
| Any other alcoholic beverages | 62 | 9 | 15% |
| Cooking oil | 54 | 11 | 20% |
| Sugar | 27 | 11 | 39% |
| Soda | 67 | 5 | 7% |
| Wine | 539 | 30 | 6% |
| Mineral water or bottled water | 27 | 4 | 13% |
| Any other non-alcoholic beverages | 67 | 5 | 7% |
| Tobacco products | 27 | 20 | 75% |
| Cement | 135 | 36 | 27% |

We have utilised the standard excise duty rate as per the LED Act and have excluded the advalorem rate from our review.

In the East Africa region i.e., Tanzania and Kenya use the same supplier, SICPA, for the supplier for DTS and like Uganda, while the respective Governments engaged SICPA to supply the stamps, the cost of the installation and operation of DTS is borne by the manufacturers. In addition, the cost of the stamps was set by SICPA in a bid to recover its initial investment.

In our analysis, we have compared the cost of DTS in Uganda in relation to other countries in the region. The aim was to establish the competitiveness of these prices in comparison to other countries. Below we analyse the cost of stamps for the various products in comparison to the excise duty rates within the region.

Table 6.3: Analysis of Excise Duty rates and DTS rates per product in the East African Region

| Excisable goods | Price of stamp for every 1,000 products in Dollars | | | | | |
|--|--|-------|----------|--------|--------|-------|
| | Uganda | Kenya | Tanzania | Rwanda | Zambia | Ghana |
| Beer - Local | 9.71 | 10.14 | 8.55 | N/A | N/A | N/A |
| Beer - Imported | 9.71 | 10.14 | 10 | N/A | N/A | N/A |
| Spirits | 29.67 | 14.54 | 20 | 16.06 | N/A | N/A |
| Fruit Juice and Vegetable Juice - Local | 4.59 | 4.06 | 3.6 | N/A | N/A | N/A |
| Fruit Juice and Vegetable Juice - imported | 4.59 | 4.06 | 10 | N/A | N/A | N/A |
| Any other fermented beverages | 9.44 | 10.14 | N/A | N/A | N/A | N/A |
| Any other alcoholic beverages | 9.44 | 10.14 | N/A | N/A | N/A | N/A |
| Cooking oil | 10.79 | N/A | N/A | N/A | N/A | N/A |
| Sugar | 10.52 | N/A | N/A | N/A | N/A | N/A |
| Soda | 4.59 | 4.06 | 6.61 | N/A | N/A | N/A |
| Wine | 29.67 | 18.93 | 8.55 | 16.06 | N/A | N/A |
| Mineral water or bottled water | 3.51 | 3.38 | 3.6 | N/A | N/A | N/A |
| Any other non-alcoholic beverages | 4.59 | 4.06 | 6.61 | N/A | N/A | N/A |
| Tobacco products | 20.23 | 18.93 | 20 | 9.14 | 1.42 | N/A |
| Cement | 36.42 | N/A | N/A | N/A | N/A | N/A |
| Cement bulker | 16,184.86 | N/A | N/A | N/A | N/A | N/A |

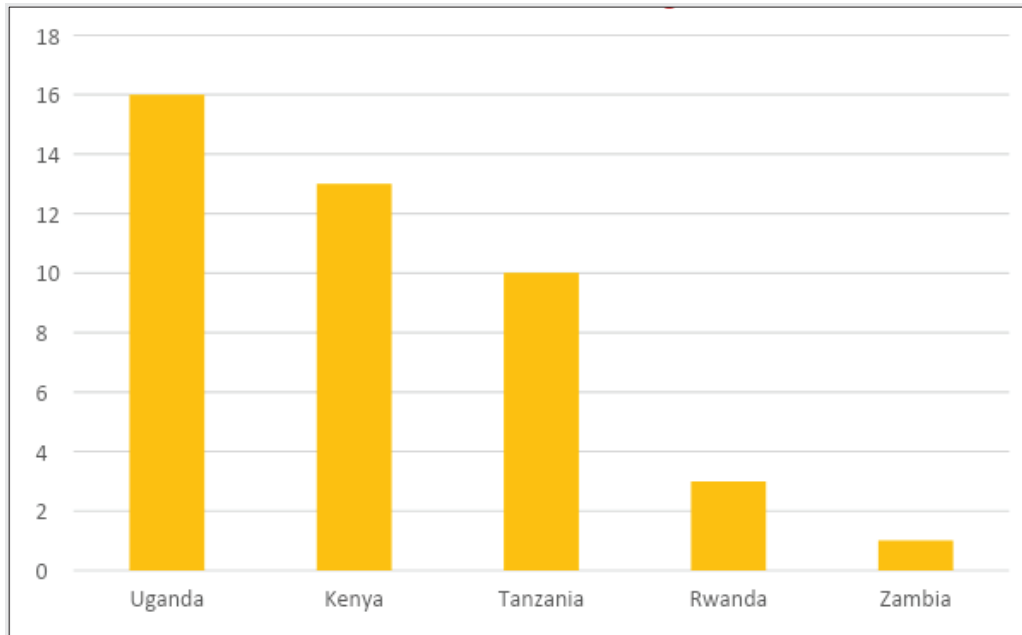
Source: Data collected from other countries as well as URA.

In our analysis, we observed that the prices of DTS in Uganda, when compared to neighbouring countries in the region appear slightly higher than most. This observation is only one facet of the broader picture. While favourable pricing can indeed benefit businesses, it's vital to consider the wider context. DTS costs represent just one component of the overall tax framework. Other factors, such as the extent of excise duty coverage, can significantly influence the economic landscape.

4.2.2. Products required to comply with DTS in Uganda in comparison to other countries.

As part of our comprehensive study of the DTS landscape in the region, we conducted an analysis of the range of products subject to DTS requirements in the various countries. Our investigation revealed that while pricing comparisons might indicate competitiveness, Uganda stands out since it includes a broader array of products within the purview of DTS compliance, as illustrated in the graph below.

Figure 6.1: Types of excisable goods required to comply with DTS in various countries in the region.



Source: Data collected from other countries as well as URA.

4.2.3. Comparison of DTS Costs with neighbouring countries.

Uganda and Kenya

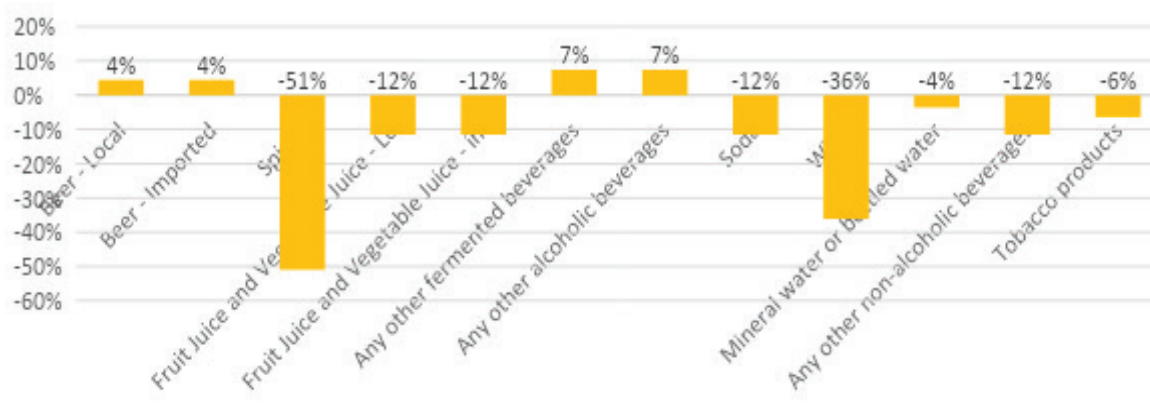
Uganda and Kenya share 12 common excisable goods subject to DTS requirements. Among these goods, Kenya imposes higher charges than Uganda for four of them. Conversely, Uganda imposes higher charges than Kenya for eight out of the 12 common items. Additionally, Kenya includes an extra product category, Cosmetics, in its list of DTS-compliant items. Below is analysis of the list of products, excise rates and the DTS rates.

