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WEST AFRICAN
TAX ADMINISTRATION FORUM

DIGITAL DATA ANALYSIS

PROMOTING TAX LITERACY AND TRANSPARENCY THROUGH ONLINE TAX INFORMATION IN WEST AFRICA

(Pilot Project)

WEST AFRICAN TAX ADMINISTRATION FORUM

WATAF Research Note: WRN001

PROJECT TITLE:

DIGITAL DATA ANALYSIS: PROMOTING TAX LITERACY AND TRANSPARENCY THROUGH ONLINE TAX INFORMATION IN WEST AFRICA

(PILOT PROJECT)

Suggested Citation/Attribution

WATAF (2023). Promoting Tax Literacy and Transparency through Online Tax Information in West Africa: WATAF Digital Data Analysis Project. Research Note by WATAF Secretariat, Abuja, Nigeria.

About WATAF

The West African Tax Administration Forum (WATAF) comprises thetax administrations of all 15 West African countries: Benin, Burkina Faso, Cabo Verde, Côte d'Ivoire, The Gambia, Ghana, Guinea, Guinea-Bissau, Liberia, Mali, Niger, Nigeria, Senegal, Sierra Leone, and Togo that are members of the Economic Community of West African States (ECOWAS). It exists to lead tax policy coordination and concerted tax administration capacity in the region. WATAF promotes tax transparency, harmonises regional tax laws and policies, promotes regional integration, and facilitates regional knowledge sharing, including dialogues to improve the quality of tax administration in Member States in order to increase the mobilisation of domestic revenue.

The inaugural meeting of WATAF was held at the Forum of Heads of Tax Administration in West Africa at the Rockview Hotel, Abuja, Nigeria, on 12 September, 2011. The original signatories to WATAF's formation were representatives from Tax Administrations from five West African Countries, namely, Benin, Ghana, The Gambia, Liberia, and Nigeria.

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ACKNOWLEDGEMENT

The financial support from the Open Society Foundation (OSF) made it possible to implement the pilot phase of the Digital Tax Data Analysis Project, as a component of the Capacity for Domestic Resource Mobilisation (C4DRM). WATAF appreciates the OSF's generous financial support and commitment to its vision and mission.

This Research Note benefited directly from items of information on the websites of a few selected organisations. The WATAF research team is grateful to each of them for providing useful information on their websites. References were made to each of them where necessary and as much as possible.

Executive Summary

This Research Note is intended to guide the promotion of (semi) real time online interactions with various categories of stakeholders in the tax system in West Africa and beyond. It provides an avenue to have an effective system for creating content for a portion of the WATAF website to benefit every site visitor. The final outcome is to ensure greater tax awareness, literacy, and transparency, as well as deeper citizen engagement with the tax systems, leading to more voluntary taxpayers, advocates for accountability and transparency in tax administrations, and more objective tax educators. The intention is that visitors to WATAF website will immensely benefit from the regular bits of tax information that serve the interests of tax authorities, civil societies, development partners, policymakers and current (or future) taxpayers.

1. Background

Tax knowledge dissemination through digital platforms can help accelerate the wheel of progress in domestic revenue mobilisation (DRM)[1], an important instrument of economic development and governance. It is imperative that West African countries strengthen their DRM efforts, and to drive them as endogenously as possible through massive tax education. Among others, domestic public revenue is a reliable and, by far, the most dependable source of financing public expenditures[2]. In addition, effective domestic public revenue naturally fosters deeper engagement between the government and citizens, thereby increasing the demand for accountability and transparency in governance[3].

Digital platforms for sharing basic, non-technical information to advance a good cause are common nowadays. They can be efficiently harnessed to realise short- and long-term goals of any public policy. Digital platforms,such as websites, can help accelerate tax literacy, awareness, compliance, and revenue collection through tax knowledge sharing on free, open, and publicly accessible platforms. As a consequence, knowledge of tax policy, practice, and performance can massively be disseminated to civil societies, governments, private sectors, academia, citizens and other members of the public[4].

In order to enhance tax administration performance in West Africa, the website of the West African Tax Administration Forum (WATAF) can serve the additional purpose of educating non-technical and technical stakeholders in the region's tax policy and practice.

Although various stakeholders may have diverse interests in its functioning, an effective, transparent, and efficient tax system benefits society as a whole as well as each member. Evidence shows that a modern and effective economy cannot be born without an effective tax system. Specifically, countries with high ratios of revenue to gross domestic product (GDP)

[1] The correlation between tax compliance and tax knowledge or awareness is far from low, although it possesses the likelihood to change, depending on the economy in question (Isbell, T. (2017), Tax compliance: Africans affirm civic duty but lack trust in tax departments). Afrobarometer Policy Paper Number 43).