Table 6.4: Analysis of Excise Duty rates and DTS rates per product in Kenya

| Category | LED (Kenya) rates | Stamp costs | Percentage of DTS cost to the LED |
|---------------------------------|-------------------|-------------|-----------------------------------|
| | USD | | |
| Beer | 784.85 | 10.14 | 1% |
| Spirits | 1795.13 | 14.54 | 1% |
| Fruit Juice and Vegetable Juice | 78.36 | 4.06 | 5% |
| Any other fermented beverages | 78.36 | 9.44 | 12% |
| Any other alcoholic beverages | 78.36 | 9.44 | 12% |
| Cooking oil | N/A | N/A | N/A |
| Sugar | 236.65 | N/A | N/A |
| Soda | 78.36 | 4.06 | 5% |
| Wine | 1341.04 | 18.93 | 1% |

| | | | |
|-----------------------------------|----------|-------|-------|
| Mineral water or bottled water | 38.81 | 3.38 | 9% |
| Any other non-alcoholic beverages | 78.36 | 4.06 | 5% |
| Tobacco products | 22400.00 | 18.93 | 0.08% |
| Cement | N/A | N/A | N/A |
| Cosmetics and Beauty products | 0.68 | 4.06 | 600% |

Figure 6.2: Comparison of the cost of Uganda's stamps to Kenya



Source: Data collected from other countries as well as URA.

The disparity in charges between the two countries varies. In cases where Kenya charges higher than Uganda, the difference is as high as 7%, with the lowest difference being 4%. In contrast, Uganda's charges surpass Kenya's by a more substantial margin, with the highest difference reaching 51% for spirits.

Uganda and Tanzania

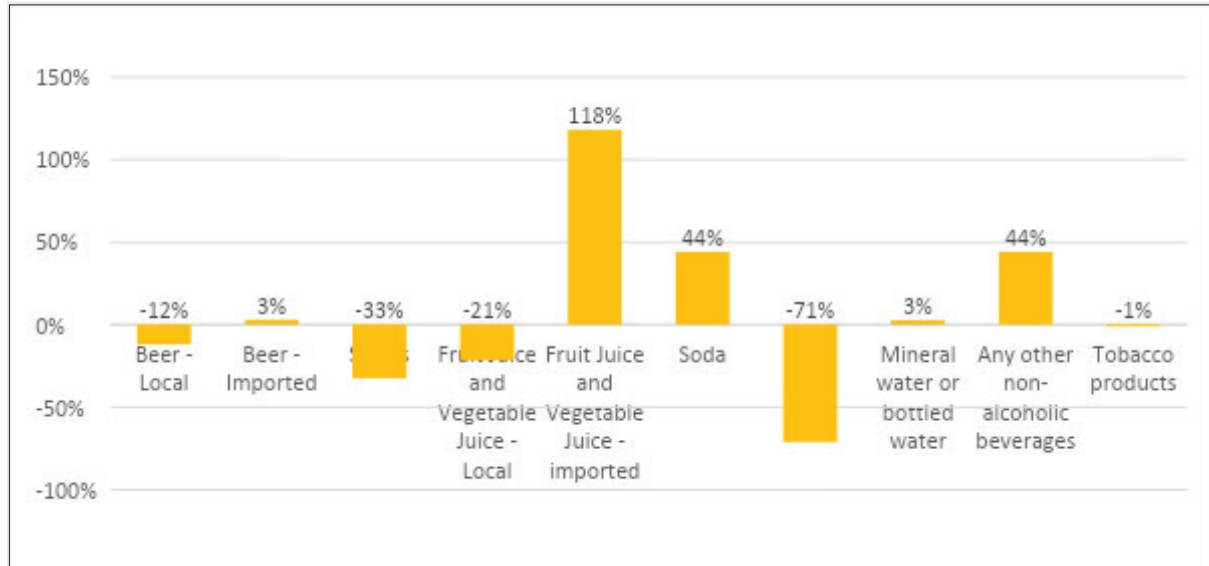
In comparing Uganda and Tanzania in terms of DTS for 10 specific items, a mixed pattern emerged. Tanzania imposed higher DTS charges than Uganda for five of these items, while Uganda applied higher charges for the remaining five. Notably, the differences in charges between the two countries varied. Below is analysis of the list of products, excise rates and the DTS rates.

Table 6.5: Analysis of Excise Duty rates and DTS rates per product in Tanzania

| Category | LED rates | Stamp costs | Percentage of DTS cost to the LED |
|-----------------------------------|------------|-------------|-----------------------------------|
| | USD | | |
| Beer | 136 | 10 | 7% |
| Spirits | 230 | 20 | 9% |
| Fruit Juice and Vegetable Juice | 92 | 10 | 11% |
| Any other fermented beverages | 1,047 | N/A | N/A |
| Any other alcoholic beverages | 1,047 | N/A | N/A |
| Cooking oil | N/A | N/A | N/A |
| Sugar | N/A | N/A | N/A |
| Soda | 64 | 6.61 | 10% |
| Wine | 1,047 | 8.55 | 1% |
| Mineral water or bottled water | 36 | 3.6 | 10% |
| Any other non-alcoholic beverages | | 27 | 6.61 |
| | | | 24% |

| | | | | |
|------------------|-----|----|-----|-----|
| Tobacco products | | 44 | 20 | 46% |
| Cement | N/A | | N/A | N/A |

Figure 6.3: Comparison of the cost of Uganda's stamps to Tanzania



Source: Data collected from other countries as well as URA.

For instance, Tanzania's highest DTS charge exceeded Uganda's by a substantial 118% for fruit and vegetable juices, while the lowest difference was a mere 3%. Conversely, Uganda's DTS charges ranged from 1% to 71% higher than Tanzania's, with the lowest difference of 1% observed for tobacco products.

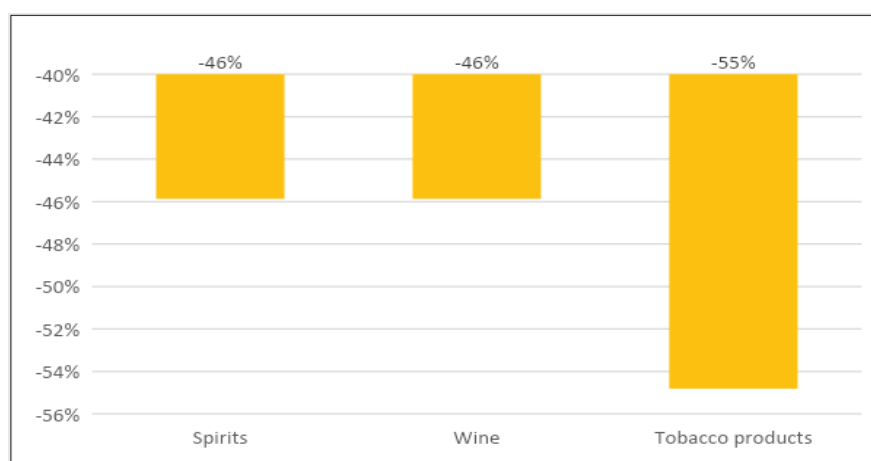
In essence, when considering the negligible differences between 3% and 1%, it becomes evident that Uganda and Tanzania had nearly identical DTS charges for three out of the ten items. However, Tanzania imposed higher charges on three items, while Uganda had four items with higher charges compared to Tanzania.

Uganda and Rwanda

Among the items subject to DTS in both Rwanda and Uganda, a consistent pattern emerged. Uganda applied higher DTS charges than Rwanda for all three shared items. The magnitude of this difference ranged from 46% to 55%, with Ugandan prices consistently exceeding those in Rwanda.

Table 6.6: Analysis of Excise Duty rates and DTS rates per product in Uganda

| Category of Excisable goods | LED Rates | Stamp/Mark Fee |
|-----------------------------|-----------------|----------------|
| | USD | |
| Spirits | 70% | 16.06 |
| Wine | 30% | 16.06 |
| Tobacco products | 36% of the pack | 9.14 |

Figure 6.4: Comparison of the cost of Uganda's stamps to Rwanda

Source: Data collected from other countries as well as URA.

Based on the above, the economic implications of DTS costs on the manufacturing sector's contribution to Uganda's GDP are significant. While the intention behind DTS is to enhance tax compliance and revenue collection, the sector's growth has been hampered by the financial constraints it has placed on manufacturers. To address these challenges, collaboration between the government and manufacturers becomes crucial, necessitating policy measures and support initiatives that alleviate the financial burden of DTS compliance and foster a conducive business environment.

4.2.4. Comparative Analysis of the percentage of excise duty to DTS in the region

The table below provides an overview of the percentage of DTS in comparison to the excise duty charged on each product per 1000 products. It provides an overview comparison of the percentage differences in DTS for the specific countries and products that are subject to DTS and provides an overview of our findings of the DTS systems in the other countries.

Table 6.7: Analysis of Stamp costs to excise duty per 1000 products

| Excisable goods | Percentage of stamp cost to the excise duty every 1,000 products in Dollars | | |
|-----------------------------------|---|-------|----------|
| | Uganda | Kenya | Tanzania |
| Beer | 6% | 2% | 7% |
| Spirits | 6% | 1% | 9% |
| Fruit Juice and Vegetable Juice | 7% | 5% | 11% |
| Any other fermented beverages | 4% | 12% | N/A |
| Any other alcoholic beverages | 15% | 12% | N/A |
| Cooking oil | 20% | N/A | N/A |
| Sugar | 39% | N/A | N/A |
| Soda | 7% | 5% | 10% |
| Wine | 6% | 1% | 1% |
| Mineral water or bottled water | 13% | 9% | 10% |
| Any other non-alcoholic beverages | 7% | 5% | 24% |
| Tobacco products | 75% | 0% | 46% |
| Cement | 27% | N/A | N/A |

We have analysed and compared the percentage of cost of a DTS to the LED levied on each product across the East African region, i.e., Uganda, Kenya, and Tanzania and from this analysis, notable differences emerge.

- a) **Products:** Uganda stands out with a comprehensive scope of LED and DTS legislation, covering a wide array of products, including cooking oil, sugar, and cement. In contrast, Kenya and Tanzania have fewer products subject to such regulations. Uganda's excise duties vary significantly, with notable percentages applied to products like cooking oil (20%), sugar (39%), and

cement (27%). Kenya and Tanzania do not have LED for cooking oil, sugar, and cement, suggesting different priorities in their legislative frameworks.

- b) **Percentage of the cost of DTS to the levied LED:** There are notable variations in excise duty percentages for specific goods, such as tobacco products, beer, and non-alcoholic beverages, underscore the diverse fiscal approaches within the region. With Uganda and Tanzania having a relatively higher cost in DTS in comparison to the stamp costs imposed in Kenya

The differing regulatory landscapes and excise duty structures among these East African nations highlight the complexities revenue authorities and businesses face when navigating regional markets. Understanding these variations is crucial for stakeholders, as it not only influences product pricing and consumer behaviour but also shapes the competitive dynamics and trade relationships within the region. Companies operating in within the region must navigate a changing regulatory environment, tailoring strategies to the specific legislative updates of each country to optimize market penetration and compliance.

4.2.5. Post-recovery considerations

This subsection explores how DTS costs are treated once the service provider, in this case SICPA, has fully recovered their initial investment. This has the potential of impacting the pricing of stamps and, consequently, the cost of compliance for manufacturers.

We established that in some cases, after the service provider recoups their costs, the pricing of DTS might undergo a revision.⁶ This could result in reduced costs per stamp for manufacturers. It's essential to note that the specific terms and mechanisms for revising stamp prices can vary significantly between countries. One illustrative example was in relation to Kenya, where the government implemented a DTS system for alcoholic beverages. Initially, there were concerns about the cost burden on manufacturers. However, after negotiations with the DTS provider and upon reaching a certain threshold of stamp usage, the government was able to reduce the per-stamp cost.⁷ This adjustment alleviated some of the cost pressures on businesses.

Similar negotiations do not seem to have been replicated in the rest of the countries. It's worth emphasising that these arrangements should be transparent and equally available for negotiation between the government and the DTS provider. Clear terms and conditions can ensure that once the initial costs are recouped, the pricing structure becomes more favourable to businesses, encouraging compliance and minimising the financial burden on manufacturers.

4.2.6. Conclusion

The cost analysis of DTS in Uganda revealed valuable insights into the pricing structure of DTS across a wide range of excisable goods. Excisable goods in Uganda are subject to varying stamp prices, with notable differences across product categories. Uganda's choice to levy LED on a broader spectrum of products compared to its neighbouring countries creates a unique landscape for businesses and tax administration.

The comparison of DTS costs across countries highlighted variations in pricing models and provided context for Uganda's approach. While Uganda's DTS costs might appear competitive, the broader scope of excisable goods under DTS poses challenges and implications for businesses and government revenue.

The implications of Uganda's comprehensive approach to DTS, as well as the comparative insights from neighbouring countries, highlight the importance of a nuanced strategy that balances revenue goals with the practicalities of compliance. As Uganda continues to refine its DTS system, it must consider these complexities to create a regulatory environment that fosters both revenue generation and business growth.

⁶ Kenya Revenue Authority. (2019). Implementation of Excisable Goods Management System (EGMS) Phase II

⁷ SICPA. (2021). Digital Tax Stamps for a Digital Future: Overview and Best Practices



OBJECTIVE 4:

Evaluation of the practical and business-friendly solutions

5. Objective 4: Evaluation of the practical and business-friendly solutions

5.1. Introduction

While the current system has been seen as costly by the Ugandan manufacturing sector, it's worth noting that exploring alternative solutions could potentially lead to more economically advantageous outcomes. In this objective, we analyse and scrutinise the offerings of the existing service provider-SICPA, the proposed role out of the digital conformity mark by UNBS, embark on evaluating possible tax legislation amendments and other regional alternative digital tracking solution providers that we engaged with during our study, offering promising options for consideration.

5.1.1. History of the implementation

The government in collaboration with URA entered into a contractual agreement with SICPA Uganda Limited ("SICPA") for the implementation of DTS and assigned them services which include the supply, implementation, training, support, maintenance and verification of quality and safety solutions.

Through the deployment of SICPA's DTS system, the Government sought to plug revenue leakages and deter counterfeiting, both of which were undermining the fiscal growth of the nation. The income generated from stamp costs on the different excisable goods in Uganda is primarily used to fund and recoup the foreign direct investment made by SICPA, rather than contributing to the Ugandan government's revenue.