[2] Refer to the United Nations' Outcome Statement of the Addis Ababa Action Agenda of the Third International Conference on Financing for Development. Also, the 2018 Notes by the United Nations' Committee of Experts on International Tax Cooperation on the role of taxation and domestic resource mobilisation in the implementation of Sustainable Development Goals.

[3] Policymakers and academics are of the view that effective domestic revenue mobilisation would engender accountability, robust state-citizen engagement, transparency, and economic stability (see Prichard, W.(2019)). Tax, politics and the social contract In Africa. In Oxford Research Encyclopedia of Politics, Oxford University Press; Mick, M., Prichard, W., and Fjeldstad, O. (2018),Taxing Africa, coercion, reform, and development African Arguments, Zed Books).

[4] Information or evidence in this context may be quantitative or textual. For instance, it could include the ratio of tax to gross domestic products, the ease of paying taxes or the average frequency of tax audits in a country.

are among the most effective states worldwide[5]. The average tax revenue to GDP ratio in the Organization for Cooperation and Development (OECD) countries amounts to 30.0 percent, far ahead of 16.0 percent in West Africa.

Today, the world is shaped not only by knowledge but especially by the medium through which it is disseminated. Corporate and individual websites are among the platforms for disseminating both technical and non-technical information. According to Siteefy, there are at least 1.13 billion websites globally, but only 18 percent are active.[6] The WATAF website (https://WATAF-tax.org/) is one of the 202 million active websites that compete for visitors' time. The website has enjoyed some visits, and it can further be employed to reach a wider audience through periodic online tax information presentations and other contents such as basic data analysis and visualisation.

Scientific evidence shows that the literacy rate is a positive correlate of the quality of public institutions and governance[7]. Tax literacy and education in West African countries are relatively low but could be improved. Three out of five Africans are not tax-aware, while two of the same group do not understand the practice of paying taxes.[8]

Tax policy and practice depend on laws and strict regulations, including the aspects that relate to the protection of taxpayer information, the provision of citizens with access to data, and other useful information that may stimulate much greater public interest and debates on taxation. However, some categories of information can be disseminated to every interested party. As long as a piece of information does not identify a taxpayer or a group of taxpayers, it is fit for public consumption. A dearth of a certain minimum level of tax education by all and sundry in a society would serve no advantage for building and sustaining an effective tax system or improving public institutions.

In West Africa, vote-seeking politicians easily make promises to provide public goods and services but hardly discuss taxation as a route to raising public funds[9]. It, therefore, becomes imperative for intergovernmental and non-governmental organisations, civil society groups, academic institutions and other relevant stakeholders to team up with tax authorities to promote tax literacy and education. The intended project of WATAF to use digital platforms to supply tax information serves as one way to promote tax literacy.

[5] Finland, France, Norway, Denmark, and Sweden are a few of the countries in this category. They generate over 40% of their GDP as public revenue and have robust human development indices, notably a high life expectancy, literacy rate, and income level.

[6] Siteefly provides reports on the statistics of websites and their activities. It can be accessed through https://siteefy.com/how-many-websites-are-there/. The facts provided in this report are correct as at 16 February 2023. The site owners update the information at regular intervals.

[7] Surveys by Afrobarometer 2014 and 2019 conclude on similar evidence on the issue (see https://www.afrobarometer.org/). Moreover, the United Nations Development Programme's latest measures of human development include the rate of literacy and two other factors. Anecdotal evidence has it that the more literate the citizens are, the more tax-aware they become.

[8] Available in reports by Afrobarometer (2014 and 2019).

2. Purpose and Significance of the Research Note

This Research Note is developed to describe some terms and concepts in tax policy and administration with a view to informing members of the public and stakeholders in the tax system. The report presents some common concepts and terms, defines them, and describes why their measurements were necessary.

The essentiality of this document lies in the fact that it has a list of common concepts, terms, and terminologies for regular data collection, analysis, and online presentation. It contains a few concepts that may have incomplete data but are relevant for public tax knowledge. It is a piece that would be useful in the future and would be updated from time to time. However, this brief does not attempt to provide a textbook description of a select number of concepts. It therefore limits its coverage to the definition and measurement of a few concepts as guides to the sourcing and processing of data for any other concepts the WATAF Secretariat may find relevant. In sum, the brief is a guidebook, a manual, or a note of samples.