SICPA uses a differentiated price model for the stamps for the different excisable goods. SICPA indicated that the prices vary by the units produced or imported across the country, as well as the price of the commodity. The expectation was that the more companies manufacture or import a type of product, the lower the cost of the stamp of that product.

Government believes that this pricing structure will enable SICPA to recoup its initial investment at a faster pace. However, this method also meant that the burden of the cost of the stamps (which is based on the retail cost of each product) was transferred from the government to the manufacturers. This was considered unfair and presented a unique set of questions by the manufacturers at the point of implementation:

- Given that the objective behind this implementation was to assist the government solve a revenue gap, it remains uncertain why the cost of the stamps was entirely covered by the manufacturers. The study revealed that it is possible for Governments to subsidise costs of stamps. An example is the Brazil Government which also uses SICPA system but subsidizes the cost of stamps hence resulting into no additional cost to industry.
- In addition, since DTS was intended for compliance measures, it is not clear why there was no legislation put in place to enable manufacturers claim a refund for the cost incurred in purchasing tax stamps and DTS equipment from the revenue authority or reduce the excise duty payable by the cost of the stamps.

5.1.2. Manufacturers' petitions on the implementation of DTS

In a bid to resolve their concerns, the manufacturers through their unified body, Uganda Manufacturers Association sought redress and audience with the parliamentary committee to assess the viability of the implementation of this project.

However, Government implemented this system citing that this implementation would help with closing the existing gap in excise duty collections from manufacturers. Based on the report of budget committee of Parliament on the supplementary expenditure for the financial year ("FY") 2019, URA reported that although Uganda's soda and bottled water sector consisted of 256 manufacturers in FY19, only 46 were on the tax register which undermined the potential of collecting over Ushs. 14.4 trillion in tax per annum given the fact that companies produce over 231.4 billion bottles per annum

whose unit price is placed at 625 shillings per bottle.⁸ This informed government's urgency to ensure that this revenue gap is closed through the introduction of DTS.

The DTS implementation in FY19 was also propelled by the fact that the government also committed to covering the cost of the stamps for FY20 which was commendable, and manufacturers took this as a goodwill gesture to embrace DTS. Unfortunately, the government, consequently, issued a directive that required manufacturers to cover the cost of the stamps with effect from 1 July 2020.

Various manufacturers sought legal recourse in several cases related to this project. Here are some notable instances:

- **Uganda Sector Alcohol Association and 39 others Vs the Attorney General:** They contested the implementation of DTS and sought a temporary injunction against specific actions by the respondents related to compliance with the Tax Stamps Regulations of 2018. However, this application was subsequently withdrawn on September 4, 2019.
- **Pauline Nakabuye (Private Citizen) vs Uganda Revenue Authority:** Pauline filed an application in the High Court for a temporary injunction against DTS and sought to quash provisions of Regulations 7(1), 7(3), and 7(4). Unfortunately, this application was dismissed.

In these cases, various manufacturers and individuals pursued legal avenues to address concerns related to the project. The outcomes varied, with some applications being withdrawn or dismissed, underscoring the complexity and challenges inherent in such legal proceedings.

5.1.3. Review of current DTS system and the proposed introduction of the Digital Conformity Mark in Uganda

5.1.3.1. DTS System in Uganda

The stamp solution implemented in Uganda is being utilized as a tax verification solution as it only provides authentication capabilities of products as they are audited in the supply chain by the authorities using specialized equipment. Here are some of the key features of the authentication solution:

Table 7.1: Analysis of key features of the DTS system in Uganda

| Features | Narrative |
|-----------------------------------|---|
| <i>Serial Number Generation:</i> | DTS solution enables the generation and printing of unique serial numbers (USN) on their tax stamps. However, these USNs are not product or SKU specific as they are pre-printed in bulk and are not assigned to a product at the time of code generation. The barcode on the stamps is not compliant with open standards such as GS1 and do not carry product specific information (i.e., GTIN). |
| <i>Printing and Application:</i> | The pre-printed tax stamps are applied to products at the time of packaging. At this point the tax stamps are virtually assigned to a product and activated. The tax stamps are designed to be tamper-resistant. |
| <i>Data Capture and Encoding:</i> | As it assigns a batch of tax stamps to an SKU at the time of packaging and enables the capture and encoding of relevant information about each product, such as batch/lot numbers, manufacturing date, expiration date. This data is virtually associated with the unique serial numbers in that batch. However, the barcode on the tax stamps does not include critical product information (e.g., TIN), hence, cannot be scanned and validated down the supply chain by the next purchaser without using a special equipment integrated into the supplier system. |

⁸ Report of the Budget Committee on The Supplementary Expenditure Schedule No. 1, Schedule No.2 and Addendum to Schedule No.2 For FY 2020/21

| Features | Narrative |
|---|--|
| <i>Monitoring and authentication</i> | The tax stamps enable authorities to scan and validate a tax stamp at any point in the supply chain. However, the solution does not provide real-time visibility into the movement of products throughout the supply chain as it lacks track and trace capabilities. It only captures information on when and where products are scanned or encountered. |
| <i>Integration with Existing Systems:</i> | The solution is designed to seamlessly integrate with existing ERP (Enterprise Resource Planning) and supply chain management systems. This ensures smooth data flow and compatibility with existing workflows. |
| <i>Aggregation and Disaggregation:</i> | The solution does not support the aggregation of products into larger units (e.g., cases or pallets) and the disaggregation of those units back into individual items as the barcode on the tax stamps applied to packs lack product specific information. This is an important gap in the system for managing products shipments at different levels of packaging. |
| <i>Reporting and Analytics:</i> | The solution provides reporting capabilities that allow authorities to generate various reports related to product manufacturing and verification activity. However, it lacks critical track and trace information i.e., next purchaser as the items are not scanned at the time of sale. There is also limited visibility and access by manufacturers to the information collected on the manufacturing production lines and on products preventing reconciliation. |
| <i>Compliance with Regulatory Standards</i> | The track and trace solution are designed to meet specific regulatory requirements set forth by governments or sector bodies. This helps companies ensure compliance with applicable laws and standards. |
| <i>Security and Anti-Counterfeiting Features:</i> | The solution includes security features that need to be changed frequently to make it difficult for counterfeiters to replicate or tamper with the tracking labels or markings. |

5.1.3.2. Pitfalls of SICPA's DTS Solution

a) Lack of track and trace capabilities

The main pitfall of the DTS system is its lack of track and trace capabilities down the supply chain. The solution involves application of pre-printed tax stamps on to products at the time of packaging. These stamps are not product specific and the barcode on them do not carry any product specific information. The products are not aggregated into shipping units and cannot be scanned at the time of shipment.

As a result, the critical information of next purchaser cannot be captured and recorded. In addition, when a wholesaler or retailer receives a product, they cannot scan and identify a product they received in shipment containers or even by just scanning the barcode on the stamps when they open the cases as these barcodes lack critical product information. This prevents them performing aggregation/disaggregation activities and recording of sales activities to the next purchaser. Due to these deficiencies in the system, the authorities have not way to verify if the entity in possession of goods in scope of this program has obtained them through legal channels or not.

b) High cost of stamps

The cost structure associated with SICPA stamps has exerted a notable influence on the manufacturing sector, specifically within Uganda. The comparatively elevated unit pricing of these stamps, relative to neighbouring jurisdictions like Kenya, Rwanda, and Tanzania, has evoked uneasiness among taxpayers and sector entities. The inconsistency is bound to introduce market imbalances, potentially delays production capacities and excise proceeds.

These high stamp prices have led to an increase in their production costs and has put them at a competitive disadvantage. This situation highlights the need for a fair and balanced pricing structure

that promotes compliance while also supporting the growth and sustainability of Uganda's manufacturing sector and the economy at large. To address these concerns, stakeholders should engage in discussions to potentially negotiate more favourable pricing terms that benefit local industries.

c) Constraining Contractual obligations to Government

The Government entered a contractual arrangement with SICPA SA for the execution of the DTS initiative. Under this agreement, SICPA was entrusted with a range of responsibilities encompassing the provision, deployment, training, assistance, upkeep, and validation of quality and safety solutions. This collaboration underscores the concerted efforts of the Government to leverage SICPA SA's expertise in advancing the successful execution of the DTS program.

Entering a long-term contractual arrangement with a single company like SICPA SA for the execution of the DTS initiative caused overdependence on one vendor with limited market competition this has led to high costs on implementation and reduced flexibility in adapting to changing circumstances, the risk of cost overruns, potential conflicts of interest, a lack of transparency, the potential loss of in-house expertise and revenue, and security concerns related to sensitive government data and operations.

d) Limited access to information collected.

There is limited visibility and access by manufacturers to the information collected by SICPA and URA on the manufacturing production lines and on products. This serves as a significant challenge and pitfall for manufacturers in Uganda and hampers manufacturers' ability to reconcile any discrepancies with the authority effectively.

This leads to uncertainties, potential delays in compliance processes, and increased operational costs. Without clear visibility into the data collected, manufacturers struggle to meet regulatory requirements, potentially leading to compliance issues and legal consequences. This challenge underscores the critical need for enhanced transparency and streamlined communication channels between regulatory bodies and private sector entities, to facilitate smoother operations and ensure a fair and well-regulated marketplace.

5.1.3.3. Proposed introduction and implementation of the UNBS Digital Conformity Mark solution.

Uganda National Bureau of Standards ("UNBS") is a government agency responsible for developing, promoting, and enforcing national standards to ensure the quality and safety of products in Uganda. UNBS plays a crucial role in regulating various industries, including manufacturing, agriculture, and services, to ensure that products meet specified standards.

UNBS is currently rolling out the Digital Conformity Mark ("DCM") stamp system. This is a device/app readable mark affixed on the unit of a commodity, embedding the conformity related data pertaining to the product on which the stamp is affixed.

UNBS will be requiring that all cosmetics, construction materials, and electronic products have the DCM affixed to them. UNBS has clarified that the rollout would initially target specific categories, with a long-term plan for comprehensive coverage. The objective of this rollout is.

- To promote fair trade through easy identification of uncertified goods
- To widen the market access and increase competitiveness of verified goods on national, regional, and international markets like BUBU, EAC, AFCTA among others.
- Promote consumer health safety and environmental protection.
- Increased flexibility in manufacturer certification compliance requirements

Traditionally, UNBS' mandate focuses on regulating various industries, including manufacturing, agriculture, and services, to ensure compliance with specified standards. However, the recent introduction of the DCM program seems to represent a departure from its core mandate.

The DCM program, which involves affixing a device/app-readable mark on the unit of commodities, is designed to embed conformity-related data to promote fair trade, widen market access, and enhance the competitiveness of certified goods. While these objectives align with broader economic and trade

goals, they may signify a shift away from the primary role of a standards body. Instead of solely focusing on setting and enforcing quality and safety standards, UNBS appears to be extending its reach into areas of market access, competitiveness, and revenue collection.

Moreover, the DCM program introduces a certification fee of UGX 21 per unit, a departure from the traditional role of a standards body that primarily sets standards without directly engaging in pricing mechanisms. This move raises questions about the diversification of UNBS's responsibilities and whether the organization might be straying from its fundamental purpose of ensuring product quality and safety.

Based on the above, we have identified various measures in terms of proposed changes to the legislation as well as alternative digital solution providers to address some of the identified pitfalls as set out below:

5.2. International Standards on tax stamp

In 2018, the International Organisation for Standards (ISO) published a new standard for tax stamps, developed with support and contributions from ITSA. ISO has over 19,500 standards. These touch on almost all aspects of daily and commercial life, helping to harmonise technical specifications of products and services and to establish best practice in management.

Because standards draw on international expertise and experience, they are a vital resource for governments when developing public policy. As tax stamps are a government specified and issued document (in nearly all cases), it is appropriate that ISO should provide a standard specifically for tax stamps. This will help and guide governments in the development and specification of tax stamps.

Below we examine the features and characteristics of an ideal tax stamp system in accordance with guidance provided by the ITSA") under ISO 22382.

a) The Ideal Tax Stamps system

In accordance with ISO 22382 guidelines, which provide recommendations for ensuring the security, content, issuance, and inspection of tax stamps, we outline below the principles and functions of an effective tax stamp system to combat the trade of illicit goods and ensure proper tax collection, particularly on products such as alcohol and tobacco.

- **Process Overview:** Tax authorities should regularly review their security, legal, and enforcement policies concerning tax stamps to identify any vulnerabilities in the stamp itself or in the processes of production, issuance, activation, application, and inspection. In cases of fraudulent activity, authorities should have backup designs available for rapid production.
- **Identify and Consult Stakeholders:** When determining the purposes and specifications of tax stamps, tax authorities should involve and consult with relevant stakeholders, including:
 - i) *Manufacturers and importers of taxable goods*, who play a key role in ordering, receiving, and applying tax stamps to finished goods. They may also act as local distributors.
 - ii) *Distributors or wholesalers* responsible for transporting taxable products from warehouses or ports to local markets and may be responsible for paying taxes to the domestic tax authority and applying tax stamps.
 - iii) *Retailers* responsible for procuring taxable goods through the legal supply chain and selling them to consumers, with a duty to verify the presence of tax stamps.
 - iv) *Suppliers of authentication and stamp systems*, which provide tax stamps and examination tools to tax authorities, law enforcement agencies, and other relevant bodies to facilitate efficient tax collection and combat fraud.
 - v) *Law enforcement agencies*, including customs, revenue police, national police, defence forces, coastguards, border control, and security services, responsible for regulatory and criminal enforcement of applicable laws related to tax stamps.
 - vi) *Consumers*, represented through consumer groups, who are the end-users of taxable products and provide input to tax authorities on tax stamp matters.

▪ **Overview of a functional digital tax stamp:**

- i) **Core Function - Revenue Collection:** Tax stamps serve as statements of tax liability or receipts and can fulfil various functions, including creating tax liability upon issuance or application to taxable products, acting as receipts for tax payment, validating tax-paid status of goods in the supply chain, identifying non- or reduced-tax-paid goods, and enabling monitoring or control of production or importation through stamp issuance.
- ii) **Track, Trace, and Monitoring:** Digital tax stamp systems incorporate track and trace features centred around unique identifiers affixed to product unit packs. These identifiers contain information such as
 - date and place of manufacturing
 - manufacturing facility
 - machine used to manufacture the tobacco products.
 - production shift or time of manufacture
 - product description
 - intended market of retail sale
 - intended shipment route.
 - identity of the importer into the EU, as applicable

Additional information linked to these identifiers includes shipment routes, purchaser identities, and payment records, allowing for comprehensive tracking and tracing of product movements.

- iii) **Possible Additional Functions:** Tax stamps can serve functions beyond tax collection and enforcement, including providing consumer reassurance through tamper-evident features and facilitating legislative compliance for tracking certain products. However, authorities should exercise caution in promoting consumer confidence if tax stamps serve other functions to avoid potential liability in case of harm from a stamped product.