3. Common Concepts in Tax Policy and Administration

There are numerous concepts, terms, and terminologies in the tax system. The list keeps growing because scholars and practitioners develop it as they daily engage with the system or attempt to propose solutions to existing or emerging problems. For the purpose of this report and the WATAF online data presentation, some common concepts are listed. Definitions are kept to their universal descriptions or as generally applicable in principles and to almost all countries.

- **Tax Revenue and Tax-Revenue-to-Gross-Domestic-Product (Tax-to-GDP)**

Tax revenue is defined as the revenues collected from taxes on income and profits, taxes levied on goods and services, payroll taxes, taxes on the ownership and transfer of property, and other taxes.

[9] It is not common to find and read elaborate discussions on taxation and revenue mobilisation strategies in the manifestos of political parties in (West) Africa. When it is mentioned at all, it is usually targeted at a small fragment of the population (particularly the large corporations that deal in trade and extractive sectors). A well-developed tax system directly or indirectly touches everyone in a society. The public goods and services funded by tax revenue benefit everyone.

The percentage of a nation's output that the government collects through taxes is known as the tax-to-GDP ratio. Actual tax revenues as a share of GDP are one of the most commonly used measures of tax effort for cross-country tax comparison. The biggest advantage of this measure is that it is easy to obtain and gives a quick overview of tax trends across countries.[10] The tax-to-GDP ratio is estimated by dividing total tax revenue by total output multiplied by 100. It is usually reported in percent (see Appendix[11]).

- **Tax Effort**

Tax effort is the ratio of actual tax collection (tax revenue reported over a certain period) to the predicted tax revenue (taxable capacity). It is the extent to which a country is making use of its tax instruments to raise revenue. Tax effort can serve as an indicator of the tax revenue capacity of a country.

In another version, tax effort is the actual tax yield compared to the tax yield of countries with similar economic features. It is also the index of the ratio between the share of the actual tax collection in gross domestic product and taxable capacity.

- **Taxable capacity**

Taxable capacity refers to the predicted tax-to-gross domestic product ratio that can be estimated empirically, taking into account a country's specific macroeconomic, demographic, and institutional features, which all change over time. It is the capability of individuals and businesses to pay taxes. Taxable capacity is synonymous with the potential tax capacity of a country, and any deviation from it creates a tax gap. Potential revenue is a theoretical concept that is useful after estimation using an econometric model, simulation, or forecasting. It is not accurate to determine the taxable capacity of countries only by checking their actual tax collection. [12].

- **Tax Complexity**

Tax complexity describes the extent of difficulty taxpayers experience in fulfilling their tax obligations. A tax complexity index can be constructed for any tax type, but the corporate income tax attracts much more attention in various discussions on the subject, both in developed and developing economies than others.

The corporate tax complexity index measures the difficulty of a country's corporate income

[10] Musgrave (1987) and Le et al. (2012) opine that actual tax revenue is more suitable for studies focusing on countries with similar economic structures and at the same level of income. The West African countries fit into this description. (Also see Lotz, J. R., & Morss, E. R. (1967). Measuring" Tax Effort" in Developing Countries (Evaluation de l'effort fiscal dans les pays en voie de développement)(Medición del" esfuerzo tributario" de los países en desarrollo). Staff Papers-International Monetary Fund, 478-499

[11] The contents of the Appendix are in the accompanying spreadsheet.

[12] Source:Le, T. M., Moreno-Dodson, B., & Bayraktar, N. (2012). Tax capacity and tax effort: an extended cross-country analysis from 1994-2009. World Bank Policy Research Working Paper (6252).

tax system as faced by multinational corporations. It is the excessive changes in tax laws as well as the excessive burden associated with compliance and payment. A few of the features for consideration in computing the tax complexity index include: difficulty in accessing and understanding tax information and legislation; difficulty in preparing tax data; length of time to process that payment; and unstable tax policies.

At present, there is a scarcity of comprehensive, up-to-date sources of information on cross-country tax complexity. The WATAF Secretariat, in partnership with ECOWAS and any other partner, may undertake such a project in West Africa to serve the interests of investors, citizens, and business communities. The Ludwig Maximilians Universitat TAX project on tax complexity (https://www.taxcomplexity.org/) presents less than 14 percent of West African countries, and does so with dated information, creating a gap in the current state of play regarding the West African tax systems.