In conclusion, by adhering to international guidelines and best practices, Uganda can revitalize its tax stamp system to combat illicit trade, improve revenue collection, and enhance regulatory compliance. This requires proactive engagement with stakeholders, regular system reviews, and the adoption of advanced technologies to bolster tracking and authentication capabilities. Through these efforts, Uganda can establish a robust and resilient tax stamp system that upholds integrity and transparency in taxation and trade processes.

5.2.1. Proposed alternative solutions and service providers.

Considering the circumstances, we propose that the governing stakeholders have a best-in-class review of the current system vis-à-vis various stamp providers in East Africa, Africa, and the world at large. By doing so, it would eliminate the monopolistic hold of SICPA, fostering an environment of healthy competition among DTS suppliers.

This competition is anticipated to revive system reviews and aggregations, drive down the costs of stamps, aligning with the objective of achieving efficiency and cost-effectiveness in the implementation of the DTS system. Ultimately, this initiative stands to benefit both manufacturers and consumers by promoting fair pricing and accessibility to compliant products in the market. Below we analyse examples of tax stamp service providers in Africa and the world at large.

Table 7.2: Review of existing alternative solution providers

| Existing Solution providers | Brief description | Unique service offerings |
|---------------------------------------|---|--|
| AB IN BEV Block chain solution | Brief Overview: ABI in collaboration with IBM technologies presents a solution that is simple, quick to be implemented and has minimal impact in sector operations. This solution is quite like the current DTS system. | Solution Capabilities: This solution was designed in such a way that it does not pose any installation cost requirements to the users. This solution utilises already existing printers, systems that are already available at the site with traceability benefits for industries, application of cutting-edge Smart Contract technology and the utilisation of one database for all industries. |
| De La Rue (“DLR”) | Brief Overview: International limited liability company with over 12 successful tax stamp schemes across the world, including 3 successful schemes in Africa. DLR certifies software, delivers, and controls traceability through order management processes, reporting and monitoring for all forms of illicit activity. | Solution Capabilities: Secure tax stamps to give absolute authentication for tobacco, wine, spirits and low volume beer and soft drinks; Direct code printing for domestic high- volume beers and soft drinks; DLR Certify™ traceability software for track & trace and reporting; Mobile inspection app for use by Customs and law enforcement via a smartphone; and a free mobile app for consumers via App Store and Google Play Store. |
| INEXTO SA (“INEXTO”) | Brief Overview: INEXTO is a leading provider of software and services for brand protection, authentication, secure serialisation, track & trace, and digital volume verification. | INEXTO indicated that they could provide this solution (excluding the set-up cost) at an average price of \$2 per a thousand codes (for digital marking/codes for example: tobacco, beer, and water). For manual stamps, they proposed an average price between \$3 and \$4 per thousand stamps (example: small volumes, manual lines, cement, and other categories). Solution Capabilities: The INEXTO solution seeks to cover the goal of ensuring that governments taxes are collected, and that laws and regulations are applied. There was a need for a reliable and secure capability to indicate whether a product on the market is authentic or counterfeit. |
| Dentsu Tracking | Brief Overview: With worldwide operations, Dentsu Tracking draws from unmatched technical and regulatory expertise working with different governments and international organizations on implementing customized supply chain control solutions to optimise tax collection and fight illicit trade. It currently operates the world's largest tracking and tracing system covering the entire tobacco supply chain of the European Union | Solution Capabilities: ID Issuing, Product marking technology, volume control solutions (production line monitoring), track & trace solutions, government business intelligence, digital product verification & control in the field. |

| | | |
|---|--|---|
| | (EU) region. Dentsu Tracking's approach is digital and data-driven, moving beyond data collection to data intelligence, bringing maximum value to authorities. | |
| Worldline (WL) Tax Control Suite | Brief Overview: WL is a global FinTech company. It is one of the unique digital transformation companies providing truly end-to-end services: from cloud hosting in its data centres to user applications design for specific governments' requirements. WL implements a digital track and trace system for tax revenue monitoring and collection on excised goods. | Solution Capabilities: Establishing comprehensive registries comprising all Economic Operators, generating secure Unique Identifiers for each excisable product, collecting, and reporting life cycle information, monitoring, and counterchecking the live production volume for each production line status, providing tools for verification and evidence checks through public or private mobile applications. |

Source: Data collected from alternative DTS solution providers.

5.2.2. Legislative proposals in line with the objectives of DTS

PSFU proposes the introduction of tax policy that enables sector players to recuperate the costs and expenses incurred in line with implementation and operationalisation of the DTS system. These proposals aim to provide manufacturers and importers with a comprehensive incentive for a seamless transition and sustainable growth.

i) Offsetting of DTS costs against the excise duty payable

In order to cushion the sector and the Government from the projected negative DTS costs, our proposal is that the Government should introduce a mechanism allowing for recovery of the DTS costs incurred by the manufacturers and importers once they confirm to the URA's satisfaction that they have paid in full all the excise duty due and payable on their excisable goods.

This recovery of the DTS cost may be through offsetting the DTS costs incurred against excise duty payable within the monthly excise duty returns. This proposed approach acknowledges the economic realities facing the sector in Uganda and recognizes that sudden cost increases, such as those associated with DTS, could have a cascading effect on the final retail price of the products. This, in turn, could lead to decreased sales volumes, especially among the lower-income demographic, who are particularly sensitive to price changes. Consequently, this could result in a drop in tax revenues from the sector.

ii) Proposal to make DTS stamp costs zero rated for VAT purposes.

We also propose for the DTS stamps to be included under Schedule 3 of the VAT Act as zero-rated goods for VAT purposes.

iii) Introduction of process loss provision in the Excise Duty Act for manufacturers

Many manufacturers are grappling with daily losses as they navigate the complexities of the DTS system. These losses stem from various sources, including product damages and production stoppages caused by various factors within the production cycle. Such factors include defective stamps issued by suppliers, paper stamps damaged on the production lines of manufacturers, damages of stamped products pre-activation and post activation prior to sale.

This implies that the manufacturer still must take reasonable steps to account for all the stamps but depending on the nature of the business, this is almost impossible. Manufacturers therefore find themselves penalised for even the minimal stock losses of up to 5%. Failure to account for the missing stamps leads to excess excise duty being paid on the lost or destroyed stamps by the manufacturers and importers.

To alleviate this burden, it is imperative for the government to enact supplementary legislation that facilitates the automatic recovery of stamp damages and losses incurred by manufacturers and

importers in the end-to-end production and operation cycle. Such a legislative provision would serve as a vital safeguard for manufacturers and importers, offering them the necessary support to mitigate financial setbacks and ensure a smoother transition into the DTS era. This implies that the manufacturer still has to take reasonable steps to account for all the stamps but depending on the nature of the business, this is almost impossible.

This proposal draws inspiration from Kenya's legislation regarding stamp wastages and losses as highlighted below.

Proposed legislation:

“In computing excise duty in the case of unaccounted for excise stamps, the Commissioner shall allow for wastage and damages which shall not exceed one percent of the quantity of issued stamps.”

In addition to cost recovery, it is crucial for the government to actively engage with sector stakeholders to identify and address operational challenges.

This collaborative approach will foster a more conducive environment for manufacturers, enabling them to navigate the intricacies of the DTS system with greater efficiency. By incorporating the feedback and experiences of manufacturers, the government can refine and optimise the implementation process, ultimately driving towards a more seamless and successful integration of the DTS system into the manufacturing landscape.



OBJECTIVE 5:

Practical alternatives to reduce illicit trade and increase Government Revenue

6. OBJECTIVE 5: Practical alternatives to reduce illicit trade and increase Government Revenue

6.1. Introduction

In our analysis, we delved into the practical alternatives proposed by manufacturers to reduce illicit trade and increase government revenue. Through interviews with various manufacturers affected by the introduction of the DTS system, we gathered valuable insights and recommendations. The objective was to explore alternative strategies that can complement or enhance the effectiveness of the DTS system in achieving its goals.

6.2. Review of existing initiatives

In our quest to understand the effectiveness of the government's initiatives in combating illicit trade and increasing revenue collection, it was essential to review the existing strategies they have put in place. These initiatives include the National Development Plan and the Domestic Revenue Mobilisation Strategy (DRMS). The National Development Plan outlines the government's financial framework, which aims to not only generate revenue but also establish a fair, equitable, and straightforward tax system that supports business competitiveness and enhances the well-being of the population. On the other hand, the DRMS focuses on increasing government revenue, with a specific goal of raising the tax-to-GDP ratio to 16-18% in the next five years, beginning in 2018-19. This strategy balances revenue generation with fostering investment, ensuring fairness, and promoting transparency within the tax system. These initiatives lay the foundation for our examination of the impact of DTS on government revenue and illicit trade in Uganda.

6.2.1. Our Findings

Through our engagements with stakeholders, we've identified alternative strategies aimed at bolstering government revenue and combating illicit trade. These strategies are particularly tailored to address the implications of the DTS system on the manufacturing sector.

Table 8.1: Stakeholder suggestions on enhancing government revenue.

| | |
|--|---|
| <p>Cost offset and automation:</p> | <p>Manufacturers emphasised the need for the government to pass legislation that allows for the offset of the additional costs incurred due to DTS implementation against excise duty payable. This creates a win-win situation where manufacturers benefit from reduced costs, and the government benefits from increased compliance and revenue generation. This approach aligns the interests of both parties and contributes to a more effective and efficient tax system.</p> <p>Additionally, they stressed the importance of offering automation options to minimise human errors in the process of affixing stamps using the manual application methods. Whereas there are already some automation processes, stakeholders advocated for the automation of the DTS application process on bulk packaging, especially for larger volumes. This enhances the efficiency of the DTS system, encourages compliance, and minimises revenue leakage. By leveraging automation, the government can optimise revenue collection processes and ensure that taxes are accurately paid, ultimately contributing to increased government revenue.</p> <p>Manufacturers and importers also recommend that an analysis be done by the URA which could suggest that unique identifiers can be placed directly onto products alleviating the need for paper stamps.</p> |
| <p>Breaking monopoly in DTS services and/or exploring cheaper service providers:</p> | <p>Concerns were raised about the inefficiency and high costs associated with accessing DTS services from a single provider. Stakeholders suggested opening the DTS space to multiple providers to break the monopoly and ultimately reduce costs and create competition. When multiple providers are allowed to offer DTS services, it introduces healthy competition that tends to drive costs down. Manufacturers can then choose from a variety of providers based on cost-effectiveness and quality of service. Reduced costs make DTS compliance more appealing to manufacturers, thereby expanding the taxpayer base.</p> <p>Additionally, the suggestion to explore alternative, cost-effective service providers reflect a strategic approach to reducing DTS-related expenses and consequently increase tax revenue collected by the government.</p> |

| | |
|--|--|
| | Depending on the scale of operations, other cheaper options to explore include replacing paper stamps with cheaper digital codes for locally manufactured goods, where possible, which will also reduce operational costs and other losses in the production chain. |
| Cost-free, discounts and reduced costs of DTS: | <p>Some manufacturers proposed that the government should consider making DTS free of charge to alleviate the burden of production costs. Suggestions also included offering discounts on DTS costs and either meeting the full cost of DTS or reducing its overall cost.</p> <p>The recommendations regarding cost-free DTS, discounts, reduced costs, and access to DTS reports are all aimed at reducing the financial burden on manufacturers. Manufacturers propose that making DTS free or offering discounts would alleviate production costs and enhance compliance.</p> |
| Increased monitoring and sensitization: | <p>Stakeholders highlighted the importance of enhancing sector monitoring and public sensitization to raise awareness of the significance of DTS. They expressed concerns over the general public's ignorance about the rationale of DTS.</p> <p>Enhanced monitoring and sensitization efforts underscore the importance of awareness and education in achieving compliance. Manufacturers recognize the significance of sector monitoring and public awareness campaigns in promoting compliance and revenue collection. If the public who are the customers are not aware of the significance of DTS, it becomes less meaningful to foster compliance given that the consumers continue to purchase products from non-compliant manufacturers.</p> |

Table 8.2: Stakeholder suggestions on curbing illicit trade.

| | |
|----------------------------|---|
| Impose stricter penalties. | <p>Manufacturers emphasised the need for an improved response to complaints, urging the government to enhance its responsiveness and propose stricter penalties, including imprisonment or fines, for defaulters.</p> <p>The call for an improved response to complaints and the proposal of stricter penalties for defaulters signify a growing concern among manufacturers about the effectiveness of the regulatory framework. Manufacturers seek a more responsive and deterrent-oriented approach from the government, aligning with the broader objective of curbing illicit trade.</p> <p>Manufacturers propose that stringent penalties would discourage illicit trade activities, acting as a disincentive for non-compliance.</p> <p>Lastly, the advocacy for strict enforcement measures, including permanent closure of companies and brands involved in illegal operations, underscores the seriousness with which stakeholders view the issue of illicit trade. This zero-tolerance approach demonstrates the commitment to eradicating unlawful activities within the sector.</p> |
| Enforce compliance. | <p>Another key aspect highlighted by manufacturers and stakeholders was the enforcement of compliance measures. They stressed the importance of robust enforcement efforts across all manufacturers, viewing this as necessary from both a standard and revenue perspective. The manufacturers called for better laws and policies on compliance. Compliance is seen as a critical factor in maximising the benefits of the DTS system while curbing illicit trade.</p> <p>Enforcing compliance is a shared responsibility between manufacturers and the government. Through a combination of clear regulations, proactive enforcement, and educational efforts, the goal is to create a culture of compliance that not only maximises the benefits of the DTS system but also curbs illicit trade and contributes to government revenue collection. This can be through stringent legislation and policies, regular audits and inspections, transparent reporting, and whistleblowing mechanisms.</p> <p>Stakeholders recognize that robust enforcement efforts are pivotal not only for standardisation but also for revenue maximisation. This highlights the dual role of DTS as a revenue collection tool and a means to combat illicit trade.</p> |
| Increased vigilance and | Stakeholders emphasise the critical role of URA in identifying and addressing products lacking DTS, further highlighting the pivotal role of enforcement agencies in combating illicit trade. |

| | |
|---------------------|--|
| market surveillance | Manufacturers' concerns regarding registered entities not fully complying with DTS requirements point to the need for micromanagement to ensure comprehensive adherence. This reveals a desire for meticulous oversight to prevent any gaps in compliance. |
|---------------------|--|

6.2.2. Future Research

Building upon the findings of this objective, several promising areas for future research and additional studies emerge. These avenues of inquiry have the potential to deepen our understanding of DTS implementation in the manufacturing and importing sector and its impact on government revenue and illicit trade.

Long-Term Impact Assessment:

One crucial area for future research is the longitudinal impact assessment of DTS implementation. A comprehensive study tracking the evolution of revenue collection and illicit trade over several years post-DTS adoption could provide valuable insights. Such research could uncover trends, including whether DTS leads to sustained revenue growth and the extent to which illicit trade diminishes or adapts over time.