- **Effective Tax Rates (ETR)**

The effective tax rate is the percent of income that an individual or firm pays in taxes. ETR for individuals is the average rate at which their earned income, such as wages, and unearned income, such as stock dividends, are taxed. A firm's ETR is the average rate at which its pre-tax profits (accounting profit, in this case) are taxed. It often deviates from the statutory tax rate, which is the legal percentage established by law. ETR indicates an individual's or a company's total tax burden.[13].

- **Tax Incidence and Tax Burden**

Tax incidence is the way the burden of a tax is shared among participants in the economy. It entails the division of tax payment between the buyer (consumer) and seller (producer). Tax Incidence signifies the distribution of tax obligations, which must be covered by the buyer and the seller.

The tax burden shifts from one party to another based on the associated price elasticity of the commodity in question. Tax incidence shows who ultimately bears the burden of the tax, as opposed to only who directly pays the tax liability.

Tax burden for a consumer is measured by the elasticity of supply divided by the addition of the supply and demand elasticities, whereas tax burden for producers is measured by the elasticity of demand divided by the sum of the demand and supply elasticities.

- **Value-Added Tax (VAT)**

VAT is a consumption tax on goods and services that is levied at each stage of the supply

[13] Source: www.corporatefinanceinstitute.com. The computation of the effective tax rate requires relevant information on the specific tax bases and is also less straightforward, but it is useful in determining the extent of the overall tax policy on taxpayers' income. For instance, tax exemptions would normally not reduce the tax amount but the actual liability or amount paid. A company may claim to have paid 31 percent in corporate tax, but its effective rate may amount to a mere 9 percent. This characterises the situation in many developing countries.

chain where value is added, from initial production to the point of sale. The amount of VAT the user pays is based on the cost of the product minus any costs of materials in the product that have already been taxed at a previous stage.

VAT is added to a product at every point in the supply chain where value is added to it. VAT is based on consumption, but it has a few kinds: consumption-kind, revenue-kind, and Gross National Product-kind VAT. Consumption taxes are levied on individuals' purchases of goods and services. In West Africa, VAT is the most common general consumption tax.[14] VAT revenue in some countries comprises domestic VAT and import VAT sources.

- **Tax Buoyancy**

Tax buoyancy measures the total response of tax revenue both to changes in national income and to discretionary changes in tax policies over time. It is traditionally interpreted as the percentage change in revenue associated with a one percent change in income. It explains the relationship between the changes in tax revenue growth and the changes in output growth. *The formula for tax buoyancy is given as the growth rate of tax revenue divided by the growth of GDP.*

- **Tax Expenditures**

These are government tax-related expenditures arising from the implementation of tax incentives (exclusions, exemptions, deductions, credits, deferrals, and preferential tax rates). Tax expenditures are usually the estimated amount of shortfall in the total tax revenue if tax authorities were to collect it in full. Tax expenditures are commonly expressed as a percentage of the GDP and can also be estimated for each tax type, category of beneficiaries, and specific sectors of the economy. The socio-economic impact of tax expenditure might be highlighted in order to spur more understanding among the general public about how governments are using taxes for sustainable growth.

- **Tax Collection Efficiency**

Tax collection efficiency can also be referred to as optimisation of tax collection. It expresses the strength of strategies for extracting tax revenue from individuals and firms. Commonly, the efficiency score is rated between zero (0), perfect inefficiency, in which the administration could only collect an approximately negligible amount of the total expected, and one (1), perfect efficiency, in which all that was due was collected. In practice, tax collection efficiency would fall between the two theoretical cases. The farther a score is from zero, the higher the level of collection efficiency of the given tax type. The collections could be for broad taxes or for each tax type. Tax collections can be optimised through the establishment of large taxpayer offices as well as simple and easy tax policies.

- **Tax Progressivity**

[14] Source: www.taxsummaries.pwc.com and Tax Foundation (https://taxfoundation.org/)

A tax system is said to be progressive if its tax burden rises with an individual taxpayer's income. That is, if, on average, a taxpayer's tax burdens rise with income. The percentage change in after-tax income is the most reliable measure of the progressivity of such a change. This definition is considered too broad because tax burden can be measured in various ways[15]. *Tax progressivity can thus generally be calculated as net income divided by pre-tax income.*

4. Sources of Tax and Revenue Data

Taxpayer data and information are confidential and reside primarily with tax authorities. Other stakeholders, such as financial institutions, customs, financial crime agencies, international shipping companies, etc., may have primary or secondary valuable information on taxes and taxpayers in various forms and types.