Consumer Behaviour and DTS Awareness:

Investigating consumer behaviour and awareness regarding DTS could shed light on the effectiveness of public sensitization campaigns. A study examining whether consumers actively check for DTS on products, their understanding of its significance, and its influence on their purchasing decisions would offer insights into the broader societal impact of DTS.

Comparative Analysis:

Conducting a detailed comparative analysis with other countries that have implemented DTS systems could provide valuable benchmarks. Examining the challenges and successes experienced by these countries in enhancing revenue collection and combating illicit trade would offer actionable lessons for Uganda.

Regulatory Impact Analysis:

Future research could focus on a comprehensive regulatory impact analysis (RIA) of suggested reforms and alternatives. This would assess the practicality, feasibility, and potential costs and benefits of proposed policy changes. RIA would help policymakers make informed decisions about the adoption and implementation of specific measures.

In summary, future research should aim to deepen our knowledge of the long-term effects of DTS, consumer behaviour, and regulatory reforms. By exploring these areas, scholars and policymakers can refine strategies to optimise revenue collection, minimise illicit trade, and ensure the continued success of Uganda's DTS system in the manufacturing sector.



CONCLUSIONS

RECOMMENDATIONS

7. Conclusions and recommendations

7.1. Introduction

A balanced and well-regulated environment is crucial for the flourishing of the manufacturing sector. In this context, members of the manufacturing sector unequivocally support the government's initiative to implement electronic tax stamps.

However, there's a consensus within the sector that the fees currently associated with DTS are disproportionately high, leading to increased operational costs. This necessitates a re-evaluation of the charges to ensure they align with sector expectations, sustainability, and growth.

The sector is advocating for a reduction in the cost of electronic tax stamps to lower production expenses and ultimately enhance product affordability. The current system is seen as excessively costly, and manufacturers find it burdensome to bear this expense alongside excise duty and other imposed taxes. The Government is urged to take prompt measures to reduce the cost of DTS and potentially explore alternative DTS solutions through a reopened tender process.

7.2. Recommendations for PSFU and URA

The introduction of DTS in Uganda was a strategic government move aimed at enhancing tax administration and combating the proliferation of counterfeit products in the country. While DTS addresses long-standing tax administration challenges, it does entail a notable cost for the manufacturing sector. Below are our key recommendations for your consideration.

Table 9.1: Summary of key recommendations

| Key Recommendations | Description | Expected Outcomes | |
|--|--|--|---|
| | | Manufacturers | Government |
| Need for immediate actions towards DTS cost reduction | <p>Evaluation of current DTS agreements and renegotiation of essential terms, particularly addressing the elevated fees presently imposed on manufacturers.</p> <p>Transitioning fee payments to SICPA to the local currency to mitigate the expenses associated with foreign exchange rates, subsequently minimising impact on the country's balance of trade.</p> | <ul style="list-style-type: none"> A decrease in DTS expenses would alleviate the financial burden on manufacturers, positively impacting their operational costs. Consumers would not face the potential scenario of manufacturers passing on additional costs through higher selling prices. | <ul style="list-style-type: none"> Lower costs are likely to motivate manufacturers, especially smaller producers facing tighter financial constraints, to adhere more closely to the authority's regulations. |
| Legislative amendments to favour users of DTS system as a way of ensuring that the system attains the desired objectives | <p>Providing tax incentives for manufacturers that are incurring high costs on tax stamps and operationalisation of DTS systems. This legislature includes:</p> <ul style="list-style-type: none"> Offsetting of DTS costs against the excise duty payable Making DTS zero rated for VAT purposes. Introduction of process loss provision in the Excise Duty Act for manufacturers. | <ul style="list-style-type: none"> Such legislative provisions would serve as a vital safeguard for manufacturers, offering them the necessary support to mitigate financial setbacks and ensure a smoother transition into the DTS era. | <ul style="list-style-type: none"> This proposal aligns with the government's objectives of efficient tax administration and supporting key industries. Additionally, this would help maintain a stable and thriving manufacturing sector, which is essential for economic growth and revenue generation. |
| The Introduction and implementation of the UNBS Digital Conformity Mark Solution | <p>Re-evaluation of the DCM system to create a synonymous system for certification of all manufacturers. Through this, the government would be able to attain an equitable digital tracking</p> | <ul style="list-style-type: none"> Implementing a device-readable mark on product units enhances traceability, transparency, and conformity in the supply chain, benefiting | <ul style="list-style-type: none"> Implementing device-readable marks on products significantly boosts URA's effectiveness in revenue collection. It enables swift, |

| Key Recommendations | Description | Expected Outcomes | |
|--|--|---|--|
| | | Manufacturers | Government |
| | solution and build trust between the sector and the revenue authority. | manufacturers. It builds consumer trust, enables quick response to quality issues, aids in regulatory compliance, and helps curb illicit trade, ultimately strengthening manufacturers' reputation and market presence. | accurate tracking of products, reducing tax evasion and illicit trade. The system's efficiency leads to cost savings for the government, allowing resources to be allocated more strategically. |
| Exploration of Existing Alternative Solution providers and effective systems that are cheaper | <p>Exploration of other electronic tax stamp alternatives that offer more competitive costs by a reputable supplier, by reopening the tender process and issuing these suppliers contracts. This would eliminate monopoly and promote competition in this sector.</p> <p>By engaging with the solution providers presented in the report, highlighting the challenges of the current system will allow these solution providers to address them differently with their respective digital solutions.</p> | <ul style="list-style-type: none"> With the lack of transparency in the current system, considering alternative solutions that would allow the URA and manufacturers to view key data points on online dashboards in real-time that would significantly benefit the sector significantly. | <ul style="list-style-type: none"> Digital solutions' increased security features will contribute to governments intended reduction of proliferating counterfeit products from DTS. Digitalization of the DTS system with more ownership will result in effective monitoring of revenue, tracking & traceability of products in the market |
| Inclusion of manufacturing stakeholders' input and in the re-negotiation process for electronic tax stamps | Re-evaluate the tendering process and the terms of the contract to ensure that alternative options at a lower cost are given due consideration and that the Public Procurement Disposal Authority (PPDA) procedures are complied with. | <ul style="list-style-type: none"> Utilise the first mover manufacturers (e.g., beer, cigarette, and soft-drinks manufacturers) as pilots for alternative systems to enable URA to conduct objective data-focused decisions on the best system for the manufacturing and importing sector. | <ul style="list-style-type: none"> With support from the data and solutions presented in this report, alternative solution providers are ready to address the concerns of the manufacturing sector and work closely with enhancing the system for URA. |
| Advocating for substantial penalties for | This proposal would act as a deterrent and reinforce the seriousness of these | <ul style="list-style-type: none"> Implementing cost offsets and automation in | <ul style="list-style-type: none"> The advocacy for strict enforcement measures, |

| Key Recommendations | Description | Expected Outcomes | |
|---|---|---|--|
| | | Manufacturers | Government |
| individuals engaged in illicit trade and the sale of counterfeit goods is a critical measure. | <p>offences, ensuring a stronger enforcement of regulations.</p> <p>It suggests that future research should concentrate on evaluating the lasting effects, understanding consumer behaviour, studying regulatory shifts, and making international comparisons. These efforts are crucial for making well-informed policy decisions.</p> | <p>manufacturing can lead to reduced costs, improved efficiency, and enhanced competitiveness. This encourages compliance and accountability, ultimately fostering sustainable growth and global competitiveness for Ugandan manufacturers and importers.</p> | <p>including permanent closure of companies and brands involved in illegal operations, underscores the seriousness with which stakeholders view the issue of illicit trade. This zero-tolerance approach demonstrates the commitment to eradicating unlawful activities within the sector.</p> |



THANK YOU

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