There are, however, various existing tax data sets that are non-confidential, anonymous, and accessible for use by analysts and researchers. A non-exhaustive list[16] of publicly available sources of tax data to generate information and analyses that can help public tax education and literacy building is as follows:

- **African Tax Outlook (www.ataftax.org/african-tax-outlook)**

The African Tax Administration Forum (ATAF) launched the first African Tax Outlook (ATO) in 2016, with a total of 15 participating member countries. The ATAF's ATO Publication arose from the necessity to make available reliable tax statistics and analyses pertaining to African tax administrations. It is a flagship African publication that provides valuable, practical, and relevant descriptive and analytical work on tax issues to improve tax administrations and inform tax policy formulation and implementation in Africa. To date, the ATO has had seven (7) editions, out of which WATAF joined as a co-producer of the fourth (4th) volume in 2019. Data on some tax indicators in West Africa, except Guinea and Guinea-Bissau, are available in the ATO from 2010 to 2021.

- **Afrobarometer (www.afrobarometer.org)**

Afrobarometer is a pan-African, independent, non-partisan research network that conducts surveys on public attitudes and perceptions on economic, political, and social matters in Africa. The network encompasses more than 30 national partners that are responsible for data collection, analysis, and in-country dissemination of data findings. The Afrobarometer micro-datasets on taxation commenced in 2014, but Guinea-Bissau was not captured in the list of countries. The surveys are suitable for national and subnational analyses.

[15] Source: www.taxpolicycenter.org

- **Ernst & Young (https://www.ey.com/en)**

Ernst & Young (EY) is a multinational professional service network of firms that provides advisory, tax, and transactional services. EY's dedicated professionals combine technical knowledge with industry experience and access to technologically advanced tools and methodologies to provide quality tax data for various clients, institutions, and countries around the world. Tax data in West Africa from EY on some industry-specific areas is available in annual reports (and upon request).

- **Global Tax Expenditure Database (GTED) (https://gted.net)**

The GTED project was initiated and is being implemented by the Council for Economic Policy and the German Institute for Development and Sustainability for the singular purpose of improving tax transparency and effectiveness worldwide. GTED has items of information on 103 countries, including 13 in West Africa, although a few of them have either scanty data or are presented with an irregular or dated dataset. The database shows tax expenditure provisions, beneficiary categories, and the level of aggregation of the information the countries provided in their tax expenditure reports.

- **International Bureau of Fiscal Documentation (IBFD)www.ibfd.com**

IBFD is a preeminent, independent, non-profit foundation that tax practitioners from all over the world rely on for high-quality independent tax knowledge and research. It is a leading authority on cross-border taxation, offering a unique quality of information and education on international tax. Access to the IBFD database is restricted and subject to certain charges. Qualitative data on tax laws, treaties, directives, etc. in most countries in West Africa are available.

- **International Centre for Tax and Development (ICTD) (https://www.ictd.ac/dataset/)**

ICTD is an independent research centre with a focus on improving tax policy and administration in low- and middle-income countries. They support partners in raising more revenue to fund public services in ways that are equitable, efficient, and strengthen accountability. A variety of datasets on some countries in West Africa are available on the ICTD website.

- **Pricewaterhousecoopers (PwC)https://taxsummaries.pwc.com/#**

PwC is an international professional and accounting services brand of firms with presence in 151 countries around the world. They deliver explicit services in the areas of tax advisory, data and analytics, digital transformation, and other related areas. PwC launched the publicly available *Worldwide Tax Summaries* and *VAT in Africa* Guide to help researchers and external and internal clients access up-to-date summaries of tax information and data. The data include information on some countries in the world. Microdata for some tax indices in West Africa can be provided upon request or from PwC's periodic publications.

[16] The list can be updated as more sources emerge. WATAF can also join as a producer of data, particularly in West Africa.

- **Tax Foundation (http://taxfoundation.org/)**

The Tax Foundation is an independent tax policy research organisation. The group uses its Taxes and Growth (TAG) macroeconomic model to simulate the effects of tax policies and produce conventional and dynamic estimates of potential changes in revenue, GDP, wages, employment, and the distribution of the federal tax burden.

- **United Nations University World Institute for Development Economic Research Government Revenue Database (https://www.wider.unu.edu/project/grd)**

The UNI-WIDER is part of the United Nations University (UNU) and an international research organisation set up with the aim of promoting peace and progress by bringing together leading scholars from around the world to tackle pressing global problems. UNI-WIDER, in conjunction with other partners, developed the Government Revenue Database (GRD) to provide comprehensive time-series cross-country data on public revenue in a comparable form. The GRD was last updated in October 2022 and contains freely accessible data on nearly all countries in West Africa, but to varying degrees.

- **World Development Indicators (https://databank.worldbank.org/source/world-development-indicators)**

The World Development Indicators (WDI) database is the primary World Bank collection of development indicators, compiled from officially recognised international sources. It presents the most current and accurate global development data available and includes national, regional, and global estimates. The series in the WDI dates back to 1960 and is regularly updated, with the latest version being 2022. Data on various tax and non-tax indices in West Africa are available and freely accessible in the WDI from 1960 to 2021.

5. Digital Tax Data Dashboard

A tax data dashboard provides access to data and information in (semi)real time from designated devices. A data visualisation platform is usually user-friendly and can communicate large pieces of information in a simple, clear, and concise form. Among others, the benefits of an online data dashboard include ready access to customised interactions with tax information.

The WATAF website would have a section for visualisation by visitors to read and learn from uploaded pieces of tax information that are derived from tax data analyses. As earlier noted, the content will feature qualitative and quantitative tax information at regular intervals. It will

[17] Data analysis outputs are available in the accompanying spreadsheet.

[18] See the Appendix in the accompanying spreadsheet.

help visitors to WATAF websites get informed on the status of key indicators of tax systems in West Africa.

The current effort is the pilot phase of the project. Outputs of quantitative data analyses[17] on a set of concepts or terms would be uploaded each quarter. The lessons from the pilot stage would inform the implementation of full-scale real-time data and visualisation tools in the near future.

The websites of the following selected international organisations feature dashboards that showcase their peculiar data and its analyses: Afrobarometer, International Institute for Democracy and Electoral Assistance, Global Tax Expenditure Database, International Monetary Fund, International Growth Centre, Tax Foundation, and World Bank. The current project by WATAF seems one of a few initiatives to disseminate tax information in developing economies based on qualitative and quantitative data.

6. Contents for Online Presentation

Tax information will be carefully developed and designed for use on the website (dashboard). The Communication and Liaison Manager holds the responsibility to ensure contents are apolitical, correct, accurate, and credible, particularly the qualitative content. Moreover, each data source must be duly acknowledged as much as possible, except where anonymity is a necessity.

The contents for use during the pilot phase are the outputs of quantitative data analyses[18]. It covers all the member states of ECOWAS. Moreover, at this phase the available pieces of information (outputs) include tax revenue, tax buoyancy, VAT efficiency score, and tax-GDP ratio. The accompanying spreadsheet files to this Note contain the outputs to initiate the Online Data Analysis and its presentation.

7. Introducing New Concepts for Analysis and Presentation

The dynamics of tax policy and practice suggest new concepts and terms will emerge over time. Therefore, the WATAF research team shall endeavour to embrace emerging concepts that have scientific sources, widespread usage, and implications for understanding tax systems in West Africa. Any concepts or terms whose definitions and applications are still undergoing debates or which do not have universal application would be avoided as much as possible.

The main criterion of eligibility for a concept to feature in the project remains data availability - textual or numerical data that is reliable, accessible, and current. This, however, does not suggest the data may have no restrictions.

8. Potential Impact and Concluding Remarks

Similar to any project, the Digital Tax Data Analysis Project promises to generate impact across all time horizons. Depending on the implementation plan, progress monitoring, and future interests of WATAF secretariat, the long-term impact of the project will entail greater literacy and transparency in the tax systems of West African countries. This shall be made possible with the growing involvement of all stakeholders, whether as taxpayers, the third sector (such as civil society groups and foundations), government officials, development partners, donors, or academia. The pilot phase of the project would therefore require commitment from WATAF research team to ensure contents are uploaded, monitored, and updated on a periodic basis - preferably quarterly. An experimentation period of four quarters consecutively may prove sufficient to assess the pilot project, and identify lessons for full-scale implementation as well as possible opportunities and challenges for future projects.

A few yardsticks to measure the short-term impact of the project may be the statistics on the number of visits to WATAF websites as well as the views and downloads of the content on those sites. Other measures can also be devised to ascertain the level of appreciation for the project among various categories of people. Given that numerous suggestions may emerge on how to identify the actual learning and education impact of the project, there must at least be a quantitative measure included in any arsenal designed to evaluate the impact of the project.